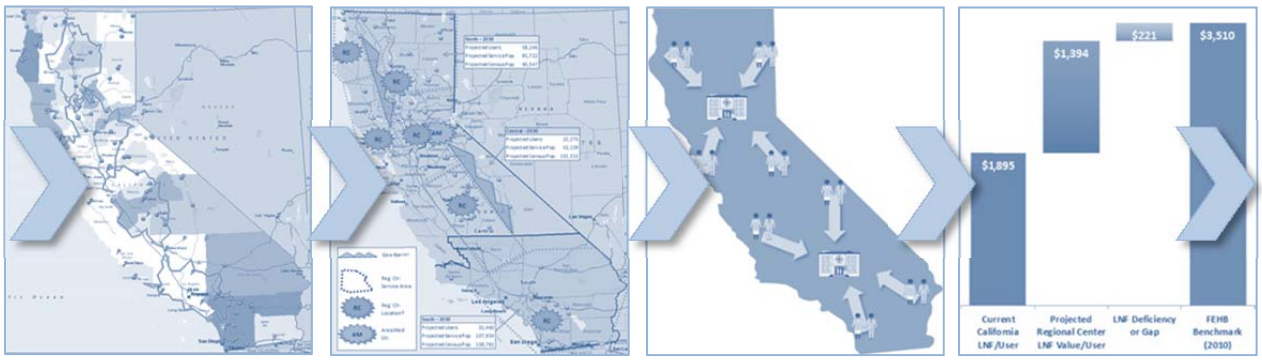
Regional Ambulatory Surgical and Specialty Health Services Feasibility Study



by

IHS, California Area Office

Final Report

December 13, 2013

INNOVA | Healthcare Solutions

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Introduction

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Overview

The California Area Health Services Master Plan was completed in 2005. Its primary focus was quantifying the healthcare demand and delivery plan for local primary service areas. The Indian Health Service/California Area Office engaged in this planning effort to identify and understand the need for regional services. Studying statewide American Indian/Alaska Native (AI/AN) population growth (projections and alignments), and developing a baseline understanding of a regional care center concept helps the Area Office staff understand the scope of services needed.

This regional centers development planning effort included:

- population and location research
- development of market share projection methodology
- supportable services quantified by location
- projected facility and staffing costs

Problem Statement

The problem addressed through this report can be summarized as follows: *What type and location of regional centers do the Primary Service Areas (PSAs) need defined from the Health Services Master Plan considering the projected American Indian/Alaska Native population distribution in California?*

Product

This report identifies American Indian/Alaska Native populations projected to 2020 and market share from which health services for up to four (4) Regional Centers have been conceptually developed in eight (8) potential scenarios/configurations. In four (4) of these, one Regional Center is further considered as a Medical Center concept with additional services. This development identifies essential supportable services, required space and staff, and anticipates initial construction and annual staffing costs. This effort is limited to American Indian/Alaska Native populations and what IHS would support.

Process

The effort required three (3) phases of work supplemented by three (3) scope modifications which added four (4) additional phases. The work effort was completed over a twenty three (23) month period. A description of each phase follows.

Phase I - Regional Centers Assumptions Development

The purpose of this phase was to identify and assess the potential impact of planning assumptions supporting the conceptual development of health services for three (3) Regional Centers. The Innova Group (Consultant) prepared demographic data and a regional discussion guide to facilitate clarity in the California Area Office's (CAO) vision for regional centers and how this planning effort should support such.

Phase I tasks included:

- Review California Area Health Services Master Plan Regional Requests
- Review California Area Health Services Master Plan Regional Center Proposed Locations from Primary Service Areas
- Study Present/Projected Health Systems Planning software User/Service Population Distribution in California to 2020
- Develop comparative American Indian/Alaska Native Population Projections from California State Data to 2020
- Project User and Service Populations from Health Systems Planning Software and State Data forward to 2030, 2040, and 2050
- Map variable travel times from Primary Service Area facilities; identifying which population centers appear most consistently accessible for regional center development consideration
- Identify possible locations for regional centers, one of which would also serve as an area wide medical center
- Identify planning challenges associated with Regional Center planning, including lessons learned from Portland planning effort
- Create discussion guide for Regional Center Planning Strategy Discussion
- Travel to Sacramento for Regional Center Planning Strategy Discussion with California Area Office Leadership to review planning assumption variables, facilitate agreement on Projection Year, Regional Center locations, and appropriate Market Share assumptions on which to develop Proposed Services.
- Develop/distribute minutes and decisions from leadership meeting.

Phase II - Regional Centers Concept Development

The purpose of this phase was to utilize agreed upon planning assumptions from Phase I to develop planning documentation that identified two (2) concepts (high & low market share) for three (3) Regional Centers by projection year, identifying the services, staff, space and costs.

Phase II Tasks included:

- Review and incorporate planning assumptions from Meeting One.
- Propose locations for three (3) Regional Centers, one of which would also serve as an area wide medical center
- Group affected Primary Service Areas by proposed Regional Center location
- Define baseline population supportable services for each location by decade
- Develop Market Share projection methodology
- Identify alternative healthcare by primary, secondary, and tertiary healthcare for state
- Identify payer profile of California users by Primary Service Area
- Teleconference for Regional Alignment Review
- Incorporate Market Share variables into methodology

- Determine two (2) concepts of baseline services for each regional location (high and low market share) for comparison and contrast
- Incorporate and run new 2007 staffing roster for each Regional Center concept
- Develop Delivery Plan Workbooks for Regional Centers and Area Medical Center
- Create supporting Health Systems Planning Software population and workload files
- Complete population base sheets in support of Delivery Plan workbooks
- Make Delivery Plan decisions for all concepts
- Develop service, staff and cost summaries for all concepts
- Travel to Sacramento for Regional Centers Concept Review meeting with California Area Office Leadership to review planning assumptions, market share methodology, and high and low services concepts for three (3) Regional Centers, soliciting direction on scenario refinement built on appropriate market share assumptions
- Develop and distribute minutes and decisions from leadership meeting.

Between Phase II and III, two (2) separate modifications were added to support additional needed research and presentation refinements. Some of the work from these two modifications overlapped with the Phase III of the original scope.

Modification 1 – Additional Regional Center Work / Refinement & Tribal Presentation

The purpose of this modification was to add necessary depth of research to requested services lines utilization, telemedicine impact and Affordable Care Act impact on projected Regional healthcare. It also added enhanced variant analysis for Regional healthcare by supporting the creation of up to four (4) regional sites with two scenarios for each site (first, outpatient facilities anchored by one inpatient area wide facility; and second, inpatient facilities only).

Modification 1 Tasks included:

- Out of Template Services Research
- Reform Impact on Erosion Analysis
- Payer Profile Data Acquisition Completion
- Telemedicine Research Impact by Service Line
- Presentation/Handout Preparation for Regional Center Alignment Videoconference
- Creation of revised 4 Regional Center Service Areas for tribal consideration and alignment of Populations
- Create supporting Regional Outpatient & Outpatient/Inpatient Health Systems Planning software files in support of 4 Regional Center scenario
- Create Resource Projection Delivery Plan Workbooks in support of 4 Regional Center scenario
- Create staffing rosters in support of 4 Regional Center scenario
- Create Health Systems Planning software file in support of revised Area Wide Medical Center
- Create Delivery Plan Workbook in support of revised Area Wide Medical Center
- Create staffing rosters in support of revised Area Wide Medical Center

- Project Costs for all revised Regional Centers and Area Wide Medical Center
- Create tiered Services Structure Graphics to show how services increase with populations as centers are reduced from 4 to 2
- Complete edits to '2-Centers' solution
- Prepare "4/3/2" Regional Centers Presentation for Tribal Leaders
- Phase III Teleconference Process Review
- Revise documentation & presentation for tribal leaders
- Tribal Leaders Extra Review Teleconference
- Edits
- Tribal Directors Meeting
- Teleconference Debrief with Area Workgroup
- Final Additional Edits for Report

Modification 2a – Referred Healthcare Travel Analysis

The purpose of this modification phase was to understand and document existing referral travel patterns relative to access standards assumed in the regional site services proposed. Approximately half of this phase was completed prior to reallocation of remaining efforts due to data unavailability.

Modification 2a Tasks included:

- Identify desirable health programs to approach for data acquisition relative to distance to proposed regional sites, user population size, and availability of payer profile information
- Discuss with area office the willingness / feasibility of desired health programs to cooperate in providing referral data by type (Contract Health Services/non-Contract Health Services), location of encounter and denials
- Refine health program list and identify path toward data acquisition with area office
- Develop Data Request to capture referred healthcare data and access patterns by Health Program
- Distribute Data Request to cooperating Health Programs
- Discuss Data Request by phone with appropriate Health Program contacts
- Support, receive, QC and re-request data as necessary
- Develop data table to receive data and import
- Summarize results and analyze
- Compare/contrast resulting profile with Regional Services Assumptions to provide typical referred healthcare travel times for most Contract Health Services paid healthcare and non-Contract Health Services healthcare where possible
- Prepare Analysis for area office review
- Teleconference with area leadership to discuss findings
- Gather edits and adjust analysis
- Create slides from analysis to import into final Tribal Leaders presentation

Modification 2b – Regional Scenarios Contract Health Services Impact Analysis

The purpose of this modification phase was to quantify the full Contract Health Services burden impact for the state and thereby allow Health Program and Tribal Leaders to understand the potential relief Regional healthcare might offer to their future Contract Health Services burden.

Modification 2b Tasks included:

- Discuss and request Contract Health Services per encounter costs data from Albuquerque/California Area Office with area office
- Prepare Innova Delivery Plan Workbook Planning tool for comparative Contract Health Services costs import and calculation
- Compare Contract Health Services per encounter costs data received with available national costs and assess the appropriate data set for usage
- Secure additional needed per encounter costs as possible (ex: Dental Specialty, Rehab, etc.)
- Load per encounter costs in planning tool
- replicate Innova Delivery Plan Workbook tool for 18 regional plans necessary for impact summary
- Adjust appropriate data set per encounter costs by location factor for regional sites
- Stratify projected workloads by payer (based on Market Share projections) to understand Contract Health Services workloads
- Capture and analyze Contract Health Services impact (remaining burden on Service Units) relative to regional scenarios
- Summarize findings by scenario for Area Office review
- Teleconference call to present analysis to Area Office and discuss
- Gather edits and adjust analysis
- Create presentation slides from analysis to import into final Tribal Leaders Presentation

Modification 2c – Tribal Officials Expanded Presentation

The purpose of this modification phase was to add necessary refinements to the presentation summarizing project findings for Tribal Leaders at the 2013 Spring Tribal Consultation. Since this communication opportunity was of critical importance, two (2) iterations were anticipated to facilitate an effective and efficient presentation.

Modification 2c Tasks included:

- Discuss presentation requirements with Area Office
- Adjust existing presentation for brevity, clarity, and effectiveness
- Add results from referral travel time analysis
- Add results from Contract Health Services impact analysis
- Test Review with Area Office Staff and California Area Tribal Advisory Committee
- Final Edits
- Presentation to Tribal Officials

- Review and gather feedback in preparation for pre-final report

Modification 3 – Adjustments to Scope to Finalize Project

The purpose of this modification phase was to reassign unused hours from Mod 2a due to unforeseen challenges in completing that work. While the CAO workgroup originally agreed on the work plan for Referred Care Travel Analysis, it became apparent that the acquisition of supporting data was simply not feasible. As a result, remaining hours in the mod were reassigned as per the task list below; comprising Mod 3. The focus of this reassignment allowed for increased effort on project summary formation, providing an addendum to the existing 2005 Health Services Master Plan, and documenting alternative critical paths toward implementing regional healthcare in California.

Modification 3 Tasks included:

- Research most effective Executive Summaries and Strategies
- Assemble and submit Draft Pre-Final with existing Executive Summary for review by CAO workgroup
- Prepare and submit leadership feedback form on Pre-Final and Executive Summary
- Allow for Review
    - Discuss Pre-Final and Executive Summary Version 1 with Planning Workgroup - ES Review #1
- Gather/collate feedback on Pre-Final and Executive Summary desires from California leadership
- Review pre-final for desired items for inclusion in Executive Summary - prioritize
- Develop updated Pre-Final Report
- Prepare Executive Summary Version 2 for inclusion with updated Pre-Final Report
- Submit updated Pre-Final with Executive Summary Version 2
- Allow for Review
    - Discuss updated Pre-Final and Executive Summary Version 2 – Executive Summary Review #2
- Collect/Collate comments and distribute minutes
- Revise and develop Executive Summary Version 3
- Develop update to California Area Health Services Master Plan showing level of need and services required to respond to that according to the continuum of healthcare IHS provides nationwide
- Identify critical paths for implementing regional healthcare in California (construction and alternative)
- Submit Executive Summary Version 3, Health Systems Master Plan Addendum (Update), and Critical paths to Implementation.
- Allow for Review
    - Discuss Pre-Final, Executive Summary Version 3, Health Systems Master Plan Update, and Implementation Options and any remaining edits
- Collect comments and distribute minutes

- Final edits of documentation

Phase III - Regional Centers Concept Refinement

The purpose of this phase was to agree on the appropriate concepts to refine toward a final deliverable, detailing services, staff and costs for each regional center and preparing a final report/deliverable.

Phase III Tasks included:

- Select appropriate concepts for refinement
- Adjust supporting Health Systems Planning software Population and Workload files
- Re-run 2007 staffing rosters for each Regional Center
- Update Population base sheets in support of Delivery Plan Workbook development
- Refine Delivery Plan Decisions for selected Regional Centers and Area Medical Center concepts
- Update Service, Staff and Cost Summaries for each Regional Center
- Create Supporting Regional Centers Summary Documentation and Graphical Services Slides
- Prepare Pre-final Report and Presentation for California Area Office
- Video Conference with California Area Office Leadership to review Regional Centers pre-final report
- Distribute Meeting Minutes, allowing one (1) week for comments
- Update documentation and prepare final report
- Distribute Final Report

Schedule

The graphic below illustrates the process and timeline for project completion along with an overview of the work effort occupying Consultant between meetings/reports.

Project Milestones

In November of 2011, the California Area engaged The Innova Group in a strategic effort to quantify the demand for Regional Services through multiple site scenarios and identify the resulting resource demands (space, staff, and cost). A California Area Office (CAO) workgroup was assembled consisting of the following IHS Staff: Margo Kerrigan, Beverly Miller, Edwin Fluette, David Sprenger, Christine Brennan, Dawn Phillips, Travis Coleman, Steve Riggio, Toni Johnson, Richard Wermers, and Vinay Behl. California's new CMO, Charles Magruder, was added to this group in November of 2012.

Key project milestones are identified below.

Meeting #1 – January 5, 2012

The Consultant met with the CAO workgroup in January of 2012 to explore the rationale for pursuing regional services, which services should/should not be provided at regional centers, and where regional centers should be located to best serve the needs of California American Indian/Alaska Natives. The outgrowth of the meeting was:

- Regional services would offer culturally appropriate secondary level healthcare currently not available anywhere in the state
- Regional services would be planned for American Indian/Alaska Natives only
- Regional services should consist of needed ambulatory healthcare (dental specialty, audiology), specialty healthcare, advanced diagnostics, acute/inpatient healthcare, surgery and speech/occupational therapy
- Regional services should not include primary healthcare or other typical services offered at local Health Programs
- Regional services should not include deliveries, emergency services nor walk in referrals
- Regional services will be planned using User Population projections
- Regional services will be offered in IHS owned/operated facilities
- Regional services are not intended to take away any resources from the local Health Programs, but rather supplement what they currently offer, completing the continuum of healthcare with a culturally appropriate response that also stretches critically limited Contract Health Services resources

Interim Work

Following the first meeting, the consultant focused on two primary work efforts:

- Who should be served where?
- Who should be anticipated at Regional Locations?

This work effort focused on aligning Health Program populations, current and projected, with the most reasonable sites for access. In other words, which Health Program users should go where for Regional healthcare? Varying access/travel times were considered. Initially, three locations were identified for

regional sites and health program user populations were aligned accordingly. A teleconference work session facilitated decisions relative to population alignments and CAO workgroup feedback/validation.

Regional Population Alignment Teleconference – April 27, 2012

Simultaneously, the consultant developed a projection methodology that anticipates referred services at regional locations without the presence of primary healthcare. This work effort was therefore concerned with developing a market share projection that considers the many variables affecting who might come to regional locations for healthcare, such as 3rd party insurance coverage, alternative healthcare options en route, population segments relative to their reliance on regional healthcare, aggressive use of telemedicine, the impact of healthcare reform (the ACA), and a patient's personal choice.

These variables were considered to help answer this simple, but critically important question: *"is there any reason why a California American Indian/Alaska Native would not travel to a Regional Center for free secondary healthcare?*" Several reasons were identified and agreed on. This market share projection methodology helped define a measurable "more aggressive" and "less aggressive" answer for use in services projection.

Services Concept Meeting – August 14, 2012

In August, the consultant and CAO workgroup met to review Regional Population Alignments, Market Share assumptions/methodology, and projected services/requirements for three Regional Locations: Redding, Sacramento, and Temecula.

Healthcare is a population based service. Larger populations support more services; smaller populations support fewer services. So while location is of great importance to remote American Indian/Alaska Native populations, finding an appropriate "shared" location for Regional Care that serves larger populations supports more of the services that Regional healthcare is all about. Consequently, this creates a dilemma:

- Should regional healthcare be distributed across the state, resulting in smaller populations served by each location, resulting in fewer regional services; or…
- Should regional healthcare be consolidated into fewer locations, with greater populations served at each, resulting in more regional services?

In order to explore the benefits/weaknesses of each option, the AWG tasked the Consultant with developing three (3) complete Regional Care scenarios with varying menus of services (Regional Outpatient Centers, Regional Inpatient Centers, and an Area Wide Medical Center) at the following locations:

- Regional Services at 4 locations: Redding, Sacramento, Fresno and Temecula
- Regional Services at 3 locations: Redding, Sacramento and Temecula
- Regional Services at 2 locations: Sacramento and Temecula

CATAC and Health Program Directors Presentation – November 14, 2012

Resulting scenario services, staff, space and costs were reviewed and compared first with the CAO workgroup and then presented to the California Area Tribal Advisory Committee and Tribal Health Program Directors at their November meeting in Sacramento. Beneficial and constructive feedback was received from participants during each conversation including:

- Refinements in the presentation to shorten, clarify the key findings of critical analysis
- Consider quantifying the impact of Regional Centers by scenario on reducing the Contract Health Services burden for Tribal Health Programs
- Consider analyzing existing travel patterns to secondary healthcare relative to the various locations proposed.

CATAC Revised Presentation – February 27, 2013

The November presentation was revised and updated with additional research/analysis related to measuring the impact of Regional healthcare on Contract Health Services. Per encounter costs for all service lines were developed based on a national database and utilized in calculating the value of referred healthcare served at each Regional facility by scenario. The presentation was further refined and simplified to facilitate a more engaged communication in anticipation of the Tribal Consultation in March.

The revised presentation was presented to the CATAC and critiqued relative to needed information or gaps in documentation. Valuable feedback was received and integrated in anticipation of the next event.

Tribal Consultation – March 13, 2013

The project effort, assumptions, concepts and conclusions were presented to Tribal Leaders at the annual Tribal Consultation in Pala, California on March 13, 2013. Feedback was received from attending Tribal Leaders relative to the following:

- Appreciation for the work effort
- Affirmation of the concept
- Concerns over travelling for healthcare

Documentation – September to December, 2013

The project concluded with an iterative documentation effort resulting in multiple Pre-Finals and one Final version. This document is the Final Report.

Participants

A project of this size achieves success only as a result of the dedicated participation of many people. This effort is indebted to the following participants who have given of their time to be thought leaders in shaping and encouraging meaningful analysis and actionable conclusions.

Name	*Title/Role*	*Email*	*Phone*
Margo Kerrigan	Area Director	Margo.Kerrigan@ihs.gov	**916-930-3981 x 306**
Beverly Miller	Associate Director /Executive Officer	Beverly.Miller@ihs.gov	**916-930-3981 x 312**
Edwin Fluette	Associate Director OEHE	Edwin.Fluette@ihs.gov	**916-930-3927 x 334**
Charles Magruder MD	Chief Medical Officer	Charles.magruder@ihs.gov	916-930-3981
David Sprenger, M.D.	Chief Medical Officer	David.Sprenger@ihs.gov	**916-930-3981 x 321**
Christine Brennan	Public Health Analyst/Statistics	Christine.Brennan@ihs.gov	**916-930-3981 x 333**
Dawn Phillips	Operations/Clinical Administration	Dawn.Phillips@ihs.gov	**916-930-3981**
Travis Coleman	Contract Specialist/Tribal Representative	Travis.Coleman@ihs.gov	**916-930-3981 x 319**
Steve Riggio	Health Systems Specialist/Urban Coordinator	Steve.Riggio@ihs.gov	**916-930-3981 x 322**
Toni Johnson	IT Specialist/Contract Health Services	Toni.Johnson@ihs.gov	**916-930-3981 x 354**
Rick Wermers	Health Facilities Engineer	Richard.Wermers@ihs.gov	**916-930-3981 x 341**
Vinay Behl	Financial Officer	Vinay.Behl@ihs.gov	**916-930-3981 x 310**
Jeanne Smith	Associate Director, Office of Management Support		
	CATAC Members - Present		
John Green	CATAC – Northern		
Peter Masten Jr.	CATAC – Northern		

Michael Thom	CATAC – Northern		
Robert Marquez	CATAC – East Central		
Silver Galleto	CATAC – West Central		
Chris Devers	CATAC – Southern		
Johnny Hernandez	CATAC – Southern		
Teresa Sanchez	CATAC – Southern		
	CATAC Members - Absent		
Stacy Dixon	CATAC – Northern		
Bonnie Hale	CATAC – East Central		
David Moose	CATAC – East Central		
Nelson Pinola	CATAC – West Central		
Crista Ray	CATAC – West Central		
	Consultants		
John Temple	Vice President – The Innova Group	John.Temple@TheInnovaGroup.com	**520-886-8650**
Anthony Laird	Senior Medical Planner – The Innova Group	Anthony.Laird@TheInnovaGroup.com	**520-886-8650**
Karen Rak	Analyst – The Innova Group	Karen.rak@theinnovagroup.com	**520-886-8650**
Nate Estrada	Analyst – The Innova Group	Nate.Estrada@TheInnovaGroup.com	**520-886-8650**

Glossary

This project employs its own terminology, one not always known to all document users or process participants. The terms below are defined in an attempt to give some help in understanding how they are generally used, verbally as well as within the deliverable documents.

ACA..... American Patient Protection and Affordable Care Act, signed into law by President Obama March 23, 2010, otherwise referred to in this document as Reform.

AI/AN..... American Indian and/or Alaskan Native.

Alternative Care ..... Alternative rural or urban hospitals accessible by patients anywhere in route to a proposed regional center.

Area..... The IHS consists of 12 large geographic and/or tribally organized administrative units responsible for the planning and provision of healthcare within each of their Service Areas.

BGSM(F) ..... Building Gross Square Meters (or Feet). Building space requirements can be understood and quantified at the room, department and building level. The building level incorporates all space within the building, including all rooms, departments, circulation and shared mechanical/electrical.

CAO ..... IHS, California Area Office, one of twelve IHS Areas.

CAO Workgroup ..... California Area Office Workgroup consisting of IHS Area Staff Members for most meetings and at times supplemented by members of the CATAC (see below).

CATAC..... California Area Tribal Advisory Committee, a standing workgroup that was at times part of the CAO workgroup (see above).

CHS..... Contract Health Services. Healthcare services that must be purchased from Non-IHS providers, based upon threshold issues or high acuity. These are generally facility and professional services of greater scope and intensity than are available through IHS facilities and providers.

CHSDA ..... Counties defined all or in part as the Contract Health Services Delivery Area. To receive Contract Health Services payment for needed services outside of the IHS delivery system, an American Indian/Alaska Native must reside within this area.

Deliverable ..... A specific planned report from The Innova Group given to the Planning workgroup, Area Office and/or Primary Service Area.

DGSM(F) ..... Department Gross Square Meters (or Feet). Building space requirements can be understood and quantified at the room, department and building level. The department level incorporates all rooms and circulation spaces within departmental boundaries.

DPW ..... Delivery Planning Workbook - The Innova Group's proprietary planning tool that utilizes historical workloads, national and Health Systems Planning software utilization rates, and IHS accepted planning benchmarks to facilitate delivery planning and calculate the resulting resource requirements.

Discipline ..... A specific medical specialty (e.g.: primary healthcare, dentistry or radiology).

Health Program ..... A California Primary Care Delivery System for one or more Rancherias, often a consortium, consisting of one or more clinics. This is somewhat synonymous with Service Unit.

Health Services Master Plan ..... An Area wide planning exercise driven by a "ground-up" consideration of who should access care at each of the Area's healthcare facilities, a breakdown of their age and sex by which to project workloads for a target planning year, typically 10 years out. Workloads by service line are then considered for delivery options: delivery needed care on-site, through Contract Health Services, referral to the Service Unit, or through some regional partnership. On-site workloads are converted into needed space and staff. Contract Health Services workloads are converted into need dollars. All service areas are "rolled-up" into an Area-wide Summary.

HFCPS ..... Healthcare Facilities Construction Priority System – IHS' methodology for scoring and ranking facility projects for funding and ultimately construction and staffing. It currently scores applicants out of 850 possible points for Phase 1, and 150 possible points for Phase 2. Projects that score the highest may be place on the Priority System for funding as it becomes available.

HSP	Health Systems Planning process software - the computer application that manages the IHS tool for the planning, programming and design of health facilities.
IHS	The Indian Health Service (IHS), an agency within the Department of Health and Human Services, is responsible for providing federal health services to American Indians and Alaska Natives. The provision of health services to members of federally-recognized tribes grew out of the special government-to-government relationship between the federal government and Indian tribes.
Justification	Used within the context of whether or not workload, criteria and market assessment "justify" the placement of resources or services at an identified location.
KC (Key Characteristic)	The recognized significant component of a discipline's ability to deliver care (e.g.: physician, radiology room).
LNF	Level of Need Funded – a measure that assesses how American Indian/Alaska Natives are funded by the Federal Government relative to the Federal Employees Health Benefit (FEHB). It is most often presented as a percentage. It does not include environmental or preventive health. It is not comparable to per capita spending on healthcare nationally, federally, or by state.
Market Share	The percentage of the user population from a specific community that is expected to be served at a facility for a specific discipline.
Market Erosion	The effect of distance, competitors, and payment ability on patients who seek care at a given facility. For example, if 92% market share is planned for a facility, it means the full market (100%) has been eroded by 8%. Such erosion may occur because some users will not drive that far, or because their service is not covered, or because they simply chose to go somewhere else.
Payer Profile	An analysis of the payer mix for a Service Area, typically focusing on Medicare, Medicaid, Veterans and other third party payers that may or may not affect the Service Area's ability to raise third party billing thereby increasing revenue.

Payer Segment	One payer within the Payer Mix, such as the commercial payer component or segment, or Medicare segment. All segments together form the complete Payer mix.
Primary Care	The standard benefits offered at most IHS and tribal clinics serving smaller typically rural populations, consisting of family practice, dental, behavioral health, pharmacy, some preventive care
PSA	A group of communities and its population for which, at a minimum, the primary care disciplines are being planned and resourced. Referred to as the Primary Service Area.
Project Cost	The sum of construction and equipment costs for a facility project. This does not include site acquisition and preparation.
Reform	The American Patient Protection and Affordable Care Act (see above)
RRM	Resource Requirements Methodology: The IHS staffing methodology.
Regional Care	Services offered through extended service areas to appropriately grouped user populations (referral partners), most often specialty care, advanced diagnostics, imaging, surgery and acute care.
Regional Centers	Specific sites offering Regional Care, sometimes referred to as Regional Centers, Referral Centers, secondary care sites, etc.
Regionalization/Referral Partners	The grouping of workload from different Primary Service Areas for the purpose of stretching resources and improving access. A region may be as simple as a referral pattern among facilities creating effective leverage to purchase commonly needed services, or it may be a facility where on site resources are justified and can be offered to one or more Primary Service Areas thereby stretching Contract Health Services dollars.
RPMS	Registered Patient Management System: the IHS standard Patient record system that forms the data basis for the master planning process.
Secondary Care	The next step in higher acuity from Primary Care, most often consisting of specialty care, advanced diagnostics, imaging, surgery and acute care.

Service Area	The communities and its population intended to be supported by a specific discipline's resources.
Service Population	The IHS understanding of the number of American Indian/Alaska Natives living within a county which may or may not be users. Census based and projected into the future. Primarily used for growth projection and market opportunities.
Service Unit	An administrative unit overseeing the delivery of healthcare to a specific geographic area. May consist of one or more facilities, Service Areas, or Primary Service Areas.
Tertiary Care	The next step in higher acuity from Secondary Care, most often consisting of higher acuity inpatient care and interventional services such as Neonatal Intensive Care Unit (NICU), Cardiac Catheterization, Open Heart, etc. These services are usually referred out of IHS/Tribal facilities.
Threshold	The minimum workload and/or remoteness necessary to justify the provision of a specific discipline.
Travel Distance	The distance a User has to travel from his home to a facility to receive care.
User	An American Indian/Alaska Native that has received or registered to receive healthcare in the past three years.
User Population	The number of Active Indian Registrants in the healthcare system from a specified area that have utilized the system in the past 3 years.

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Executive Summary

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A Severe Shortfall

California American Indian/Alaska Natives experience a severe shortfall in secondary care, most often provided through referrals to the private sector for inpatient and specialty care. This is a hardship to an already challenged population.

California IHS presents this study supporting two Regional Ambulatory Surgical & Specialty Centers for American Indian/Alaska Natives as a strategy for improving access to documented and needed secondary care, closing the Level of Need Funding (LNF) shortfall by as much as 39.8 percentage basis points, and providing a path for IHS to demonstrate its ability to build and operate culturally appropriate healthcare facilities.

A Regional Solution

This study suggests that two Regional Ambulatory Surgical & Specialty Centers, owned/operated by IHS, providing culturally-appropriate care, are the best solution, potentially increasing California Area's LNF from 54% to 93.8%:

- One facility centrally located for the central/northern region, such as Sacramento, to serve the referral needs of central and northern California tribal governments (300,715 square feet with 774 employees). *(See Concept of Operation page 93)*
- One facility centrally located in agreement with southern California tribal governments, such as Temecula, to serve the referral needs of the federally recognized tribes in southern California (119,369 building gross square feet with 269 FTE). *(See Concept of Operation page 93)*

Each would provide an enhanced level of secondary healthcare for American Indian/Alaska Natives residing in California, including Medical & Surgical Specialty, Surgery, advanced Diagnostic Imaging, and Acute care, to name a few. Total project cost for both locations is estimated at $253.5m. The annual operating cost for both locations is estimated at $134.6m.

An Enhanced Level of Healthcare

These two Regional Ambulatory Surgical & Specialty Centers would enhance the level of healthcare for American Indian/Alaska Natives residing in California in at least five important ways.

1. ***First, these facilities would provide statewide access to needed healthcare***. Appropriate locations for regional care in the north/central and southern parts of California would provide reasonable travel time to access consistent secondary care. The alternative, creating agreements with local hospitals, would result in inconsistent access and care for many tribal healthcare programs. *(See Concept of Operation page 90)*
2. ***Second, secondary services currently not accessible, but sponsored by IHS in other IHS areas, would be available***. Other IHS areas have access to the levels of regional care identified in this study (examples include Phoenix Indian Medical Center in the Phoenix Area, Gallup Indian

Medical Center in the Navajo Area, and Alaska Native Medical Center in the Alaska Area). Such facilities in California would not only help eliminate current gaps in the continuum of care for American Indian/Alaska Natives residing in California, but increase the level of access and presence of direct care services to what is currently available in other IHS areas.

3. ***Third, healthcare in a culturally-appropriate environment would be rendered***. The provision of secondary care through contracts with local hospitals fails to address the need for cultural awareness. Providing needed services in a culturally appropriate environment will help raise the health of California American Indian/Alaska Natives to the highest possible level.
4. ***Fourth, they would make limited Contract Health Services funding more available for higher levels of acute care***. Providing direct secondary care at regional centers allows local health programs to spend limited Contract Health Services dollars on other care that must be secured from the private sector, stretching those dollars while increasing access to higher level care.
5. ***Fifth, these facilities could close the disparity gap in Level of Need Funded.*** The 2010 national Level of Need Funding (LNF) benchmark is $3,510 per-user. California's present LNF is $1,895 per user, or 54% of the benchmark. The projected value of secondary care satisfied by these regional centers would significantly reduce the existing gap in LNF from 46% to 6.2%, a reduction of 39.8 percentage basis points. This represents an increase in LNF from $1,895 per-user to $3,294 per-user for American Indian/Alaska Natives residing in California, an additional $1,399 per-user for a projected 2025 area-wide user population of 102,745.

   This LNF impact is calculated by relating total anticipated operational costs (operations plus depreciation) to the projected California Area user population to produce a per-user dollar value. This value reflects the LNF investment IHS is being asked to make in healthcare delivery for American Indian/Alaska Natives residing in California. This value also approximates the market cost of all referred healthcare demand projected to be satisfied at two Regional Ambulatory Surgical & Specialty Centers. *(See Concept of Operation page 83)*

A Forward Path

This study provides the concept, requirements, and guiding assumptions to begin the process of bringing Regional Care from recommendation to reality in improving health outcomes of American Indian/Alaska Natives residing in California to the highest possible level. Implementation requires active IHS/Tribal involvement and the following steps:

- Tribal and IHS adoption of this report
- IHS support in review and consideration of additional planning documentation
  - Comprehensive financial/revenue analysis
  - Competitor and risk analysis
  - Potential site availability and costs
- Support from the California tribal governments for the development of planning and project approval documentation, design, construction, and staffing.

Concept of Operation

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Regional Healthcare

Regional Healthcare is not new to American Indian/Alaska Native (AI/AN) Healthcare, whether operated by IHS or Tribal entities. It is, however, unusual to consider it apart from anchor services typically associated with a concept of operations; services such as primary care, dental and preventive health. Such is the healthcare focused on in this planning effort: one or more regional locations offering secondary specialty, surgical and acute care for the expressed purpose of supporting primary healthcare assets already in place at local health programs serving American Indian/Alaska Natives across the state.

From California's point of view, the rationale for pursuing such healthcare is clear:

- To provide American Indian/Alaska Natives who reside in California secondary services currently not accessible
- To provide American Indian/Alaska Natives who reside in California secondary services through direct care, eliminating a long-standing barrier to access
- To stretch limited future Contract Health Services Dollars for California Tribal Health Programs
- To close the gap between projected California Contract Health Services funding and projected demand (the gap is not projected to improve in the foreseeable future)
- To respond to the requests of California Tribes regarding interest in Regional Healthcare (while regional services planning was not a formal part of the 2005 Health Services Master Plan, health programs were asked which services would be most attractive and needed if offered at an appropriate location)
- To complete the continuum of healthcare and eliminate current gaps in services for American Indian/Alaska Natives who reside in California
- To provide a healing place designed for American Indian/Alaska Natives who reside in California for secondary healthcare that is
    - Culturally Appropriate
    - Patient Sensitive
    - Clinically Excellent
    - Providing a menu of Tribally Requested Services
    - Providing Advanced Healthcare
    - Raising the health of American Indian/Alaska Natives who reside in California to the highest possible level

This concept of addressing unmet need for American Indian/Alaska Natives who reside in California is under increasing study as IHS Areas are starting to view its potential as the best option for providing secondary healthcare in light of IHS' traditional Contract Health Services funding increase methodology (which is historically tied to new construction only) and IHS' support infrastructure (which is historically facility based). The Portland Area IHS recently completed a similar effort that resulted in the request for a demonstration project to test the effectiveness of providing such healthcare at a site in the Seattle area.

This study is both similar and different from the Portland effort. It is similar in that it focuses on a similar menu of secondary services and plans those services using IHS planning tools such as the Health Systems Planning Software, Required Resources Methodology, and Facility Budget Estimating software. As articulated in that study, the Health Systems Planning software and Required Resources Methodology are problematic when used in Regional Planning and should be altered to better support such efforts. It is different in that it focuses on optimizing locations and services to best meet regional demand across the state and does not attempt to evaluate how such a concept would be "placed" on the Health Care Facilities Construction Priority System.

This study addresses

- What services are appropriate for regional healthcare
- When populations are appropriately grouped to maximize their offering
- Thus determining how many points of regional healthcare are ideal for American Indian/Alaska Natives who reside in California

At the Kickoff Meeting for this planning effort, when the Area Planning Workgroup was asked "why consider Regional Healthcare?" their answers were

- Regional Center planning should help to establish a baseline for Congress for Tribal requests
- To increase the level of complex medical facilities (like Phoenix Area, Navajo Area, Aberdeen Area), to use as leverage in increasing funding levels
- To make us comparable to other IHS areas
- To allow us to track Contract Health Services more closely to establish better funding
- To foster Centers of clinical competence enhanced by telemedicine technology, allowing specialty and sub-specialty healthcare to be accessed by even the most remote populations in the state
- To provide a full range of specialty healthcare options

In short, this study began on the assumption that a Regional center will support better healthcare at a better price in cooperation with IHS' historic model for providing services to AI/ANs.

Regional Center Definition

As mentioned above, the California Area Planning Workgroup defines Regional Healthcare by specific criteria. A Regional site would offer the following services:

- Specialty Healthcare
- Ambulatory Surgery
- Tele-Medicine
- Overnight Stays
- Acute Care/Inpatient
- Short Stay

- Referrals Only

Conversely, a regional site would not offer the following services:

- Primary Care
- Emergency Care
- Deliveries or OB Services
- Walk In Services for Local AI/ANs

There are many reasons for the inclusion and exclusion of these services.

- Regional Healthcare is designed to support, not replace, services presently offered at Health Programs across the state
- Regional Healthcare is not designed to compete with existing Health Programs
- Regional Healthcare is not designed to increase or manipulate California's existing or future user population
    - Healthcare is sized based on user population presently served at existing health programs grown by appropriate rates to 2020
    - Such healthcare is not anticipated to be "overrun" with locals seeking services because healthcare would come by referrals only from existing health programs
- Regional Healthcare is designed to continue such support as need is recognized for the extension of Primary Care assets to future tribal populations
- Regional Care is envisioned to provide services currently not available at existing Health Programs, ones that would most stretch limited Contract Health Services dollars (thus currently paid for with limited Contract Health Services dollars or ones that simply go unmet due to an absence of Contract Health Services dollars)
    - Colonoscopy suite
    - Women's Ob/Gyn outpatient type surgeries
    - Orthoscopic surgeries, (knee)
    - Oral Surgery
    - Pediatric dentistry
    - Endodontic
    - preventive healthcare,
    - chronic conditions
- To address services identified as desirable from the 2005 California Area Health Services Master Plan
    - Preventive health
    - Non acute ambulatory surgery
    - Treatment for chronic conditions
    - General Surgeon
    - Psychiatrist

- Gastroenterologist
- Endocrinologist
- Pediatric Dentistry
- Oral Surgery
- Orthopedics
- Cardiology
- Colonoscopy Suite
- Women's Health
- Knee Replacements
- Pain Management
- Mammography

In summary, the Regional Healthcare Concept of Operation is based on willing and often isolated partners experiencing shared needs who are unable to deliver referred healthcare, and when they can are dissatisfied with cultural insensitivity to their tribal members. It assumes tribal members are willing and motivated to travel to appropriately located IHS owned/operated facility (ies) offering culturally appropriate advanced diagnostic, specialty, and acute services as desired by tribes. Such services are offered as are sustainable in terms of staffing, recruitment, tertiary support, operations and revenue.

Issues

This study does not attempt to address all issues potentially problematic to regional healthcare. These will need study in future planning efforts, as this baseline study is built upon in future years.

- Transportation was recognized as a challenge for this concept. The California Area Planning Workgroup recognized that this will be an issue for everybody.
- Pharmacy and Laboratory were both included in the concept of operations though they are generally arranged locally with contracts and discounts by health programs. Various suggestions were made regarding how to seam Regional requirements with local capabilities:
    - Tele-kiosks for pharmacy could perhaps be coordinated with regional healthcare – dispensing machine with a Pharmacist Tech (but a pharmacist is at a regional center checking the Rx)
    - There are between 8 and 13 Tribal pharmacies, most of whom can do contracts with urban centers for pharmaceuticals
- The Patient Protection and Affordable Healthcare Act (ACA) will impact healthcare across the state. The California Area Planning Workgroup recognized the importance of delivering high quality healthcare at regional sites if they are to be competitive toward users who have a choice. Ultimately, this reality could not be modeled as part of this.
- Research capabilities were desired by the California Area Planning Workgroup. Phoenix Indian Medical Center has had space provided for NIH researchers dedicated to Indian population research alone. However, quantifying that space was not possible as part of this effort. Consequently, research space was not included in the concept.
- Unaffiliated populations were identified as a significant unmet need. In California, over half of the rural Indian population is unaffiliated (known as “Rural California American Indians”, and no longer permitted to visit a tribal facility for healthcare). Appeals go to tribal governments, but the California Area IHS cannot force a tribe to ‘serve somebody’ healthcare. Complaints about refusals for healthcare aren’t generally registered. This population remains unserved at a local level and so is also unserved in the regional concept

Regional Healthcare Planning Factors

This concept of operation supporting a Regional Specialty Regional center serving geographically dispersed populations considers the following components and will discuss each in the following pages. Additional detail is available in the Appendices of this report.

- Populations
    - User, Service, Census,
    - PSA to Regional Site Alignment
- Regional Healthcare Locations
    - Scenario Development (six)

  - 4 Locations – 3 outpatient and 1 inpatient
  - 4 locations – all inpatient
  - 3 locations – 2 outpatient and 1 inpatient
  - 3 locations – all inpatient
  - 2 locations – 1 outpatient and 1 inpatient
  - 2 locations – all inpatient
- Market Share Challenges
  - Erosion Factor 1
  - Erosion Factor 2
  - Erosion Factor 3
  - Erosion Factor 4
  - Erosion Factor 5
- Market Share Projection
- Projected Services
- Resource Requirements

Populations

Healthcare is a population based business. Two critical decisions must be made in projecting Regional services that are related to population.

- First, which populations will be utilized in planning services? (Population Types)
- Second, how will populations be clustered to provide the best possible healthcare? (Population Alignments)

A complete population table for American Indian/Alaska Natives who reside in California can be found in Appendix #1 and forms the basis for the conversation and conclusions covered below.

Population Types

Regarding the first, several population data sets are available from which to plan healthcare. They differ greatly.

- User population counts the number of American Indian/Alaska Natives who reside in California that have received service from a local Health Program or Primary Healthcare site at least one time within the last three years. This number is agreed upon annually between IHS and Tribes and is accessible through the Health Systems Planning software.
- Service population counts the total number of American Indian/Alaska Natives who reside in California living within a county and has some relationship to the US Census count of American Indian/Alaska Natives who reside in California. That relationship is not consistent, for at times the service population and census population are essentially identical, while at other times there is no service population when there is considerable census population. IHS utilizes the service population growth rates to grow user population.

- Census population is provided by the US Census and counts American Indian/Alaska Natives who reside in California that self-identify as either single or two or more races.

User population is typically the planning standard utilized in IHS and tribal projects for planning services. Since the concept of operations assumes this to be an IHS owned and operated facility (ies), user population was selected as the planning population.

Population Alignments

A variety of population clustering alignments were evaluated relative to:

- Their ability to provide the kind of services American Indian/Alaska Natives who reside in California are interested in.
- Their ability to provide locations accessible to the majority of potential users.

This balancing act is not easy for the following reasons.

First, as mentioned, increasing population generates increased services. The graphic below helps to illustrate how services grow relative to an increasing user population. While ambulatory surgery is desirable, it is not sustainable until it serves a population of about 15,000 users. On-site specialists such as general surgery and orthopedics are desirable but unsustainable until they are serving a population of about 30,000 users. In fact, the kinds of services most desirable by American Indian/Alaska Natives who reside in California require a user population of 30,000 or more. True regional healthcare starts when one is able to cluster about 30,000 users.

Second, it is desirable to place required healthcare as close to the user population as possible. In regional healthcare, this is difficult since 30,000 users represents about one-third of California's total user population. This immediately suggests a maximum of three centers for regional healthcare. Further complicating this is the fact that user population is not evenly distributed across the state: the north contains more users than the south. Distribution of services, while desirable, diminishes the level of healthcare sustainable because fewer populations are clustered or grouped for healthcare. Consolidation of

services, while undesirable, increases the level of healthcare sustainable because greater population is clustered or grouped for healthcare.

As a result the California Area Planning Workgroup, though originally considering 6 possible locations for healthcare, realized that two of those did not have sufficient projected user population to provide regional healthcare. Consequently, 4 locations were considered from which various scenarios were modeled.

Various access times for regional healthcare were evaluated, ranging from two to four hours. No access time considered was inclusive of all Health Program locations. Unfortunately, some (Crescent City and Toiyabe for example) will always face considerable travel times for regional healthcare (4+ hours). It should be understood that they currently face similar travel times for secondary healthcare, and when they eventually arrive, the must pay for the healthcare (personal funds or Contract Health Services). Though such travel time is not desirable, covered healthcare at the time of arrival represents an improvement over the present situation.

Alignment of populations for regional services consideration was driven by the following assumptions

- Each Regional Center was supported by a corresponding population grouping. Complete documentation supporting the decision making process is found in Appendix #1.
- Health Program service areas were not split. In other words, the entire user population was assumed to travel to Sacramento or Redding. There was no split on a community by community basis.
- User Populations were drawn directly from the Health Systems Planning software 2011.
- User Populations are “present” for alignment purposes, being 2011 user population.
- Unassigned or non-service unit Health Systems Planning software populations were not assigned to any Regional Center.

The assignments of Health Program user populations to various regional locations are shown below, and assume a 3 hour typical maximum access travel time (driving). In the following tables:

- Populations assume 100% market share
- Green shading identifies Health Program populations within the 3 hour access time
- Pink shading identifies Health Program populations outside of the 3 hour access time
- Grey shading identifies Urban Health Program populations
- Percentages of each user population are shown at the bottom of each table

Additional documentation is included in the Appendices.

Four Regional Centers

Extended Drive Time (3 Hours +)

User Populations are current (2011), not projected, and taken from the Health Systmes Planning software, Indian Health Service's primary population based planning tool. They assume 100% market share. Green shading indicates PSAs within travel time. Pink shading identifies PSAs outside travel time. Gray shading identifies Urban Programs. **Concept distributes regional care to most PSAs but scope of services is diminished for many PSA populations.**

Regional Center 1	20,008	Redding			
Greenville Rancheria	1,204	Hoopa	2,850		
Modoc	190	Karuk	1,931		
Pit River	916	United Indian Health Svc	7,898		
Quartz Valley	211	Warner Mountain	126		
Redding Rancheria	3,609				
Susanville Rancheria	1,073				
PSA Pop w/in Travel Time	**7,203**	**PSA Pop o/s Travel Time**	**12,805**	**Urban HSP User Pop**	**0**

Regional Center 2	31,865	Sacramento			
Chapa De	6,576	Round Valley	1,199	Sacramento Native American HC	1,341
Chicken Ranch	28			Native American HC (Oakland)	1,484
Colusa IHCC	129			Indian HC of San. Clara Valley (San Jose)	642
Consolidated	2,806			Fresno American Indian Health Proj.	4
Feather River	4,751				
Lake County	2,090				
MACT	1,915				
Northern Valley	2,309				
Shingle Springs	1,112				
Sonoma County	5,248				
Tuolumne Me-Wuk	231				
PSA Pop w/in Travel Time	**27,195**	**PSA Pop o/s Travel Time**	**1,199**	**Urban HSP User Pop**	**3,471**

Regional Center 3	10,480	Fresno			
Central Valley	4,737	Toiyabe	2,790		
Table Mountain	5				
Tejon Tribe	372				
Tule River	2,576				
PSA Pop w/in Travel Time	**7,690**	**PSA Pop o/s Travel Time**	**2,790**	**Urban HSP User Pop**	**0**

Regional Center 4	24,813	Temecula			
Cabazon Band	7	Santa Ynez	988	American Indian HSC (Santa Barbara)	313
Indian Health Council	4,691			San Diego American Indian HC	1,843
Riverside/San Bernardino	13,391			Bakersfield American Indian Health Proj.	280
Southern IHC	2,725			United American Indian Involvement (LA)	338
Sycuan Band	126			American Indian Free Clinic (Los Angeles)	111
PSA Pop w/in Travel Time	**20,940**	**PSA Pop o/s Travel Time**	**988**	**Urban HSP User Pop**	**2,885**

Total PSA Pop w/in TT	63,028	Total PSA Pop o/s TT	17,782	Total Urban HSP User Pop	6,356

Three Regional Centers

Extended Drive Time (3 Hours +)

User Populations are current (2011), not projected, and taken from the Health Systmes Planning software, Indian Health Service's primary population based planning tool. They assume 100% market share. Green shading indicates PSAs within travel time. Pink shading identifies PSAs outside travel time. Gray shading identifies Urban Programs. **Concept moderates distribution of Regional Care to PSAs while providing true specialty care in Sacramento.**

Regional Center 1	**20,008**	**Redding**			
Greenville Rancheria	1,204	Hoopa	2,850		
Modoc	190	Karuk	1,931		
Pit River	916	United Indian Health Svc	7,898		
Quartz Valley	211	Warner Mountain	126		
Redding Rancheria	3,609				
Susanville Rancheria	1,073				
PSA Pop w/in Travel Time	**7,203**	**PSA Pop o/s Travel Time**	**12,805**	**Urban HSP User Pop**	**0**

Regional Center 2	**41,973**	**Sacramento**			
Central Valley	4,737	Round Valley	1,199	Sacramento Native American HC	1,341
Chapa De	6,576	Toiyabe	2,790	Native American HC (Oakland)	1,484
Chicken Ranch	28	Tule River	2,576	Indian HC of San. Clara Valley (San Jose)	642
Colusa IHCC	129			Fresno American Indian Health Proj.	4
Consolidated	2,806				
Feather River	4,751				
Lake County	2,090				
MACT	1,915				
Northern Valley	2,309				
Shingle Springs	1,112				
Sonoma County	5,248				
Table Mountain	5				
Tuolumne Me-Wuk	231				
PSA Pop w/in Travel Time	**31,937**	**PSA Pop o/s Travel Time**	**6,565**	**Urban HSP User Pop**	**3,471**

Regional Center 3	**25,185**	**Temecula**			
Cabazon Band	7	Santa Ynez	988	American Indian HSC (Santa Barbara)	313
Indian Health Council	4,691			San Diego American Indian Health Center	1,843
Riverside/San Bernardino	13,391			Bakersfield American Indian Health Proj.	280
Southern IHC	2,725			United American Indian Involvement (LA)	338
Sycuan Band	126			American Indian Free Clinic (Los Angeles)	111
Tejon Tribe	372				
PSA Pop w/in Travel Time	**21,312**	**PSA Pop o/s Travel Time**	**988**	**Urban HSP User Pop**	**2,885**

Total PSA Pop w/in TT	**60,452**	**Total PSA Pop o/s TT**	**20,358**	**Total Urban HSP User Pop**	**6,356**

Two Regional Centers

Extended Drive Time (3 Hours +)

User Populations are current (2011), not projected, and taken from the Health Systmes Planning software, Indian Health Service's primary population based planning tool. They assume 100% market share. Green shading indicates PSAs within travel time. Pink shading identifies PSAs outside travel time. Gray shading identifies Urban Programs. **Concept reduces access for some PSA pops but offers the most regional services for populations.**

Regional Center 1	61,981	Sacramento			
Central Valley	4,737	Hoopa	2,850	Sacramento Native American HC	1,341
Chapa De	6,576	Karuk	1,931	Native American HC (Oakland)	1,484
Chicken Ranch	28	Round Valley	1,199	Indian HC of San. Clara Valley (San Jose)	642
Colusa IHCC	129	Toiyabe	2,790	Fresno American Indian Health Proj.	4
Consolidated	2,806	Tule River	2,576		
Feather River	4,751	United Indian Health Svc	7,898		
Lake County	2,090	Warner Mountain	126		
MACT	1,915	Greenville Rancheria	1,204		
Northern Valley	2,309	Modoc	190		
Redding Rancheria	3,609	Pit River	916		
Shingle Springs	1,112	Quartz Valley	211		
Sonoma County	5,248	Susanville Rancheria	1,073		
Table Mountain	5				
Tuolumne Me-Wuk	231				
PSA Pop w/in Travel Time	**35,546**	**PSA Pop o/s Travel Time**	**22,964**	**Urban HSP User Pop**	**3,471**

Regional Center 2	25,185	Temecula			
Cabazon Band	7	Santa Ynez	988	American Indian HSC (Santa Barbara)	313
Indian Health Council	4,691			San Diego American Indian HC	1,843
Riverside/San Bernardino	13,391			Bakersfield American Indian Health Proj.	280
Southern IHC	2,725			United American Indian Involvement (LA)	338
Sycuan Band	126			American Indian Free Clinic (Los Angeles)	111
Tejon Tribe	372				
PSA Pop w/in Travel Time	**21,312**	**PSA Pop o/s Travel Time**	**988**	**Urban HSP User Pop**	**2,885**

Total PSA Pop w/in TT	56,858	Total PSA Pop o/s TT	23,952	Total Urban HSP User Pop	6,356

Regional Center Locations

Locations for regional healthcare are supported by appropriate clustering of user populations as outlined and illustrated above. Locations must also meet the following criteria to be truly supportive:

- Locations balanced geographically relative to user populations
- Reasonable road capabilities allowing users to travel safely barring weather and other unintended consequences
- Adequate infrastructure necessary for visiting patients and family members (food, lodging, entertainment, airlift/airport capabilities, and other support services
- Immediately available tertiary healthcare with on-call specialists should a secondary procedure or acute healthcare episode deem necessary

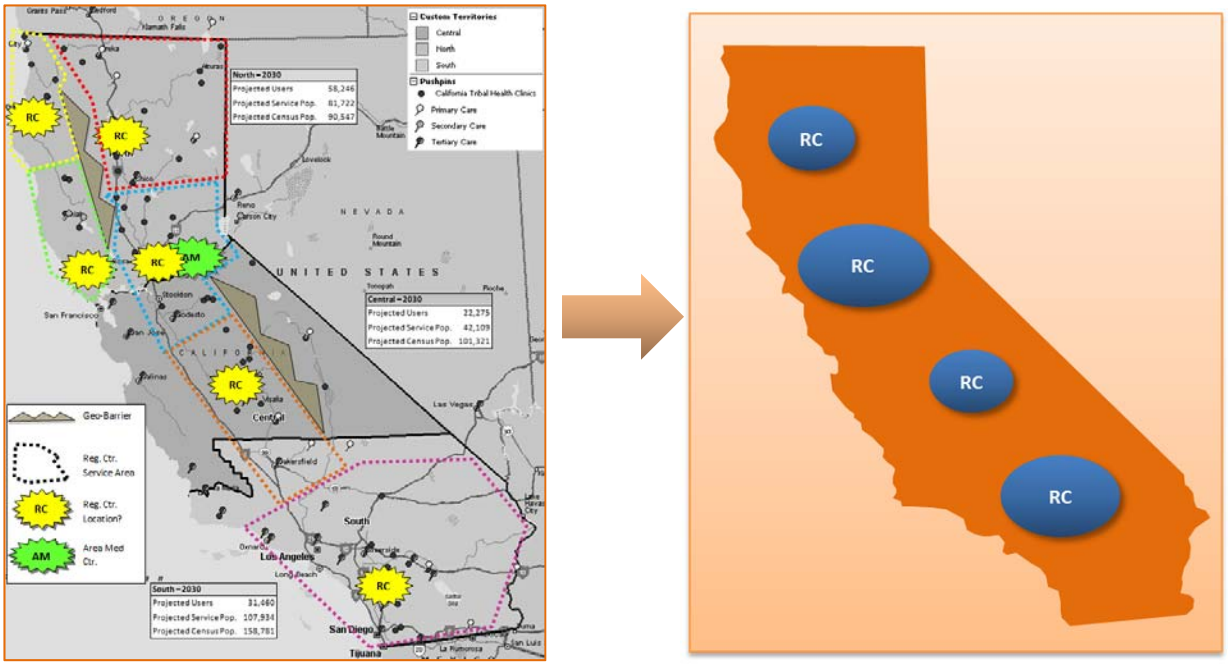
As mentioned previously, the California Area Planning Workgroup originally considered 6 sites but reduced that number to 4. The process to make that decision included

- Separation of California into 3 geographic regions with associated populations (user, service, census) to support regional site discussions
- Identification of regional location concepts by California Area Planning Workgroup in First Meeting
- Vetting of initial California Area Planning Workgroup concepts
    - Review of California Area Planning Workgroup location concepts
    - Review of regional location requests from Health Programs (from 2005 Area Health Services Master Plan)
    - Review of travel times and access patterns
    - Review of user population groupings and relative regional opportunities
    - Determine and prioritize options
- Review of regional locations (Conference Call) – concepts confirmation for draft services development
- Discussion and decision making

Through a nine month process, the California Area Planning Workgroup settled on the potential of two to four regional sites serving relative user populations, each of which were modeled for consideration of effectiveness in delivering regional healthcare.

- Scenario Development (six)
    - 4 Locations – 3 outpatient and 1 inpatient
    - 4 locations – all inpatient
    - 3 locations – 2 outpatient and 1 inpatient
    - 3 locations – all inpatient
    - 2 locations – 1 outpatient and 1 inpatient
    - 2 locations – all inpatient

The starting point is shown below left; the final locations considered for regional healthcare shown below right (Redding, Sacramento, Fresno, and Temecula).



Again, the types of regional facilities ultimately considered by site by scenario are shown below: six scenarios considering variations of four possible sites.

	One Inpatient Facility Anchoring Additional Outpatient Facilities			Multiple Inpatient Facilities		
	IP + OP			ALL IP		
Scenario	1	2	3	4	5	6
Redding	OP	OP		IP	IP	
Sacramento	IP	IP	IP	IP	IP	IP
Fresno	OP			IP		
Temecula	OP	OP	OP	IP	IP	IP
# of Centers	4	3	2	4	3	2
OP or IP	3 OP/1 IP	2 OP/1 IP	1 OP/1 IP	4 IP	3 IP	2 IP

The next critical question considered is “who will come?” Typically, when a primary healthcare clinic is built, everyone comes; sometimes more than the service or census populations identifies as present. For regional healthcare, that assumption is not supportable.

Market Share Erosion

Who should regional healthcare be sized for? Since the primary assumption is that most will need to travel out of their primary care service areas for some distance, it is safe to assume that some will either choose not to or simply cannot. The California Area Planning Workgroup acknowledged the reality that not everyone will come to a regional point of healthcare for a variety of reasons:

- Transportation is not available
- Unfamiliarity with regional location
- Outside of daily world
- Choose to receive healthcare at an alternative, closer, site
- Choose not to receive healthcare
- Etc.

Research identifies a number of factors that drive the reduction in the percentage of those willing/able to travel for healthcare relative to the distance that must be travelled. This reduction is called market share erosion. Factors that affect access include

- Social structure
- Health beliefs
- Enabling resources
- Demographic variables
- Health status
- Health behaviors
- Distance to healthcare
- Access to transportation

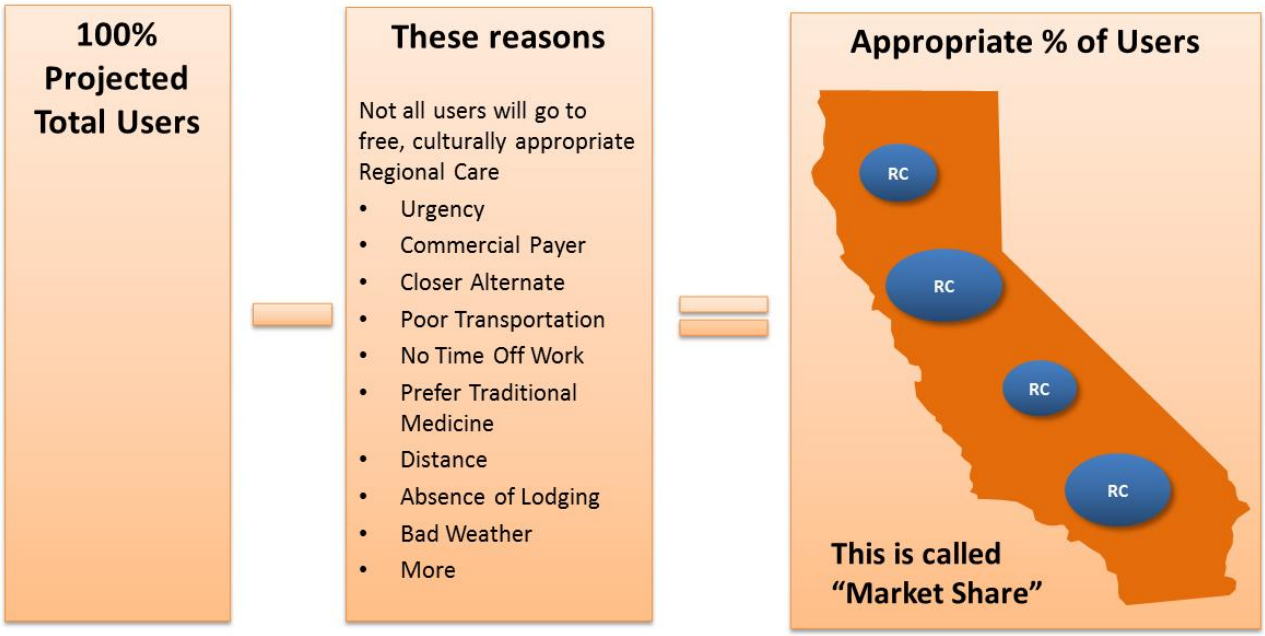
Although access can be measured in many ways, geographic access is of primary concern in many rural areas. This erosion is best understood within a conceptual model that integrates concepts from health geography with a health behavior model, which considers:

- Predisposing factors
    - Family composition
    - Social structure
    - Health beliefs
- Enabling Factors
    - Income
    - Health insurance status
    - Physician availability
- Need for Healthcare

Perhaps the most comprehensive thinking on factors affecting market share erosion is found in an article by Arcury, Gester, Preisser, Sherman, Spencer and Perin, *The Effects of Geography and Spatial*

Behavior on Health Care Utilization among the Residents of a Rural Region (2005). Additional information is available in Appendix #4.

The graphic below shows the basic formula that must be considered.



Since this project could not quantify the impact of all possible variables driving market share erosion, it focused on available data that would support modeling of the ultimate impact of each variable on market share. These erosion factors are as follows:

- Health Program Payer Profiles – This data was utilized to identify what percentage of the population is most reliant on regional healthcare: those without a third party payer. It provides an answer to the question "*Who is reliant on regional services*?
- Shifting Health Program Payer Profiles – This data was utilized to identify the coming shift in payers as a result of Healthcare Reform. Not all shifts can be understood. But data is available that shows the likely changes in uninsured and Medicaid. It provides an answer to the question "*Who will be reliant on regional services after Reform*?"
- Health Program Distance to Regional Healthcare – This data was utilized to identify how procedures and DRGs by payer diminish as the patient's location of residence is increasingly rural. It provides a partial answer to the question "*How will the market erode en route to regional healthcare*?"
- Alternative Healthcare – This data was utilized to identify how patients with a choice may choose to exercise such and select an alternative point of healthcare rather than drive to distant

regional healthcare. It provides a partial answer to the question "*How will the market erode en route to regional healthcare*?"

- Directing Payer Segments – This data was utilized to anticipate the impact of directing certain payer segments to distant regional healthcare; essentially overriding their ability to use Medicaid or Contract Health Services dollars at an alternative location. It answers the question "*How can market erosion be limited by directing certain payer segments*?"

Discussion of each dataset's utilization follows. Additional detail is available in the Appendices.

Erosion Factor 1 - Payer Profile

Who is reliant on access to distant Regional healthcare?

Erosion Factor	1	2	3	4	5
Erosion Question	Who is truly reliant on Regional Care?	Who will be reliant on Regional Care after Reform?	Will distance to Regional care affect market share?	How will alternative care affect market share?	Can Medi-Cal and CHS eligible payers be directed?
Erosion Decision Strategy and Resulting Assumption	Define high reliance by number & percentage of present AI/AN users with no 3rd party payer	Shift AI/AN uninsured users to Medicaid consistent with UCLA Health Policy projections	Study Medicare utilization relative to urban-to-rural access patterns and determine % erosion per travel time.	Reduce number of users by a percentage per alternate care opportunity en route	Assume both segments of each Health Program population can be directed to care

The IHS/California Area Office provided Health Program enrollee data by payer where available (21 of 33 Health Programs had such payer data). This data was divided into two sub-tables:

- Table 1 – Payer breakdown by third party source
- Table 2 – Payer breakdown by status and geography

Table 2 was utilized in identifying what portion of the base user population should be considered as "highly reliant" on distant regional healthcare. To arrive at this percentage, the number of users with no third party coverage in the Contract Health Services Delivery Area and all geographies were divided into the number of AI/AN active users in the Contract Health Services Delivery Area and all geographies and averaged. This resulting current percentage was applied to projected user populations to identify those that

- Would likely drive to regional healthcare
- Bypass all alternative healthcare options

- And demonstrate resilience toward market erosion as a result of distance

Additionally, this percentage was utilized later in the market share calculations to determine what portion of user populations could potentially be directed to regional healthcare by the local Health Programs.

On average, 28.5% of Health Program users are currently defined as Highly Reliant on access to distant Regional healthcare.

Detailed Health Program payer profile information and a sample Health Program profile, outlining how data was utilized, is available in Appendix #4.

Erosion Factor 2 – Shifting Payer Profiles

Who will be reliant on distant Regional healthcare after Reform?

Erosion Factor	1	2	3	4	5
Erosion Question	Who is truly reliant on Regional Care?	Who will be reliant on Regional Care after Reform?	Will distance to Regional care affect market share?	How will alternative care affect market share?	Can Medi-Cal and CHS eligible payers be directed?
Erosion Decision Strategy and Resulting Assumption	Define high reliance by number & percentage of present AI/AN users with no 3rd party payer	Shift AI/AN uninsured users to Medicaid consistent with UCLA Health Policy projections	Study Medicare utilization relative to urban-to-rural access patterns and determine % erosion per travel time.	Reduce number of users by a percentage per alternate care opportunity en route	Assume both segments of each Health Program population can be directed to care

Healthcare Reform will have a distinct impact on the delivery of healthcare to AI/ANs. At a minimum, current published documents identify the following:

- AI/AN participation in Health Insurance Exchanges
- Expanded Medicaid eligibility
- IHS and I/T/U responsibility and reimbursement opportunities
- Reauthorization of the Indian Health Care Improvement Act
- Grant opportunities for I/T/U entities

For this project, the second item above related to Medicaid eligibility is of greatest concern because it will drive a shift in payer segmentation, resulting in a greater percentage of insured payers (Medicaid) and a much smaller percentage of un-insured payers (no 3rd Party).

Research from UCLA Health Policy suggests that of those currently uninsured AI/ANs in the state of California, Reform could shift at least 43% into insured status through Medicaid. This would mean that 57% of current uninsured would remain uninsured for a variety of reasons.

This research conclusion was utilized in market share calculation by increasing the insured Health Program Medicaid payers (accomplished by applying 43% to the uninsured AI/AN population, which was then subtracted from the uninsured group and added to the Medicaid payer group) and decreasing the remaining uninsured population (accomplished by retaining 57% of uninsured Health Program user population for projected uninsured payer status).

In other words, 16.3% of American Indian/Alaska Natives who reside in California will be Highly Reliant on distant regional healthcare after Reform is implemented (down from 28.5% presently).

While Reform will shift payers across all payer segments, this single percentage is the most reliable indicator to use in modeling. The significance of payer Reform will be both good and bad:

- Good – newly insured AI/AN members are enabled to seek specialty healthcare and can take that revenue to a distant regional or area wide medical center (market share goes up)
- Bad – newly insured AI/AN members now have a choice; they can go to a distant regional or area wide medical center or they can choose a closer alternative healthcare site (market share goes down)

Detailed uninsured payer shift information is available in Appendix #5.

Erosion Factor 3 - Distance to Regional Healthcare

How will the market erode en route to Regional healthcare?

Erosion Factor	1	2	3	4	5
Erosion Question	Who is truly reliant on Regional Care?	Who will be reliant on Regional Care after Reform?	Will distance to Regional care affect market share?	How will alternative care affect market share?	Can Medi-Cal and CHS eligible payers be directed?
Erosion Decision Strategy and Resulting Assumption	Define high reliance by number & percentage of present AI/AN users with no 3rd party payer	Shift AI/AN uninsured users to Medicaid consistent with UCLA Health Policy projections	Study Medicare utilization relative to urban-to-rural access patterns and determine % erosion per travel time.	Reduce number of users by a percentage per alternate care opportunity en route	Assume both segments of each Health Program population can be directed to care

Earlier this document referenced a comprehensive treatment of the relationship between market share and distance (Arcury, Gester, Preisser, Sherman, Spencer and Perin, *The Effects of Geography and*

Spatial Behavior on Health Care Utilization among the Residents of a Rural Region (2005)). While research shows market share erodes relative to distance, quantifying the rate of erosion is of primary concern for this effort.

Two separate data sets were studied to understand how erosion by distance happens in California. Since secondary and tertiary cares are abundant in the state, there are few test sites useful in coordinating data relative to distance. But two were appropriate:

- The "urban to rural" path from Los Angeles to Bishop (Fig 1)
- The "urban to rural" path from San Francisco to Garberville (Fig 2)

So the issue of payment for services could largely be eliminated, Medicare utilization was selected for study relative to data available from the Dartmouth Atlas of Healthcare and California State Inpatient Data. Utilization was considered for sample zip codes in distances of roughly 60 miles in an increasingly "rural" direction from the urban center (Los Angeles or San Francisco). Since Medicare patients do not typically worry about payment for services, the question was "will there be a noticeable reduction in utilization in the Dartmouth data and state inpatient data as populations are increasingly rural?"

Various DRG and Procedures were selected for analysis depending on the presence of a health data set and a geographically appropriate zip code with statistically significant population. Examples include:

- Coronary Angiography
- Bacterial Pneumonia Discharge
- Hospitalization for Hip Fracture
- Cellulitis

- Nutritional and Metabolic Disorder

When both data sets' utilization by urban-to-rural path were averaged, the result was an average drop in utilization of -4.0% for every 60 miles a Medicare patient is removed from urban secondary and/or tertiary care. This assumption was embedded in the market share calculations

Detailed erosion by distance information is available in Appendix #4.

Erosion Factor 4 - Alternative Healthcare

How will the market erode en route to Regional healthcare?

Erosion Factor	1	2	3	4	5
Erosion Question	Who is truly reliant on Regional Care?	Who will be reliant on Regional Care after Reform?	Will distance to Regional care affect market share?	How will alternative care affect market share?	Can Medi-Cal and CHS eligible payers be directed?
Erosion Decision Strategy and Resulting Assumption	Define high reliance by number & percentage of present AI/AN users with no 3rd party payer	Shift AI/AN uninsured users to Medicaid consistent with UCLA Health Policy projections	Study Medicare utilization relative to urban-to-rural access patterns and determine % erosion per travel time.	Reduce number of users by a percentage per alternate care opportunity en route	Assume both segments of each Health Program population can be directed to care

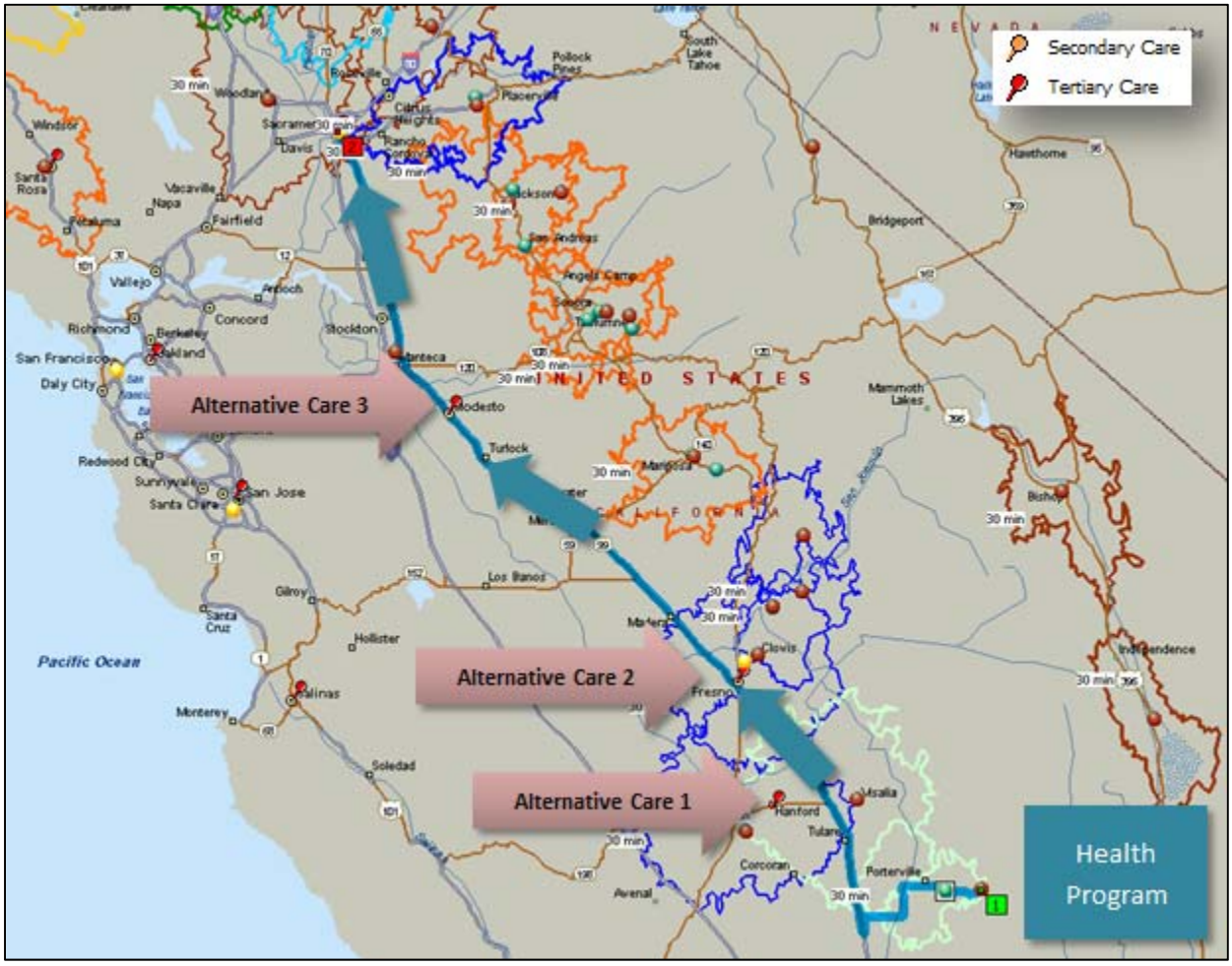
Using Microsoft Map Point, The Innova Group identified California Tribal Health Programs and the distance to their particular Regional Center (RC) assignment by scenario modeled. The following settings were used to standardize driving time between the Health Program and the Regional Center assignment:

- No driving breaks were allotted
- All driving speeds on the various types of roadway were set to "average"
- Segments were based on preferred roads rather than the quickest route or shortest distance to minimize needless market share erosion resulting from weather, road repairs, etc.

The distance was calculated using the primary point of healthcare (ex: for United Indian Health Services, Potawot in Arcata was used) as opposed to calculating distance from all possible points of healthcare. This assumption was made because measuring true distance for referred healthcare would require street addresses for all Native users (data that is not available) or measuring referrals from each Health Program clinic regardless of whether it was the actual source of the referral or not (an effort that added little value in light of the fact that such has little bearing on where the patient actually lives).

The AMA Hospital Guide was utilized to locate points of Secondary and Tertiary Care across the state relative to all California Health Program locations. Map Point made it possible to count the number of alternative secondary and tertiary care options between the Health Program and the regional center assignment. Any alternative healthcare sites that were within 15 miles distance of the planned route were counted as a possible healthcare sites. Any alternative healthcare sites located in a regional center site were not counted as possible healthcare sites. The total number passed "in route" was entered on the Market Share projection table. Only secondary and tertiary alternative healthcare was considered.

Discussions with the California Area Planning Workgroup resulted in the assumption that user population seeking Regional healthcare will erode by 10-20% per alternative healthcare opportunity en route, depending on reliance. Consider the application of this assumption using the example of Tule River Health below.



In the example above, patients travelling from Tule River to Sacramento, assuming the two or three center scenario, would pass three points of alternative healthcare. Their user population would

therefore be reduced from 30-60% based on the patient population's reliance on distant Regional healthcare. That would be the impact of erosion as a function purely of alternative healthcare.

Based on this methodology, Health Program referral patients would encounter between 1.3 to 1.5 alternative healthcare locations while en route to distant regional healthcare depending on the scenario modeled.

Detailed information on Erosion by Alternative Healthcare is available in Appendix #4.

Erosion Factor 5 - Directing Payer Segments

"Can market erosion be limited by directing certain payer segments?"

Erosion Factor	1	2	3	4	5
Erosion Question	Who is truly reliant on Regional Care?	Who will be reliant on Regional Care after Reform?	Will distance to Regional care affect market share?	How will alternative care affect market share?	Can Medi-Cal and CHS eligible payers be directed?
Erosion Decision Strategy and Resulting Assumption	Define high reliance by number & percentage of present AI/AN users with no 3rd party payer	Shift AI/AN uninsured users to Medicaid consistent with UCLA Health Policy projections	Study Medicare utilization relative to urban-to-rural access patterns and determine % erosion per travel time.	Reduce number of users by a percentage per alternate care opportunity en route	Assume both segments of each Health Program population can be directed to care

With the steady reduction in market share as a result of shifting payers, distance, and alternative healthcare, the California Area Planning Workgroup considered the question of whether Health Programs could limit erosion by directing certain payer segments to distant Regional healthcare.

This is a question also considered by the Portland PAFAC. Like the PAFAC, the California Area Planning Workgroup determined that two payer segments could be directed to distant regional healthcare:

- Contract Health Services eligible patients with no third party coverage
- Medicaid covered patients

In the final market share calculations, results were considered that

- Gave those payer segments the choice in whether or not they decide to go to regional healthcare
    - The assumption was they would choose not to go to distant regional healthcare
- Removed those payer segments' choice in whether or not they decide to go to regional healthcare
    - The assumption was they would go to distant Regional healthcare

The result of those two variations produced a high and low market share projection for each scenario modeled. The variation is significant; as much as

- 14.9% for Redding
- 22.2% for Sacramento
- 15%% for Fresno
- 7.0% for Temecula
- 22.8% for Sacramento for acute healthcare services when considered as an Area Wide Medical Center supporting one or more outpatient Regional Centers.

The table below captures the range of impact that directing two payer segments has in limiting market share erosion.

	Low Market Share			High Market Share		
Scenario	1	2	3	4	5	6
Redding	78.6%	78.6%		93.5%	93.5%	
Sacramento	83.8%	78.2%	74.5%	96.7%	94.7%	92.9%
Sacramento (Area Medical Center Inpatient only)	65.9%	65.9%	65.9%	88.7%	88.7%	88.7%
Fresno	79.4%			94.9%		
Temecula	91.4%	91.4%	91.4%	98.4%	98.4%	98.4%
# of Centers	4	3	2	4	3	2

While both market shares were calculated, the California Area Planning Workgroup opted to model scenarios using the high.

In addition to a high market share assumption, the aggressive use of telemedicine was assumed.

Detailed information on directing Payer Segments as it affects market share can be found in Appendix #4.

Detailed information on how telemedicine impacted workload projections for various service lines is found in Appendix #3.

Market Share Projections

Market share erosion factors discussed above were utilized in a series of tables that calculate anticipated market share by facility by scenario. Those tables are located on the following pages. They function by matriculating Health Program user populations through each of the erosion factors to arrive at a high and low market share by each Regional Center per scenario.

Six scenarios in all were modeled. Ten separate market shares were required to support those modeling efforts. The tables are understood from left to right. Because of publishing limitations, an image of one of the tables is displayed and explained by section (erosion factor). Sections of two images are intentionally removed to allow them to fit on the page.

Erosion Factor 1 (See Figure 1 below*)*

The far left of each table includes Service Areas (Health Programs) and their 2011 total (all) user population and Contract Health Services Delivery Area user population. Columns 3-25 stratify those populations by payer and create a composite understanding of users by level of present reliance on regional healthcare. This analysis comes from the payer profiles provided by the California Area IHS. As noted previously, 9.4% is the assumed statewide average of AI/AN Medicaid enrollment.

(Figure 1)

Medicaid Assumption → 9.4%

Erosion Factor #1 - Who is t

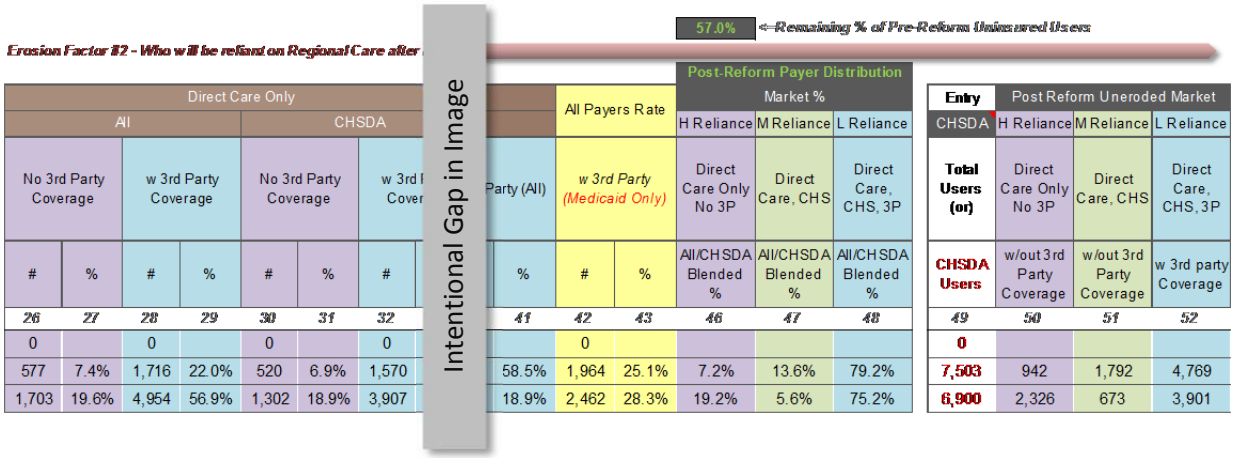
Intentional Gap in Image

Service Area	Users by Payer: All	Users by Payer: CHSDA	All: Does not include "Other Eligible" or "Non-Indian" payers: Total	All: No 3rd Party Coverage: #	All: No 3rd Party Coverage: %	All: w 3rd P… Covera: #	CHSDA: …Party …age: %	CHSDA: w 3rd Party (All): #	CHSDA: w 3rd Party (All): %	All Payers Rate: w 3rd Party (Medicaid Only): #	All Payers Rate: w 3rd Party (Medicaid Only): %	Pre-Reform Payer Distribution Market %: H Reliance: All/CHSDA Blended %	Pre-Reform Payer Distribution Market %: M Reliance: All/CHSDA Blended %	Pre-Reform Payer Distribution Market %: L Reliance: All/CHSDA Blended %
	1	2	3	4	5		16	17	18	19	20	23	24	25
Cabazon Band of Mission Indians										0	9.4%			
Central Valley	7,809	7,503	1,012	13.0%	1,281	1	24.0%	3,612	48.1%	731	9.4%	12.6%	23.9%	63.6%
Chapa-De Indian Health Project	8,705	6,900	2,988	34.3%	3,669	4	9.8%	1,012	14.7%	815	9.4%	33.7%	9.8%	56.5%

Erosion Factor 2 (See Figure 2 below)

Columns 26-52 re-stratify those populations by payer relative to shifting payer segments as anticipated by UCLA Health Policy research. 43% of uninsured payers are shifted to Medicaid payer status and a new composite understanding of users by level of projected reliance on regional healthcare post Reform is created. The assumption is that 57% of presently uninsured American Indian/Alaska Natives who reside in California will remain so, post Reform.

(Figure 2)



Direct Care Only								All Payers Rate		Post-Reform Payer Distribution Market %			Entry	Post Reform Uneroded Market		
All				CHSDA						H Reliance	M Reliance	L Reliance	CHSDA	H Reliance	M Reliance	L Reliance
No 3rd Party Coverage		w 3rd Party Coverage		No 3rd Party Coverage		w 3rd I Cover	Party (All)	w 3rd Party (Medicaid Only)		Direct Care Only No 3P	Direct Care, CHS	Direct Care, CHS, 3P	Total Users (or)	Direct Care Only No 3P	Direct Care, CHS	Direct Care, CHS, 3P
#	%	#	%	#	%	#	%	#	%	All/CHSDA Blended %	All/CHSDA Blended %	All/CHSDA Blended %	CHSDA Users	w/out 3rd Party Coverage	w/out 3rd Party Coverage	w 3rd party Coverage
26	27	28	29	30	31	32	41	42	43	46	47	48	49	50	51	52
0		0		0		0		0					0			
577	7.4%	1,716	22.0%	520	6.9%	1,570	58.5%	1,964	25.1%	7.2%	13.6%	79.2%	7,503	942	1,792	4,769
1,703	19.6%	4,954	56.9%	1,302	18.9%	3,907	18.9%	2,462	28.3%	19.2%	5.6%	75.2%	6,900	2,326	673	3,901

Erosion Factor 3 (See Figure 3 below)

Columns 53-62 erode the post Reform population stratification according to assumptions identified above relating to erosion by distance. Each Health Program is assigned to a Regional Center for modeling purposes and the distance to that site is identified. Moderate and Low reliance populations are eroded accordingly (10-20% per 60 miles) and new subtotals are displayed in columns 61-62.

(Figure 3)

		Market Erosion by Distance							
Regional Center Location	SU/PSA Drive Time to RC (in minutes)	Direct Care Only No 3P	Direct Care, CHS (No Choice)	Direct Care, CHS (Choice)	Direct Care, CHS, 3P (Medicaid Only)	Direct Care, CHS, 3P (Medicaid Reduced)	Direct Care, CHS, 3P	M Reliance No Choice	M Reliance Choice
		w/out 3rd Party Coverage	w/out 3rd Party Coverage	w/out 3rd Party Coverage	w 3rd party Coverage	w 3rd party Coverage	w 3rd party Coverage	Net Users	Net Users
53	54	55	56	57	58	59	60	61	62
Temecula, CA	84							0	0
Sacramento, CA	156	866	1,647	1,647	1,102	3,370	4,383	6,985	6,895
Sacramento, CA	37	2,326	673	673	1,103	2,798	3,901	6,900	6,900

Erosion Factor 4 – (see Figure 4 below)

Columns 63-69 further erode the post Reform distance impacted population stratification according to assumptions identified above relating to erosion by alternative healthcare. Each Health Program is assigned to a Regional Center for modeling purposes and the distance to that site is identified. The number of alternative healthcare sites en route from each Health Program to the assigned Regional site is then totaled using mapping software and the user population (market share) is eroded accordingly.

(Figure 4)

Erosion Factor #4 - How many alternative care opportunities are there?

	Sub Market Erosion by Competitors					
# of Alt Care in route (Sec or Trty)	Direct Care Only No 3P	Direct Care, CHS (No Choice)	Direct Care, CHS (Choice)	Direct Care, CHS, 3P (*Medicaid Only*)	Direct Care, CHS, 3P (Medicaid Reduced)	Direct Care, CHS, 3P
	w/out 3rd Party Coverage	w/out 3rd Party Coverage	w/out 3rd Party Coverage	w 3rd party Coverage	w 3rd party Coverage	w 3rd party Coverage
63	*64*	*65*	*66*	*67*	*68*	*69*
0						
2	866	1,647	1,317	*1,102*	*3,370*	2,630
1	2,326	673	606	*1,103*	*2,798*	3,120

Erosion Factor 5 – (see Figure 5 below)

Columns 70-73 offer two alternative final market shares for consideration based on whether Contract Health Services and Medicaid patients will be directed to Regional healthcare (high market share option) or whether they will not, and be left with the choice (low market share option). The results of each are represented as population and percentage of the original population representing 100% market share. The percentage figures are not utilized beyond this point. The total users, or remaining market by Health Program, are totaled and used for a final market share (see figure 6 and explanation).

(Figure 5)

Erosion Factor #5 -Can you direct Medicaid?

Market Share			
M Reliance - CHS No Choice & Medicaid Only		*M Reliance - Choice*	
Total Users	**% of User Pop**	**Total Users**	**% of User Pop**
70	*71*	*72*	*73*
0	0.0%	0	0.0%
6,985	93.1%	4,813	64.1%
6,900	100.0%	6,053	87.7%

Resulting Market Share (see Figure 6 below)

The bottom rows of each market share table identify the resulting shares utilized in the planning effort for each facility for each scenario. They total the high and low market share total users and divide those totals by the corresponding full market share total populations in columns 1 and 2. In the example below, the following market shares resulted from all erosion factor applications for the 2 Center Scenario:

- Low Market Share
  - 74.5% for Sacramento
  - 91.4% for Temecula
- High Market Share (utilized in Services Planning)
  - 92.9% for Sacramento
  - 98.4% for Temecula

(Figure 6)

	Market Share			
	M Reliance - CHS No Choice & Medicaid Only		*M Reliance - Choice*	
Service Area	Total Users	% of User Pop	Total Users	% of User Pop
	70	71	72	73
Sacramento, CA	40,214	92.9%	32,217	74.5%
Temecula, CA	26,110	98.4%	24,231	91.4%

In summary, current Health Program user populations were matriculated through five erosion factors or gates, resulting in eroded user populations by Health Program. These populations were totaled and related to full user populations by Regional Center assignment, which resulted in a market share percentage that was utilized in projecting 2020 user populations for regional services planning by facility by scenario.

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Regional Ambulatory Surgical and Specialty Health Services Feasibility Study

IHS, California Area Office

Market Erosion Calculation Table (Unabbreviated)

Medicaid Assumption → **9.4%**

Erosion Factor #1 - Who is truly reliant on Regional Care?

Erosion Factor #2 - Who will be reliant on Regional Care after Reform?

Service Area	Users by Payer: All	Users by Payer: CHSDA	Direct Care Only: All: No 3rd Party Coverage: #	Direct Care Only: All: No 3rd Party Coverage: %	Direct Care Only: All: w 3rd Party Coverage: #	Direct Care Only: All: w 3rd Party Coverage: %	Direct Care Only: CHSDA: No 3rd Party Coverage: #	Direct Care Only: CHSDA: No 3rd Party Coverage: %	Direct Care Only: CHSDA: w 3rd Party Coverage: #	Direct Care Only: CHSDA: w 3rd Party Coverage: %	CHS Eligible: All: No 3rd Party Coverage: #	CHS Eligible: All: No 3rd Party Coverage: %	CHS Eligible: All: w 3rd Party (All): #	CHS Eligible: All: w 3rd Party (All): %	CHS Eligible: CHSDA: No 3rd Party Coverage: #	CHS Eligible: CHSDA: No 3rd Party Coverage: %	CHS Eligible: CHSDA: w 3rd Party (All): #	CHS Eligible: CHSDA: w 3rd Party (All): %	All Payers Rate: *w 3rd Party (Medicaid Only)*: #	All Payers Rate: *w 3rd Party (Medicaid Only)*: %	Pre-Reform Payer Distribution Market %: H Reliance: Direct Care Only No 3P	Pre-Reform Payer Distribution Market %: M Reliance: Direct Care, CHS	Pre-Reform Payer Distribution Market %: L Reliance: Direct Care, CHS, 3P	Direct Care Only: All: No 3rd Party Coverage: #	Direct Care Only: All: No 3rd Party Coverage: %	Direct Care Only: All: w 3rd Party Coverage: #	Direct Care Only: All: w 3rd Party Coverage: %	Direct Care Only: CHSDA: No 3rd Party Coverage: #	Direct Care Only: CHSDA: No 3rd Party Coverage: %	Direct Care Only: CHSDA: w 3rd Party Coverage: #	Direct Care Only: CHSDA: w 3rd Party Coverage: %	CHS E: All: No 3rd Party Coverage: #	CHS E: All: No 3rd Party Coverage: %	CHS E: All: w 3rd Party (All): #	CHS E: All: w 3rd Party (All): %
	Does not include "Other Eligible" or "Non-Indian" payers		No 3rd Party Coverage		w 3rd Party Coverage		No 3rd Party Coverage		w 3rd Party Coverage		No 3rd Party Coverage		w 3rd Party (All)		No 3rd Party Coverage		w 3rd Party (All)				All/CHSDA Blended %	All/CHSDA Blended %	All/CHSDA Blended %	No 3rd Party Coverage		w 3rd Party Coverage		No 3rd Party Coverage		w 3rd Party Coverage		No 3rd Party Coverage		w 3rd Party (All)	
	Total	Total	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%				#	%	#	%	#	%	#	%	#	%	#	%
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
Cabazon Band of Mission Indians																			0	9.4%				0		0		0		0		0		0	
Central Valley	7,809	7,503	1,012	13.0%	1,281	16.4%	912	12.2%	1,178	15.7%	1,855	23.8%	3,661	46.9%	1,801	24.0%	3,612	48.1%	731	9.4%	12.6%	23.9%	63.6%	577	7.4%	1,716	22.0%	520	6.9%	1,570	20.9%	1,057	13.5%	4,459	57.1%
Chapa-De Indian Health Project	8,705	6,900	2,988	34.3%	3,669	42.1%	2,284	33.1%	2,925	42.4%	842	9.7%	1,206	13.9%	679	9.8%	1,012	14.7%	815	9.4%	33.7%	9.8%	56.5%	1,703	19.6%	4,954	56.9%	1,302	18.9%	3,907	56.6%	480	5.5%	1,568	18.0%
Chicken Ranch																			0	9.4%				0		0		0		0		0		0	
Colusa Tribal Health																			0	9.4%				0		0		0		0		0		0	
Consolidated Tribal Health Care	3,310	3,016	142	4.3%	529	16.0%	102	3.4%	406	13.5%	448	13.5%	2,191	66.2%	411	13.6%	2,097	69.5%	310	9.4%	3.8%	13.6%	82.6%	81	2.4%	590	17.8%	58	1.9%	450	14.9%	255	7.7%	2,384	72.0%
Feather River Tribal Health	5,000	4,623	661	13.2%	2,203	44.1%	548	11.9%	1,962	42.4%	54	1.1%	2,082	41.6%	52	1.1%	2,061	44.6%	468	9.4%	12.5%	1.1%	86.4%	377	7.5%	2,487	49.7%	312	6.8%	2,198	47.5%	31	0.6%	2,105	42.1%
Greenville Rancheria Tribal Health Program	1,271	779	316	24.9%	452	35.6%	142	18.2%	243	31.2%	121	9.5%	382	30.1%	86	11.0%	308	39.5%	119	9.4%	21.5%	10.3%	68.2%	180	14.2%	588	46.3%	81	10.4%	304	39.0%	69	5.4%	434	34.1%
Hoopa Health Association	3,608	3,285	230	6.4%	455	12.6%	168	5.1%	337	10.3%	411	11.4%	2,512	69.6%	385	11.7%	2,395	72.9%	338	9.4%	5.7%	11.6%	82.7%	131	3.6%	554	15.4%	96	2.9%	409	12.5%	234	6.5%	2,689	74.5%
Indian Health Council, Inc.	5,563	4,628	1,231	22.1%	1,128	20.3%	865	18.7%	826	17.8%	1,149	20.7%	2,055	36.9%	1,047	22.6%	1,890	40.8%	521	9.4%	20.4%	21.6%	58.0%	702	12.6%	1,657	29.8%	493	10.7%	1,198	25.9%	655	11.8%	2,549	45.8%
Karuk Tribal Health Program	2,618	2,126	291	11.1%	322	12.3%	98	4.6%	193	9.1%	509	19.4%	1,496	57.1%	446	21.0%	1,389	65.3%	245	9.4%	7.9%	20.2%	71.9%	166	6.3%	447	17.1%	56	2.6%	235	11.1%	290	11.1%	1,715	65.5%
Lake County Tribal Health Consortium, Inc.	2,413	1,870	464	19.2%	509	21.1%	333	17.8%	360	19.3%	118	4.9%	1,322	54.8%	97	5.2%	1,080	57.8%	226	9.4%	18.5%	5.0%	76.4%	264	11.0%	709	29.4%	190	10.2%	503	26.9%	67	2.8%	1,373	56.9%
MACT Health Board																			0	9.4%				0		0		0		0		0		0	
Modoc Indian Health Project	187	173	0	0.0%	0	0.0%	0	0.0%	0	0.0%	26	13.9%	161	86.1%	21	12.1%	152	87.9%	18	9.4%	0.0%	13.0%	87.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	15	7.9%	172	92.1%
Northern Valley Indian Health	3,413	2,206	874	25.6%	1,511	44.3%	489	22.2%	853	38.7%	93	2.7%	935	27.4%	73	3.3%	791	35.9%	319	9.4%	23.9%	3.0%	73.1%	498	14.6%	1,887	55.3%	279	12.6%	1,063	48.2%	53	1.6%	975	28.6%
Pit River Health Service	1,305	767	382	29.3%	370	28.4%	209	27.2%	138	18.0%	39	3.0%	514	39.4%	35	4.6%	385	50.2%	122	9.4%	28.3%	3.8%	68.0%	218	16.7%	534	40.9%	119	15.5%	228	29.7%	22	1.7%	531	40.7%
Quartz Valley Indian Reservation CHS	303	160	47	15.5%	115	38.0%	2	1.3%	46	28.8%	22	7.3%	119	39.3%	17	10.6%	95	59.4%	28	9.4%	8.4%	8.9%	82.7%	27	8.8%	135	44.6%	1	0.7%	47	29.3%	13	4.1%	128	42.4%
Redding Rancheria Indian Health Services																			0	9.4%				0		0		0		0		0		0	
Riverside/San Bernardino County Indian Health	12,508	12,408	4,645	37.1%	4,395	35.1%	4,599	37.1%	4,361	35.1%	927	7.4%	2,541	20.3%	917	7.4%	2,531	20.4%	1,171	9.4%	37.1%	7.4%	55.5%	2,648	21.2%	6,392	51.1%	2,621	21.1%	6,339	51.1%	528	4.2%	2,940	23.5%
Round Valley Indian Health Center	1,308	1,204	74	5.7%	92	7.0%	53	4.4%	70	5.8%	378	28.9%	764	58.4%	364	30.2%	717	59.6%	122	9.4%	5.0%	29.6%	65.4%	42	3.2%	124	9.5%	30	2.5%	93	7.7%	215	16.5%	927	70.8%
Santa Ynez Tribal Health Program	1,426	1,062	476	33.4%	358	25.1%	241	22.7%	240	22.6%	177	12.4%	415	29.1%	173	16.3%	408	38.4%	133	9.4%	28.0%	14.4%	57.6%	271	19.0%	563	39.5%	137	12.9%	344	32.4%	101	7.1%	491	34.4%
Shingle Springs Tribal Health Program	1,560	1,157	458	29.4%	973	62.4%	310	26.8%	724	62.6%	18	1.2%	111	7.1%	18	1.6%	105	9.1%	146	9.4%	28.1%	1.4%	70.6%	261	16.7%	1,170	75.0%	177	15.3%	857	74.1%	10	0.7%	119	7.6%
Sonoma County Indian Health																			0	9.4%				0		0		0		0		0		0	
Southern Indian Health Council	3,519	2,462	803	22.8%	1,523	43.3%	387	15.7%	934	37.9%	159	4.5%	1,034	29.4%	147	6.0%	994	40.4%	329	9.4%	19.3%	5.2%	75.5%	458	13.0%	1,868	53.1%	221	9.0%	1,100	44.7%	91	2.6%	1,102	31.3%
Susanville Indian Rancheria																			0	9.4%				0		0		0		0		0		0	
Sycuan Band of Mission Indians	397	129	199	50.1%	183	46.1%	36	27.9%	91	70.5%	5	1.3%	10	2.5%	0	0.0%	2	1.6%	37	9.4%	39.0%	0.6%	60.4%	113	28.6%	269	67.6%	21	15.9%	106	82.5%	3	0.7%	12	3.1%
Table Mountain Rancheria	0	0	0		0		0		0		0		0		0		0		0	9.4%				0		0		0		0		0		0	
Tejon Tribe																			0	9.4%				0		0		0		0		0		0	
Toiyabe Indian Health Project	3,266	2,961	343	10.5%	1,012	31.0%	251	8.5%	821	27.7%	71	2.2%	1,840	56.3%	68	2.3%	1,821	61.5%	306	9.4%	9.5%	2.2%	88.3%	196	6.0%	1,159	35.5%	143	4.8%	929	31.4%	40	1.2%	1,871	57.3%
Tule River Indian Health Center, Inc.																			0	9.4%				0		0		0		0		0		0	
Tuolumne Me-Wuk Indian Health Center	858	587	205	23.9%	325	37.9%	83	14.1%	181	30.8%	13	1.5%	315	36.7%	13	2.2%	310	52.8%	80	9.4%	19.0%	1.9%	79.1%	117	13.6%	413	48.2%	47	8.1%	217	36.9%	7	0.9%	321	37.4%
United Indian Health Services																			0	9.4%				0		0		0		0		0		0	
Warner Mountain Indian Health Program																			0	9.4%				0		0		0		0		0		0	
American Indian HSC (Santa Barbara)	603	416	286	47.4%	315	52.2%	207	49.8%	207	49.8%	1	0.2%	1	0.2%	1	0.2%	1	0.2%	56	9.4%	48.6%	0.2%	51.2%	163	27.0%	438	72.6%	118	28.4%	296	71.2%	1	0.1%	1	0.2%
San Diego American Indian Health Center	2,045	1,472	101	4.9%	1,944	95.1%	74	5.0%	1,398	95.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	191	9.4%	5.0%	0.0%	95.0%	58	2.8%	1,987	97.2%	42	2.9%	1,430	97.1%	0	0.0%	0	0.0%
Sacramento Native American Health Center	2,126	1,812	500	23.5%	1,623	76.3%	381	21.0%	1,428	78.8%	0	0.0%	3	0.1%	0	0.0%	3	0.2%	199	9.4%	22.3%	0.0%	77.7%	285	13.4%	1,838	86.5%	217	12.0%	1,592	87.8%	0	0.0%	3	0.1%
Native American Health Center, Inc. (Oakland)	1,367	1,171	1,336	97.7%	30	2.2%	1,142	97.5%	28	2.4%	1	0.1%	0	0.0%	1	0.1%	0	0.0%	128	9.4%	97.6%	0.1%	2.3%	762	55.7%	604	44.2%	651	55.6%	519	44.3%	1	0.0%	0	0.0%
United American Indian Involvement (LA)	2,987	2,850	2,352	78.7%	633	21.2%	2,247	78.8%	601	21.1%	2	0.1%	0	0.0%	2	0.1%	0	0.0%	280	9.4%	78.8%	0.1%	21.1%	1,341	44.9%	1,644	55.1%	1,281	44.9%	1,567	55.0%	1	0.0%	1	0.0%
Indian HC of Santa Clara Valley (San Jose)	476	334	474	99.6%	1	0.2%	333	99.7%	0	0.0%	1	0.2%	0	0.0%	1	0.3%	0	0.0%	45	9.4%	99.6%	0.3%	0.1%	270	56.8%	205	43.0%	190	56.8%	143	42.9%	1	0.1%	0	0.1%
Fresno American Indian Health Project	641	631	544	84.9%	96	15.0%	536	84.9%	94	14.9%	0	0.0%	1	0.2%	0	0.0%	1	0.2%	60	9.4%	84.9%	0.0%	15.1%	310	48.4%	330	51.5%	306	48.4%	324	51.4%	0	0.0%	1	0.2%
Bakersfield American Indian Health Project	1,244	1,094	117	9.4%	46	3.7%	71	6.5%	37	3.4%	710	57.1%	371	29.8%	650	59.4%	336	30.7%	116	9.4%	7.9%	58.2%	33.8%	67	5.4%	96	7.7%	40	3.7%	68	6.2%	405	32.5%	676	54.4%
American Indian Free Clinic (Los Angeles)																			0	9.4%				0		0		0		0		0		0	
Sacramento, CA																				9.4%	20.7%	10.1%	69.2%												
Temecula, CA																				9.4%	33.3%	10.7%	56.0%												

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2 Regional Center Market Share Calculation

57.0% <=*Remaining % of Pre-Reform Uninsured Users*

Erosion Factor #3 - How far is Regional Care? | *Erosion Factor #4 - How many alternative care opportunities are there?* | *Erosion Factor #5 -Can you direct Medicaid?*

Eligible						Post-Reform Payer Distribution Market %			Entry	Post Reform Uneroded Market						Market Erosion by Distance									Sub Market Erosion by Competitors						Market Share			
CHSDA				All Payers Rate		H Reliance	M Reliance	L Reliance	CHSDA	H Reliance	M Reliance	L Reliance																				
No 3rd Party Coverage		w 3rd Party (All)		*w 3rd Party (Medicaid Only)*		Direct Care Only No 3P	Direct Care, CHS	Direct Care, CHS, 3P	Total Users (or)	Direct Care Only No 3P	Direct Care, CHS	Direct Care, CHS, 3P	Regional Center Location	SU/PSA Drive Time to RC (in minutes)	Direct Care Only No 3P	Direct Care, CHS (*No Choice*)	Direct Care, CHS (Choice)	Direct Care, CHS, 3P (*Medicaid Only*)	Direct Care, CHS, 3P (Medicaid Reduced)	Direct Care, CHS, 3P	*M Reliance No Choice*	*M Reliance Choice*	# of Alt Care in route (Sec or Try)	Direct Care Only No 3P	Direct Care, CHS (No Choice)	Direct Care, CHS (Choice)	Direct Care, CHS, 3P (*Medicaid Only*)	Direct Care, CHS, 3P (Medicaid Reduced)	Direct Care, CHS, 3P	*M Reliance - CHS No Choice & Medicaid Only*		*M Reliance - Choice*	
#	%	#	%	#	%	All/CHSDA Blended %	All/CHSDA Blended %	All/CHSDA Blended %	CHSDA Users	w/out 3rd Party Coverage	w/out 3rd Party Coverage	w 3rd party Coverage			w/out 3rd Party Coverage	w/out 3rd Party Coverage	w/out 3rd Party Coverage	w 3rd party Coverage	w 3rd party Coverage	w 3rd party Coverage	Net Users	Net Users		w/out 3rd Party Coverage	w/out 3rd Party Coverage	w/out 3rd Party Coverage	w 3rd party Coverage	w 3rd party Coverage	w 3rd party Coverage	Total Users	% of User Pop	Total Users	% of User Pop
38	39	40	41	42	43	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73
0		0		0					0				Temecula, CA	84							0	0	0							0	0.0%	0	0.0%
1,027	13.7%	4,386	58.5%	1,964	25.1%	7.2%	13.6%	79.2%	7,503	942	1,792	4,769	Sacramento, CA	156	866	1,647	1,647	*1,102*	*3,370*	4,383	6,985	6,895	2	866	1,647	1,317	*1,102*	*3,370*	2,630	6,985	93.1%	4,813	64.1%
387	5.6%	1,304	18.9%	2,462	28.3%	19.2%	5.6%	75.2%	6,900	2,326	673	3,901	Sacramento, CA	37	2,326	673	673	*1,103*	*2,798*	3,901	6,900	6,900	1	2,326	673	606	*1,103*	*2,798*	3,120	6,900	100.0%	6,053	87.7%
0		0		0					0				Sacramento, CA	100							0	0	1							0	0.0%	0	0.0%
0		0		0					0				Sacramento, CA	64							0	0	1							0	0.0%	0	0.0%
234	7.8%	2,274	75.4%	563	17.0%	2.2%	7.7%	90.1%	3,016	116	410	2,491	Sacramento, CA	153	106	376	376	*390*	*1,931*	2,289	2,803	2,772	1	106	376	339	*390*	*1,931*	1,831	2,803	92.9%	2,276	75.5%
30	0.6%	2,083	45.1%	775	15.5%	7.1%	0.6%	92.2%	4,623	580	51	3,992	Sacramento, CA	67	556	49	49	*594*	*3,261*	3,831	4,460	4,436	1	556	49	44	*594*	*3,261*	3,065	4,460	96.5%	3,665	79.3%
49	6.3%	345	44.3%	307	24.1%	12.3%	5.9%	81.9%	779	168	80	531	Sacramento, CA	148	154	74	74	*118*	*380*	488	725	716	1	154	74	66	*118*	*380*	390	725	93.1%	611	78.4%
219	6.7%	2,561	77.9%	613	17.0%	3.3%	6.6%	90.1%	3,285	189	380	2,717	Sacramento, CA	261	150	303	303	*368*	*1,873*	2,167	2,694	2,620	2	150	303	242	*368*	*1,873*	1,300	2,694	82.0%	1,693	51.5%
597	12.9%	2,340	50.6%	1,544	27.8%	11.6%	12.3%	76.0%	4,628	945	1,001	2,682	Temecula, CA	29	945	1,001	1,001	*744*	*1,938*	2,682	4,628	4,628	0	945	1,001	1,001	*744*	*1,938*	2,682	4,628	100.0%	4,628	100.0%
254	12.0%	1,581	74.4%	589	22.5%	4.5%	11.5%	84.0%	2,126	167	430	1,529	Sacramento, CA	290	133	343	343	*274*	*1,001*	1,220	1,751	1,695	2	133	343	274	*274*	*1,001*	732	1,751	82.4%	1,139	53.6%
55	3.0%	1,122	60.0%	476	19.7%	10.6%	2.9%	86.6%	1,870	346	94	1,429	Sacramento, CA	124	318	87	87	*259*	*1,075*	1,314	1,740	1,719	1	318	87	78	*259*	*1,075*	1,051	1,740	93.0%	1,447	77.4%
0		0		0					0				Sacramento, CA	83							0	0	1							0	0.0%	0	0.0%
12	6.9%	161	93.1%	29	15.3%	0.0%	7.4%	92.6%	173	0	23	150	Sacramento, CA	287	0	18	18	*18*	*105*	120	142	138	2	0	18	14	*18*	*105*	72	142	81.9%	86	49.9%
42	1.9%	822	37.3%	735	21.5%	13.6%	1.7%	84.7%	2,206	527	67	1,612	Sacramento, CA	90	506	64	64	*333*	*1,227*	1,547	2,130	2,117	1	506	64	57	*333*	*1,227*	1,238	2,130	96.6%	1,801	81.6%
20	2.6%	400	52.2%	303	23.2%	16.1%	2.2%	81.7%	767	217	29	521	Sacramento, CA	187	190	25	25	*106*	*364*	458	687	674	2	190	25	20	*106*	*364*	275	687	89.5%	486	63.3%
10	6.1%	102	63.9%	58	19.2%	4.8%	5.1%	90.1%	160	13	14	132	Sacramento, CA	248	11	11	11	*20*	*89*	105	132	128	2	11	11	9	*20*	*89*	63	132	82.3%	83	51.9%
0		0		0					0				Sacramento, CA	138							0	0	2							0	0.0%	0	0.0%
523	4.2%	2,925	23.6%	3,567	28.5%	21.1%	4.2%	74.6%	12,408	4,603	918	6,886	Temecula, CA	58	4,603	918	918	*1,964*	*4,923*	6,886	12,408	12,408	0	4,603	918	918	*1,964*	*4,923*	6,886	12,408	100.0%	12,408	100.0%
207	17.2%	874	72.6%	317	24.2%	2.9%	16.9%	80.3%	1,204	61	356	787	Sacramento, CA	199	53	313	313	*168*	*545*	692	1,078	1,058	1	53	313	281	*168*	*545*	553	1,078	89.5%	888	73.8%
99	9.3%	482	45.4%	414	29.0%	16.0%	8.2%	75.8%	1,062	298	152	612	Temecula, CA	190	262	134	134	*156*	*400*	538	952	933	4	262	134	94	*156*	*400*	215	952	89.6%	570	53.7%
10	0.9%	113	9.7%	351	22.5%	16.0%	0.8%	83.2%	1,157	325	16	816	Sacramento, CA	35	325	16	16	*184*	*633*	816	1,157	1,157	1	325	16	14	*184*	*633*	653	1,157	100.0%	992	85.8%
0		0		0					0				Sacramento, CA	155							0	0	2							0	0.0%	0	0.0%
84	3.4%	1,057	42.9%	743	21.1%	11.0%	3.0%	86.0%	2,462	474	129	1,858	Temecula, CA	66	455	124	124	*377*	*1,422*	1,783	2,378	2,362	1	455	124	112	*377*	*1,422*	1,427	2,378	96.6%	1,993	81.0%
0		0		0					0				Sacramento, CA	185							0	0	1							0	0.0%	0	0.0%
0	0.0%	2	1.6%	125	31.5%	22.2%	0.4%	77.4%	129	50	1	78	Temecula, CA	68	48	1	1	*23*	*52*	75	125	124	2	48	1	1	*23*	*52*	45	125	96.7%	94	72.7%
0		0		0					0				Sacramento, CA	160							0	0	2							0	0.0%	0	0.0%
0		0		0					0				Temecula, CA	135							0	0	2							0	0.0%	0	0.0%
39	1.3%	1,850	62.5%	484	14.8%	5.4%	1.3%	93.3%	2,961	281	66	2,614	Sacramento, CA	268	224	53	53	*309*	*1,838*	2,085	2,424	2,361	1	224	53	48	*309*	*1,838*	1,668	2,424	81.9%	1,939	65.5%
0		0		0					0				Sacramento, CA	231							0	0	3							0	0.0%	0	0.0%
7	1.3%	316	53.8%	174	20.3%	10.8%	1.1%	88.1%	587	112	11	464	Sacramento, CA	104	107	11	11	*90*	*359*	446	567	563	1	107	11	9	*90*	*359*	356	567	96.6%	473	80.6%
0		0		0					0				Sacramento, CA	290							0	0	3							0	0.0%	0	0.0%
0		0		0					0				Sacramento, CA	322							0	0	2							0	0.0%	0	0.0%
1	0.1%	1	0.3%	180	29.8%	27.7%	0.1%	72.2%	416	202	1	213	Temecula, CA	163	186	1	1	*58*	*142*	196	387	382	4	186	1	1	*58*	*142*	78	387	93.0%	265	63.6%
0	0.0%	0	0.0%	235	11.5%	2.8%	0.0%	97.2%	1,472	73	0	1,399	Temecula, CA	53	73	0	0	*161*	*1,238*	1,399	1,472	1,472	2	73	0	0	*161*	*1,238*	839	1,472	100.0%	913	62.0%
0	0.0%	3	0.2%	414	19.5%	12.7%	0.0%	87.3%	1,812	404	0	1,408	Sacramento, CA	2	404	0	0	*274*	*1,134*	1,408	1,812	1,812	0	404	0	0	*274*	*1,134*	1,408	1,812	100.0%	1,812	100.0%
1	0.0%	0	0.0%	703	51.4%	55.6%	0.0%	44.3%	1,171	1,143	1	27	Sacramento, CA	73	1,097	1	1	*13*	*13*	26	1,124	1,124	2	1,097	1	1	*13*	*13*	15	1,124	96.0%	1,113	95.1%
1	0.0%	1	0.0%	1,292	43.2%	44.9%	0.0%	55.0%	2,850	2,246	2	602	Temecula, CA	79	2,155	2	2	*250*	*338*	578	2,745	2,735	0	2,155	2	2	*250*	*338*	578	2,745	96.3%	2,735	96.0%
1	0.2%	0	0.1%	249	52.3%	56.8%	0.1%	43.1%	334	333	1	0	Sacramento, CA	107	319	1	1	*0*	*0*	0	320	320	2	319	1	1	*0*	*0*	0	320	96.0%	320	95.9%
0	0.0%	1	0.2%	294	45.9%	48.4%	0.0%	51.6%	631	536	0	95	Sacramento, CA	153	492	0	0	*40*	*51*	88	583	580	3	492	0	0	*40*	*51*	35	583	92.4%	527	83.6%
371	33.9%	616	56.3%	472	37.9%	4.5%	33.2%	62.3%	1,094	87	637	370	Temecula, CA	172	80	586	586	*129*	*221*	340	1,016	1,005	3	80	586	410	*129*	*221*	136	1,016	92.9%	626	57.2%
0		0		0					0				Temecula, CA	79							0	0	0							0	0.0%	0	0.0%
					23.0%	11.8%	5.8%	82.4%	**43,265**																						**Sacramento, CA**	40,214	92.9%	32,217	74.5%
					28.3%	19.0%	6.1%	74.9%	**26,521**																						**Temecula, CA**	26,110	98.4%	24,231	91.4%

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Regional Ambulatory Surgical and Specialty Health Services Feasibility Study

IHS, California Area Office

Market Erosion Calculation Table (Unabbreviated)

Medicaid Assumption → **9.4%**

Erosion Factor #1 - Who is truly reliant on Regional Care?

Erosion Factor #2 - Who will be reliant on Regional Care after Reform?

Service Area	Users by Payer: All	Users by Payer: CHSDA	Direct Care Only: All: No 3rd Party Coverage #	Direct Care Only: All: No 3rd Party Coverage %	Direct Care Only: All: w 3rd Party Coverage #	Direct Care Only: All: w 3rd Party Coverage %	Direct Care Only: CHSDA: No 3rd Party Coverage #	Direct Care Only: CHSDA: No 3rd Party Coverage %	Direct Care Only: CHSDA: w 3rd Party Coverage #	Direct Care Only: CHSDA: w 3rd Party Coverage %	CHS Eligible: All: No 3rd Party Coverage #	CHS Eligible: All: No 3rd Party Coverage %	CHS Eligible: All: w 3rd Party (All) #	CHS Eligible: All: w 3rd Party (All) %	CHS Eligible: CHSDA: No 3rd Party Coverage #	CHS Eligible: CHSDA: No 3rd Party Coverage %	CHS Eligible: CHSDA: w 3rd Party (All) #	CHS Eligible: CHSDA: w 3rd Party (All) %	All Payers Rate: *w 3rd Party (Medicaid Only)* #	All Payers Rate: *w 3rd Party (Medicaid Only)* %	Pre-Reform Payer Distribution Market %: H Reliance: Direct Care Only No 3P	Pre-Reform Payer Distribution Market %: M Reliance: Direct Care, CHS	Pre-Reform Payer Distribution Market %: L Reliance: Direct Care, CHS, 3P	Direct Care Only: All: No 3rd Party Coverage #	Direct Care Only: All: No 3rd Party Coverage %	Direct Care Only: All: w 3rd Party Coverage #	Direct Care Only: All: w 3rd Party Coverage %	Direct Care Only: CHSDA: No 3rd Party Coverage #	Direct Care Only: CHSDA: No 3rd Party Coverage %	Direct Care Only: CHSDA: w 3rd Party Coverage #	Direct Care Only: CHSDA: w 3rd Party Coverage %	CHS E: All: No 3rd Party Coverage #	CHS E: All: No 3rd Party Coverage %	CHS E: All: w 3rd Party (All) #	CHS E: All: w 3rd Party (All) %
	All	CHSDA	Does not include "Other Eligible" or "Non-Indian" payers		No 3rd Party Coverage		w 3rd Party Coverage		No 3rd Party Coverage		w 3rd Party Coverage		No 3rd Party Coverage		w 3rd Party (All)		No 3rd Party Coverage		w 3rd Party (All)				All/CHSDA Blended %	All/CHSDA Blended %	All/CHSDA Blended %	No 3rd Party Coverage		w 3rd Party Coverage		No 3rd Party Coverage		w 3rd Party Coverage		No 3rd Party Coverage		w 3rd Party (All)	
	Total	Total	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%						#	%	#	%	#	%	#	%	#	%	#	%
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
Cabazon Band of Mission Indians																			0	9.4%				0		0		0		0		0		0	
Central Valley	7,809	7,503	1,012	13.0%	1,281	16.4%	912	12.2%	1,178	15.7%	1,855	23.8%	3,661	46.9%	1,801	24.0%	3,612	48.1%	731	9.4%	12.6%	23.9%	63.6%	577	7.4%	1,716	22.0%	520	6.9%	1,570	20.9%	1,057	13.5%	4,459	57.1%
Chapa-De Indian Health Project	8,705	6,900	2,988	34.3%	3,669	42.1%	2,284	33.1%	2,925	42.4%	842	9.7%	1,206	13.9%	679	9.8%	1,012	14.7%	815	9.4%	33.7%	9.8%	56.5%	1,703	19.6%	4,954	56.9%	1,302	18.9%	3,907	56.6%	480	5.5%	1,568	18.0%
Chicken Ranch																			0	9.4%				0		0		0		0		0		0	
Colusa Tribal Health																			0	9.4%				0		0		0		0		0		0	
Consolidated Tribal Health Care	3,310	3,016	142	4.3%	529	16.0%	102	3.4%	406	13.5%	448	13.5%	2,191	66.2%	411	13.6%	2,097	69.5%	310	9.4%	3.8%	13.6%	82.6%	81	2.4%	590	17.8%	58	1.9%	450	14.9%	255	7.7%	2,384	72.0%
Feather River Tribal Health	5,000	4,623	661	13.2%	2,203	44.1%	548	11.9%	1,962	42.4%	54	1.1%	2,082	41.6%	52	1.1%	2,061	44.6%	468	9.4%	12.5%	1.1%	86.4%	377	7.5%	2,487	49.7%	312	6.8%	2,198	47.5%	31	0.6%	2,105	42.1%
Greenville Rancheria Tribal Health Program	1,271	779	316	24.9%	452	35.6%	142	18.2%	243	31.2%	121	9.5%	382	30.1%	86	11.0%	308	39.5%	119	9.4%	21.5%	10.3%	68.2%	180	14.2%	588	46.3%	81	10.4%	304	39.0%	69	5.4%	434	34.1%
Hoopa Health Association	3,608	3,285	230	6.4%	455	12.6%	168	5.1%	337	10.3%	411	11.4%	2,512	69.6%	385	11.7%	2,395	72.9%	338	9.4%	5.7%	11.6%	82.7%	131	3.6%	554	15.4%	96	2.9%	409	12.5%	234	6.5%	2,689	74.5%
Indian Health Council, Inc.	5,563	4,628	1,231	22.1%	1,128	20.3%	865	18.7%	826	17.8%	1,149	20.7%	2,055	36.9%	1,047	22.6%	1,890	40.8%	521	9.4%	20.4%	21.6%	58.0%	702	12.6%	1,657	29.8%	493	10.7%	1,198	25.9%	655	11.8%	2,549	45.8%
Karuk Tribal Health Program	2,618	2,126	291	11.1%	322	12.3%	98	4.6%	193	9.1%	509	19.4%	1,496	57.1%	446	21.0%	1,389	65.3%	245	9.4%	7.9%	20.2%	71.9%	166	6.3%	447	17.1%	56	2.6%	235	11.1%	290	11.1%	1,715	65.5%
Lake County Tribal Health Consortium, Inc.	2,413	1,870	464	19.2%	509	21.1%	333	17.8%	360	19.3%	118	4.9%	1,322	54.8%	97	5.2%	1,080	57.8%	226	9.4%	18.5%	5.0%	76.4%	264	11.0%	709	29.4%	190	10.2%	503	26.9%	67	2.8%	1,373	56.9%
MACT Health Board																			0	9.4%				0		0		0		0		0		0	
Modoc Indian Health Project	187	173	0	0.0%	0	0.0%	0	0.0%	0	0.0%	26	13.9%	161	86.1%	21	12.1%	152	87.9%	18	9.4%	0.0%	13.0%	87.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	15	7.9%	172	92.1%
Northern Valley Indian Health	3,413	2,206	874	25.6%	1,511	44.3%	489	22.2%	853	38.7%	93	2.7%	935	27.4%	73	3.3%	791	35.9%	319	9.4%	23.9%	3.0%	73.1%	498	14.6%	1,887	55.3%	279	12.6%	1,063	48.2%	53	1.6%	975	28.6%
Pit River Health Service	1,305	767	382	29.3%	370	28.4%	209	27.2%	138	18.0%	39	3.0%	514	39.4%	35	4.6%	385	50.2%	122	9.4%	28.3%	3.8%	68.0%	218	16.7%	534	40.9%	119	15.5%	228	29.7%	22	1.7%	531	40.7%
Quartz Valley Indian Reservation CHS	303	160	47	15.5%	115	38.0%	2	1.3%	46	28.8%	22	7.3%	119	39.3%	17	10.6%	95	59.4%	28	9.4%	8.4%	8.9%	82.7%	27	8.8%	135	44.6%	1	0.7%	47	29.3%	13	4.1%	128	42.4%
Redding Rancheria Indian Health Services																			0	9.4%				0		0		0		0		0		0	
Riverside/San Bernardino County Indian Health	12,508	12,408	4,645	37.1%	4,395	35.1%	4,599	37.1%	4,361	35.1%	927	7.4%	2,541	20.3%	917	7.4%	2,531	20.4%	1,171	9.4%	37.1%	7.4%	55.5%	2,648	21.2%	6,392	51.1%	2,621	21.1%	6,339	51.1%	528	4.2%	2,940	23.5%
Round Valley Indian Health Center	1,308	1,204	74	5.7%	92	7.0%	53	4.4%	70	5.8%	378	28.9%	764	58.4%	364	30.2%	717	59.6%	122	9.4%	5.0%	29.6%	65.4%	42	3.2%	124	9.5%	30	2.5%	93	7.7%	215	16.5%	927	70.8%
Santa Ynez Tribal Health Program	1,426	1,062	476	33.4%	358	25.1%	241	22.7%	240	22.6%	177	12.4%	415	29.1%	173	16.3%	408	38.4%	133	9.4%	28.0%	14.4%	57.6%	271	19.0%	563	39.5%	137	12.9%	344	32.4%	101	7.1%	491	34.4%
Shingle Springs Tribal Health Program	1,560	1,157	458	29.4%	973	62.4%	310	26.8%	724	62.6%	18	1.2%	111	7.1%	18	1.6%	105	9.1%	146	9.4%	28.1%	1.4%	70.6%	261	16.7%	1,170	75.0%	177	15.3%	857	74.1%	10	0.7%	119	7.6%
Sonoma County Indian Health																			0	9.4%				0		0		0		0		0		0	
Southern Indian Health Council	3,519	2,462	803	22.8%	1,523	43.3%	387	15.7%	934	37.9%	159	4.5%	1,034	29.4%	147	6.0%	994	40.4%	329	9.4%	19.3%	5.2%	75.5%	458	13.0%	1,868	53.1%	221	9.0%	1,100	44.7%	91	2.6%	1,102	31.3%
Susanville Indian Rancheria																			0	9.4%				0		0		0		0		0		0	
Sycuan Band of Mission Indians	397	129	199	50.1%	183	46.1%	36	27.9%	91	70.5%	5	1.3%	10	2.5%	0	0.0%	2	1.6%	37	9.4%	39.0%	0.6%	60.4%	113	28.6%	269	67.6%	21	15.9%	106	82.5%	3	0.7%	12	3.1%
Table Mountain Rancheria	0	0	0		0		0		0		0		0		0		0		0	9.4%				0		0		0		0		0		0	
Tejon Tribe																			0	9.4%				0		0		0		0		0		0	
Toiyabe Indian Health Project	3,266	2,961	343	10.5%	1,012	31.0%	251	8.5%	821	27.7%	71	2.2%	1,840	56.3%	68	2.3%	1,821	61.5%	306	9.4%	9.5%	2.2%	88.3%	196	6.0%	1,159	35.5%	143	4.8%	929	31.4%	40	1.2%	1,871	57.3%
Tule River Indian Health Center, Inc.																			0	9.4%				0		0		0		0		0		0	
Tuolumne Me-Wuk Indian Health Center	858	587	205	23.9%	325	37.9%	83	14.1%	181	30.8%	13	1.5%	315	36.7%	13	2.2%	310	52.8%	80	9.4%	19.0%	1.9%	79.1%	117	13.6%	413	48.2%	47	8.1%	217	36.9%	7	0.9%	321	37.4%
United Indian Health Services																			0	9.4%				0		0		0		0		0		0	
Warner Mountain Indian Health Program																			0	9.4%				0		0		0		0		0		0	
American Indian HSC (Santa Barbara)	603	416	286	47.4%	315	52.2%	207	49.8%	207	49.8%	1	0.2%	1	0.2%	1	0.2%	1	0.2%	56	9.4%	48.6%	0.2%	51.2%	163	27.0%	438	72.6%	118	28.4%	296	71.2%	1	0.1%	1	0.2%
San Diego American Indian Health Center	2,045	1,472	101	4.9%	1,944	95.1%	74	5.0%	1,398	95.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	191	9.4%	5.0%	0.0%	95.0%	58	2.8%	1,987	97.2%	42	2.9%	1,430	97.1%	0	0.0%	0	0.0%
Sacramento Native American Health Center	2,126	1,812	500	23.5%	1,623	76.3%	381	21.0%	1,428	78.8%	0	0.0%	3	0.1%	0	0.0%	3	0.2%	199	9.4%	22.3%	0.0%	77.7%	285	13.4%	1,838	86.5%	217	12.0%	1,592	87.8%	0	0.0%	3	0.1%
Native American Health Center, Inc. (Oakland)	1,367	1,171	1,336	97.7%	30	2.2%	1,142	97.5%	28	2.4%	1	0.1%	0	0.0%	1	0.1%	0	0.0%	128	9.4%	97.6%	0.1%	2.3%	762	55.7%	604	44.2%	651	55.6%	519	44.3%	1	0.0%	0	0.0%
United American Indian Involvement (LA)	2,987	2,850	2,352	78.7%	633	21.2%	2,247	78.8%	601	21.1%	2	0.1%	0	0.0%	2	0.1%	0	0.0%	280	9.4%	78.8%	0.1%	21.1%	1,341	44.9%	1,644	55.1%	1,281	44.9%	1,567	55.0%	1	0.0%	1	0.0%
Indian HC of Santa Clara Valley (San Jose)	476	334	474	99.6%	1	0.2%	333	99.7%	0	0.0%	1	0.2%	0	0.0%	1	0.3%	0	0.0%	45	9.4%	99.6%	0.3%	0.1%	270	56.8%	205	43.0%	190	56.8%	143	42.9%	1	0.1%	0	0.1%
Fresno American Indian Health Project	641	631	544	84.9%	96	15.0%	536	84.9%	94	14.9%	0	0.0%	1	0.2%	0	0.0%	1	0.2%	60	9.4%	84.9%	0.0%	15.1%	310	48.4%	330	51.5%	306	48.4%	324	51.4%	0	0.0%	1	0.2%
Bakersfield American Indian Health Project	1,244	1,094	117	9.4%	46	3.7%	71	6.5%	37	3.4%	710	57.1%	371	29.8%	650	59.4%	336	30.7%	116	9.4%	7.9%	58.2%	33.8%	67	5.4%	96	7.7%	40	3.7%	68	6.2%	405	32.5%	676	54.4%
American Indian Free Clinic (Los Angeles)																			0	9.4%				0		0		0		0		0		0	
Redding, CA																				9.4%	11.1%	12.9%	76.1%												
Sacramento, CA																				9.4%	22.7%	9.6%	67.7%												
Temecula, CA																				9.4%	33.3%	10.7%	56.0%												

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3 Regional Center Market Share Calculation

57.0% <=*Remaining % of Pre-Reform Uninsured Users*

Erosion Factor #3 - How far is Regional Care? | *Erosion Factor #4 - How many alternative care opportunities are there?* | *Erosion Factor #5 -Can you direct Medicaid?*

Eligible CHSDA		All Payers Rate		Post-Reform Payer Distribution Market %			Entry	Post Reform Uneroded Market					Market Erosion by Distance								Sub Market Erosion by Competitors						Market Share			
No 3rd Party Coverage		w 3rd Party (All)		*w 3rd Party (Medicaid Only)*		H Reliance	CHSDA	H Reliance	M Reliance	L Reliance									*M Reliance No Choice*	*M Reliance Choice*									*M Reliance - CHS No Choice & Medicaid Only*		*M Reliance - Choice*	
#	%	#	%	#	%	All/CHSDA Blended %	Total Users (or) CHSDA Users	Direct Care Only No 3P w/out 3rd Party Coverage	Direct Care, CHS w/out 3rd Party Coverage	Direct Care, CHS, 3P w 3rd party Coverage	Regional Center Location	SU/PSA Drive Time to RC (in minutes)	Direct Care Only No 3P w/out 3rd Party Coverage	Direct Care, CHS (*No Choice*) w/out 3rd Party Coverage	Direct Care, CHS (Choice) w/out 3rd Party Coverage	Direct Care, CHS, 3P (*Medicaid Only*) w 3rd party Coverage	Direct Care, CHS, 3P (Medicaid Reduced) w 3rd party Coverage	Direct Care, CHS, 3P w 3rd party Coverage	Net Users	Net Users	# of Alt Care in route (Sec or Trty)	Direct Care Only No 3P w/out 3rd Party Coverage	Direct Care, CHS (No Choice) w/out 3rd Party Coverage	Direct Care, CHS (Choice) w/out 3rd Party Coverage	Direct Care, CHS, 3P (*Medicaid Only*) w 3rd party Coverage	Direct Care, CHS, 3P (Medicaid Reduced) w 3rd party Coverage	Direct Care, CHS, 3P w 3rd party Coverage	Total Users	% of User Pop	Total Users	% of User Pop
38	*39*	*40*	*41*	*42*	*43*	*46*	*47*	*48*	*49*	*50*	*51*	*52*	*53*	*54*	*55*	*56*	*57*	*58*	*59*	*60*	*61*	*62*	*63*	*64*	*65*	*66*	*67*	*68*	*69*	*70*	*71*	*72*	*73*
0		0		0					0				Temecula, CA	84							0	0	0										
1,027	13.7%	4,386	58.5%	1,964	25.1%	7.2%	13.6%	79.2%	7,503	942	1,792	4,769	Sacramento, CA	156	866	1,647	1,647	*1,102*	*3,370*	4,383	6,985	6,895	2	866	1,647	1,317	*1,102*	*3,370*	2,630	6,985	93.1%	4,813	64.1%
387	5.6%	1,304	18.9%	2,462	28.3%	19.2%	5.6%	75.2%	6,900	2,326	673	3,901	Sacramento, CA	37	2,326	673	673	*1,103*	*2,798*	3,901	6,900	6,900	1	2,326	673	606	*1,103*	*2,798*	3,120	6,900	100.0%	6,053	87.7%
0		0		0					0				Sacramento, CA	100							0	0	1							0	0.0%	0	0.0%
0		0		0					0				Sacramento, CA	64							0	0	1							0	0.0%	0	0.0%
234	7.8%	2,274	75.4%	563	17.0%	2.2%	7.7%	90.1%	3,016	116	410	2,491	Sacramento, CA	153	106	376	376	*390*	*1,931*	2,289	2,803	2,772	1	106	376	339	*390*	*1,931*	1,831	2,803	92.9%	2,276	75.5%
30	0.6%	2,083	45.1%	775	15.5%	7.1%	0.6%	92.2%	4,623	580	51	3,992	Sacramento, CA	67	556	49	49	*594*	*3,261*	3,831	4,460	4,436	1	556	49	44	*594*	*3,261*	3,065	4,460	96.5%	3,665	79.3%
49	6.3%	345	44.3%	307	24.1%	12.3%	5.9%	81.9%	779	168	80	531	Redding, CA	116	161	77	77	*123*	*392*	510	752	747	0	161	77	77	*123*	*392*	510	752	96.6%	747	96.0%
219	6.7%	2,561	77.9%	613	17.0%	3.3%	6.6%	90.1%	3,285	189	380	2,717	Redding, CA	126	173	349	349	*424*	*2,107*	2,497	3,053	3,019	1	173	349	314	*424*	*2,107*	1,997	3,053	92.9%	2,485	75.6%
597	12.9%	2,340	50.6%	1,544	27.8%	11.6%	12.3%	76.0%	4,628	945	1,001	2,682	Temecula, CA	29	945	1,001	1,001	*744*	*1,938*	2,682	4,628	4,628	0	945	1,001	1,001	*744*	*1,938*	2,682	4,628	100.0%	4,628	100.0%
254	12.0%	1,581	74.4%	589	22.5%	4.5%	11.5%	84.0%	2,126	167	430	1,529	Redding, CA	169	154	395	395	*316*	*1,115*	1,405	1,979	1,954	1	154	395	355	*316*	*1,115*	1,124	1,979	93.1%	1,633	76.8%
55	3.0%	1,122	60.0%	476	19.7%	10.6%	2.9%	86.6%	1,870	346	94	1,429	Sacramento, CA	124	318	87	87	*259*	*1,075*	1,314	1,740	1,719	1	318	87	78	*259*	*1,075*	1,051	1,740	93.0%	1,447	77.4%
0		0		0					0				Sacramento, CA	83							0	0	1							0	0.0%	0	0.0%
12	6.9%	161	93.1%	29	15.3%	0.0%	7.4%	92.6%	173	0	23	150	Redding, CA	144	0	21	21	*21*	*119*	138	161	159	1	0	21	19	*21*	*119*	111	161	92.9%	129	74.7%
42	1.9%	822	37.3%	735	21.5%	13.6%	1.7%	84.7%	2,206	527	67	1,612	Sacramento, CA	90	506	64	64	*333*	*1,227*	1,547	2,130	2,117	1	506	64	57	*333*	*1,227*	1,238	2,130	96.6%	1,801	81.6%
20	2.6%	400	52.2%	303	23.2%	16.1%	2.2%	81.7%	767	217	29	521	Redding, CA	156	199	27	27	*111*	*377*	479	714	705	1	199	27	24	*111*	*377*	383	714	93.1%	606	79.1%
10	6.1%	102	63.9%	58	19.2%	4.8%	5.1%	90.1%	160	13	14	132	Redding, CA	113	13	14	14	*24*	*104*	127	155	154	1	13	14	12	*24*	*104*	102	155	96.6%	127	79.2%
0		0		0					0				Redding, CA	6							0	0	0							0	0.0%	0	0.0%
523	4.2%	2,925	23.6%	3,567	28.5%	21.1%	4.2%	74.6%	12,408	4,603	918	6,886	Temecula, CA	58	4,603	918	918	*1,964*	*4,923*	6,886	12,408	12,408	0	4,603	918	918	*1,964*	*4,923*	6,886	12,408	100.0%	12,408	100.0%
207	17.2%	874	72.6%	317	24.2%	2.9%	16.9%	80.3%	1,204	61	356	787	Sacramento, CA	199	53	313	313	*168*	*545*	692	1,078	1,058	1	53	313	281	*168*	*545*	553	1,078	89.5%	888	73.8%
99	9.3%	482	45.4%	414	29.0%	16.0%	8.2%	75.8%	1,062	298	152	612	Temecula, CA	190	262	134	134	*156*	*400*	538	952	933	4	262	134	94	*156*	*400*	215	952	89.6%	570	53.7%
10	0.9%	113	9.7%	351	22.5%	16.0%	0.8%	83.2%	1,157	325	16	816	Sacramento, CA	35	325	16	16	*184*	*633*	816	1,157	1,157	1	325	16	14	*184*	*633*	653	1,157	100.0%	992	85.8%
0		0		0					0				Sacramento, CA	155							0	0	2							0	0.0%	0	0.0%
84	3.4%	1,057	42.9%	743	21.1%	11.0%	3.0%	86.0%	2,462	474	129	1,858	Temecula, CA	66	455	124	124	*377*	*1,422*	1,783	2,378	2,362	1	455	124	112	*377*	*1,422*	1,427	2,378	96.6%	1,993	81.0%
0		0		0					0				Redding, CA	112							0	0	1							0	0.0%	0	0.0%
0	0.0%	2	1.6%	125	31.5%	22.2%	0.4%	77.4%	129	50	1	78	Temecula, CA	68	48	1	1	*23*	*52*	75	125	124	2	48	1	1	*23*	*52*	45	125	96.7%	94	72.7%
0		0		0					0				Sacramento, CA	160							0	0	2							0	0.0%	0	0.0%
0		0		0					0				Temecula, CA	135							0	0	2							0	0.0%	0	0.0%
39	1.3%	1,850	62.5%	484	14.8%	5.4%	1.3%	93.3%	2,961	281	66	2,614	Sacramento, CA	268	224	53	53	*309*	*1,838*	2,085	2,424	2,361	1	224	53	48	*309*	*1,838*	1,668	2,424	81.9%	1,939	65.5%
0		0		0					0				Sacramento, CA	231							0	0	3							0	0.0%	0	0.0%
7	1.3%	316	53.8%	174	20.3%	10.8%	1.1%	88.1%	587	112	11	464	Sacramento, CA	104	107	11	11	*90*	*359*	446	567	563	1	107	11	9	*90*	*359*	356	567	96.6%	473	80.6%
0		0		0					0				Redding, CA	151							0	0	1							0	0.0%	0	0.0%
0		0		0					0				Redding, CA	200							0	0	1							0	0.0%	0	0.0%
1	0.1%	1	0.3%	180	29.8%	27.7%	0.1%	72.2%	416	202	1	213	Temecula, CA	163	186	1	1	*58*	*142*	196	387	382	4	186	1	1	*58*	*142*	78	387	93.0%	265	63.6%
0	0.0%	0	0.0%	235	11.5%	2.8%	0.0%	97.2%	1,472	73	0	1,399	Temecula, CA	53	73	0	0	*161*	*1,238*	1,399	1,472	1,472	2	73	0	0	*161*	*1,238*	839	1,472	100.0%	913	62.0%
0	0.0%	3	0.2%	414	19.5%	12.7%	0.0%	87.3%	1,812	404	0	1,408	Sacramento, CA	2	404	0	0	*274*	*1,134*	1,408	1,812	1,812	0	404	0	0	*274*	*1,134*	1,408	1,812	100.0%	1,812	100.0%
1	0.0%	0	0.0%	703	51.4%	55.6%	0.0%	44.3%	1,171	1,143	1	27	Sacramento, CA	73	1,097	1	1	*13*	*13*	26	1,124	1,124	2	1,097	1	1	*13*	*13*	15	1,124	96.0%	1,113	95.1%
1	0.0%	1	0.0%	1,292	43.2%	44.9%	0.0%	55.0%	2,850	2,246	2	602	Temecula, CA	79	2,155	2	2	*250*	*338*	578	2,745	2,735	0	2,155	2	2	*250*	*338*	578	2,745	96.3%	2,735	96.0%
1	0.2%	0	0.1%	249	52.3%	56.8%	0.1%	43.1%	334	333	1	0	Sacramento, CA	107	319	1	1	*0*	*0*	0	320	320	2	319	1	1	*0*	*0*	0	320	96.0%	320	95.9%
0	0.0%	1	0.2%	294	45.9%	48.4%	0.0%	51.6%	631	536	0	95	Sacramento, CA	153	492	0	0	*40*	*51*	88	583	580	3	492	0	0	*40*	*51*	35	583	92.4%	527	83.6%
371	33.9%	616	56.3%	472	37.9%	4.5%	33.2%	62.3%	1,094	87	637	370	Temecula, CA	172	80	586	586	*129*	*221*	340	1,016	1,005	3	80	586	410	*129*	*221*	136	1,016	92.9%	626	57.2%
0		0		0					0				Temecula, CA	79							0	0	0							0	0.0%	0	0.0%
					20.4%	6.3%	7.3%	86.4%	**7,290**																								
					23.6%	12.9%	5.5%	81.6%	**35,975**																								
					28.3%	19.0%	6.1%	74.9%	**26,521**																								

Redding, CA	6,814	93.5%	5,728	78.6%
Sacramento, CA	34,083	94.7%	28,119	78.2%
Temecula, CA	26,110	98.4%	24,231	91.4%

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Regional Ambulatory Surgical and Specialty Health Services Feasibility Study

IHS, California Area Office

Market Erosion Calculation Table (Unabbreviated)

Medicaid Assumption → **9.4%**

Erosion Factor #1 - Who is truly reliant on Regional Care?

Erosion Factor #2 - Who will be reliant on Regional Care after Reform?

Service Area	Users by Payer: All	Users by Payer: CHSDA	Direct Care Only: All: No 3rd Party Coverage: #	%	Direct Care Only: All: w 3rd Party Coverage: #	%	Direct Care Only: CHSDA: No 3rd Party Coverage: #	%	Direct Care Only: CHSDA: w 3rd Party Coverage: #	%	CHS Eligible: All: No 3rd Party Coverage: #	%	CHS Eligible: All: w 3rd Party (All): #	%	CHS Eligible: CHSDA: No 3rd Party Coverage: #	%	CHS Eligible: CHSDA: w 3rd Party (All): #	%	All Payers Rate: *w 3rd Party (Medicaid Only)*: #	%	Pre-Reform Payer Distribution Market %: H Reliance: Direct Care Only No 3P	M Reliance: Direct Care, CHS	L Reliance: Direct Care, CHS, 3P
	Does not include "Other Eligible" or "Non-Indian" payers																				All/CHSDA Blended %	All/CHSDA Blended %	All/CHSDA Blended %
	Total	Total																					
	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*	*18*	*19*	*20*	*23*	*24*	*25*
Cabazon Band of Mission Indians																			0	9.4%			
Central Valley	7,809	7,503	1,012	13.0%	1,281	16.4%	912	12.2%	1,178	15.7%	1,855	23.8%	3,661	46.9%	1,801	24.0%	3,612	48.1%	731	9.4%	12.6%	23.9%	63.6%
Chapa-De Indian Health Project	8,705	6,900	2,988	34.3%	3,669	42.1%	2,284	33.1%	2,925	42.4%	842	9.7%	1,206	13.9%	679	9.8%	1,012	14.7%	815	9.4%	33.7%	9.8%	56.5%
Chicken Ranch																			0	9.4%			
Colusa Tribal Health																			0	9.4%			
Consolidated Tribal Health Care	3,310	3,016	142	4.3%	529	16.0%	102	3.4%	406	13.5%	448	13.5%	2,191	66.2%	411	13.6%	2,097	69.5%	310	9.4%	3.8%	13.6%	82.6%
Feather River Tribal Health	5,000	4,623	661	13.2%	2,203	44.1%	548	11.9%	1,962	42.4%	54	1.1%	2,082	41.6%	52	1.1%	2,061	44.6%	468	9.4%	12.5%	1.1%	86.4%
Greenville Rancheria Tribal Health Program	1,271	779	316	24.9%	452	35.6%	142	18.2%	243	31.2%	121	9.5%	382	30.1%	86	11.0%	308	39.5%	119	9.4%	21.5%	10.3%	68.2%
Hoopa Health Association	3,608	3,285	230	6.4%	455	12.6%	168	5.1%	337	10.3%	411	11.4%	2,512	69.6%	385	11.7%	2,395	72.9%	338	9.4%	5.7%	11.6%	82.7%
Indian Health Council, Inc.	5,563	4,628	1,231	22.1%	1,128	20.3%	865	18.7%	826	17.8%	1,149	20.7%	2,055	36.9%	1,047	22.6%	1,890	40.8%	521	9.4%	20.4%	21.6%	58.0%
Karuk Tribal Health Program	2,618	2,126	291	11.1%	322	12.3%	98	4.6%	193	9.1%	509	19.4%	1,496	57.1%	446	21.0%	1,389	65.3%	245	9.4%	7.9%	20.2%	71.9%
Lake County Tribal Health Consortium, Inc.	2,413	1,870	464	19.2%	509	21.1%	333	17.8%	360	19.3%	118	4.9%	1,322	54.8%	97	5.2%	1,080	57.8%	226	9.4%	18.5%	5.0%	76.4%
MACT Health Board																			0	9.4%			
Modoc Indian Health Project	187	173	0	0.0%	0	0.0%	0	0.0%	0	0.0%	26	13.9%	161	86.1%	21	12.1%	152	87.9%	18	9.4%	0.0%	13.0%	87.0%
Northern Valley Indian Health	3,413	2,206	874	25.6%	1,511	44.3%	489	22.2%	853	38.7%	93	2.7%	935	27.4%	73	3.3%	791	35.9%	319	9.4%	23.9%	3.0%	73.1%
Pit River Health Service	1,305	767	382	29.3%	370	28.4%	209	27.2%	138	18.0%	39	3.0%	514	39.4%	35	4.6%	385	50.2%	122	9.4%	28.3%	3.8%	68.0%
Quartz Valley Indian Reservation CHS	303	160	47	15.5%	115	38.0%	2	1.3%	46	28.8%	22	7.3%	119	39.3%	17	10.6%	95	59.4%	28	9.4%	8.4%	8.9%	82.7%
Redding Rancheria Indian Health Services																			0	9.4%			
Riverside/San Bernardino County Indian Health	12,508	12,408	4,645	37.1%	4,395	35.1%	4,599	37.1%	4,361	35.1%	927	7.4%	2,541	20.3%	917	7.4%	2,531	20.4%	1,171	9.4%	37.1%	7.4%	55.5%
Round Valley Indian Health Center	1,308	1,204	74	5.7%	92	7.0%	53	4.4%	70	5.8%	378	28.9%	764	58.4%	364	30.2%	717	59.6%	122	9.4%	5.0%	29.6%	65.4%
Santa Ynez Tribal Health Program	1,426	1,062	476	33.4%	358	25.1%	241	22.7%	240	22.6%	177	12.4%	415	29.1%	173	16.3%	408	38.4%	133	9.4%	28.0%	14.4%	57.6%
Shingle Springs Tribal Health Program	1,560	1,157	458	29.4%	973	62.4%	310	26.8%	724	62.6%	18	1.2%	111	7.1%	18	1.6%	105	9.1%	146	9.4%	28.1%	1.4%	70.6%
Sonoma County Indian Health																			0	9.4%			
Southern Indian Health Council	3,519	2,462	803	22.8%	1,523	43.3%	387	15.7%	934	37.9%	159	4.5%	1,034	29.4%	147	6.0%	994	40.4%	329	9.4%	19.3%	5.2%	75.5%
Susanville Indian Rancheria																			0	9.4%			
Sycuan Band of Mission Indians	397	129	199	50.1%	183	46.1%	36	27.9%	91	70.5%	5	1.3%	10	2.5%	0	0.0%	2	1.6%	37	9.4%	39.0%	0.6%	60.4%
Table Mountain Rancheria	0	0	0		0		0		0		0		0		0		0		0	9.4%			
Tejon Tribe																			0	9.4%			
Toiyabe Indian Health Project	3,266	2,961	343	10.5%	1,012	31.0%	251	8.5%	821	27.7%	71	2.2%	1,840	56.3%	68	2.3%	1,821	61.5%	306	9.4%	9.5%	2.2%	88.3%
Tule River Indian Health Center, Inc.																			0	9.4%			
Tuolumne Me-Wuk Indian Health Center	858	587	205	23.9%	325	37.9%	83	14.1%	181	30.8%	13	1.5%	315	36.7%	13	2.2%	310	52.8%	80	9.4%	19.0%	1.9%	79.1%
United Indian Health Services																			0	9.4%			
Warner Mountain Indian Health Program																			0	9.4%			
American Indian HSC (Santa Barbara)	603	416	286	47.4%	315	52.2%	207	49.8%	207	49.8%	1	0.2%	1	0.2%	1	0.2%	1	0.2%	56	9.4%	48.6%	0.2%	51.2%
San Diego American Indian Health Center	2,045	1,472	101	4.9%	1,944	95.1%	74	5.0%	1,398	95.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	191	9.4%	5.0%	0.0%	95.0%
Sacramento Native American Health Center	2,126	1,812	500	23.5%	1,623	76.3%	381	21.0%	1,428	78.8%	0	0.0%	3	0.1%	0	0.0%	3	0.2%	199	9.4%	22.3%	0.0%	77.7%
Native American Health Center, Inc. (Oakland)	1,367	1,171	1,336	97.7%	30	2.2%	1,142	97.5%	28	2.4%	1	0.1%	0	0.0%	1	0.1%	0	0.0%	128	9.4%	97.6%	0.1%	2.3%
United American Indian Involvement (LA)	2,987	2,850	2,352	78.7%	633	21.2%	2,247	78.8%	601	21.1%	2	0.1%	0	0.0%	2	0.1%	0	0.0%	280	9.4%	78.8%	0.1%	21.1%
Indian HC of Santa Clara Valley (San Jose)	476	334	474	99.6%	1	0.2%	333	99.7%	0	0.0%	1	0.2%	0	0.0%	1	0.3%	0	0.0%	45	9.4%	99.6%	0.3%	0.1%
Fresno American Indian Health Project	641	631	544	84.9%	96	15.0%	536	84.9%	94	14.9%	0	0.0%	1	0.2%	0	0.0%	1	0.2%	60	9.4%	84.9%	0.0%	15.1%
Bakersfield American Indian Health Project	1,244	1,094	117	9.4%	46	3.7%	71	6.5%	37	3.4%	710	57.1%	371	29.8%	650	59.4%	336	30.7%	116	9.4%	7.9%	58.2%	33.8%
American Indian Free Clinic (Los Angeles)																			0	9.4%			
Redding, CA																				9.4%	11.1%	12.9%	76.1%
Fresno, CA																				9.4%	11.7%	17.6%	70.7%
Sacramento, CA																				9.4%	26.9%	6.5%	66.6%
Temecula, CA																				9.4%	33.3%	10.7%	56.0%

Service Area	Direct Care Only: All: No 3rd Party Coverage: #	%	Direct Care Only: All: w 3rd Party Coverage: #	%	Direct Care Only: CHSDA: No 3rd Party Coverage: #	%	Direct Care Only: CHSDA: w 3rd Party Coverage: #	%	CHS E: All: No 3rd Party Coverage: #	%	CHS E: All: w 3rd Party (All): #	%
	26	*27*	*28*	*29*	*30*	*31*	*32*	*33*	*34*	*35*	*36*	*37*
Cabazon Band of Mission Indians	0		0		0		0		0		0	
Central Valley	577	7.4%	1,716	22.0%	520	6.9%	1,570	20.9%	1,057	13.5%	4,459	57.1%
Chapa-De Indian Health Project	1,703	19.6%	4,954	56.9%	1,302	18.9%	3,907	56.6%	480	5.5%	1,568	18.0%
Chicken Ranch	0		0		0		0		0		0	
Colusa Tribal Health	0		0		0		0		0		0	
Consolidated Tribal Health Care	81	2.4%	590	17.8%	58	1.9%	450	14.9%	255	7.7%	2,384	72.0%
Feather River Tribal Health	377	7.5%	2,487	49.7%	312	6.8%	2,198	47.5%	31	0.6%	2,105	42.1%
Greenville Rancheria Tribal Health Program	180	14.2%	588	46.3%	81	10.4%	304	39.0%	69	5.4%	434	34.1%
Hoopa Health Association	131	3.6%	554	15.4%	96	2.9%	409	12.5%	234	6.5%	2,689	74.5%
Indian Health Council, Inc.	702	12.6%	1,657	29.8%	493	10.7%	1,198	25.9%	655	11.8%	2,549	45.8%
Karuk Tribal Health Program	166	6.3%	447	17.1%	56	2.6%	235	11.1%	290	11.1%	1,715	65.5%
Lake County Tribal Health Consortium, Inc.	264	11.0%	709	29.4%	190	10.2%	503	26.9%	67	2.8%	1,373	56.9%
MACT Health Board	0		0		0		0		0		0	
Modoc Indian Health Project	0	0.0%	0	0.0%	0	0.0%	0	0.0%	15	7.9%	172	92.1%
Northern Valley Indian Health	498	14.6%	1,887	55.3%	279	12.6%	1,063	48.2%	53	1.6%	975	28.6%
Pit River Health Service	218	16.7%	534	40.9%	119	15.5%	228	29.7%	22	1.7%	531	40.7%
Quartz Valley Indian Reservation CHS	27	8.8%	135	44.6%	1	0.7%	47	29.3%	13	4.1%	128	42.4%
Redding Rancheria Indian Health Services	0		0		0		0		0		0	
Riverside/San Bernardino County Indian Health	2,648	21.2%	6,392	51.1%	2,621	21.1%	6,339	51.1%	528	4.2%	2,940	23.5%
Round Valley Indian Health Center	42	3.2%	124	9.5%	30	2.5%	93	7.7%	215	16.5%	927	70.8%
Santa Ynez Tribal Health Program	271	19.0%	563	39.5%	137	12.9%	344	32.4%	101	7.1%	491	34.4%
Shingle Springs Tribal Health Program	261	16.7%	1,170	75.0%	177	15.3%	857	74.1%	10	0.7%	119	7.6%
Sonoma County Indian Health	0		0		0		0		0		0	
Southern Indian Health Council	458	13.0%	1,868	53.1%	221	9.0%	1,100	44.7%	91	2.6%	1,102	31.3%
Susanville Indian Rancheria	0		0		0		0		0		0	
Sycuan Band of Mission Indians	113	28.6%	269	67.6%	21	15.9%	106	82.5%	3	0.7%	12	3.1%
Table Mountain Rancheria	0		0		0		0		0		0	
Tejon Tribe	0		0		0		0		0		0	
Toiyabe Indian Health Project	196	6.0%	1,159	35.5%	143	4.8%	929	31.4%	40	1.2%	1,871	57.3%
Tule River Indian Health Center, Inc.	0		0		0		0		0		0	
Tuolumne Me-Wuk Indian Health Center	117	13.6%	413	48.2%	47	8.1%	217	36.9%	7	0.9%	321	37.4%
United Indian Health Services	0		0		0		0		0		0	
Warner Mountain Indian Health Program	0		0		0		0		0		0	
American Indian HSC (Santa Barbara)	163	27.0%	438	72.6%	118	28.4%	296	71.2%	1	0.1%	1	0.2%
San Diego American Indian Health Center	58	2.8%	1,987	97.2%	42	2.9%	1,430	97.1%	0	0.0%	0	0.0%
Sacramento Native American Health Center	285	13.4%	1,838	86.5%	217	12.0%	1,592	87.8%	0	0.0%	3	0.1%
Native American Health Center, Inc. (Oakland)	762	55.7%	604	44.2%	651	55.6%	519	44.3%	1	0.0%	0	0.0%
United American Indian Involvement (LA)	1,341	44.9%	1,644	55.1%	1,281	44.9%	1,567	55.0%	1	0.0%	1	0.0%
Indian HC of Santa Clara Valley (San Jose)	270	56.8%	205	43.0%	190	56.8%	143	42.9%	1	0.1%	0	0.1%
Fresno American Indian Health Project	310	48.4%	330	51.5%	306	48.4%	324	51.4%	0	0.0%	1	0.2%
Bakersfield American Indian Health Project	67	5.4%	96	7.7%	40	3.7%	68	6.2%	405	32.5%	676	54.4%
American Indian Free Clinic (Los Angeles)	0		0		0		0		0		0	

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4 Regional Center Market Share Calculation

57.0% <=Remaining % of Pre-Reform Uninsured Users

Erosion Factor #3 - How far is Regional Care? | *Erosion Factor #4 - How many alternative care opportunities are there?* | *Erosion Factor #5 -Can you direct Medicaid?*

Eligible CHSDA				All Payers Rate		Post-Reform Payer Distribution Market %			Entry	Post Reform Uneroded Market					Market Erosion by Distance							Sub Market Erosion by Competitors						Market Share			
No 3rd Party Coverage		w 3rd Party (All)		*w 3rd Party (Medicaid Only)*		H Reliance	M Reliance	L Reliance	CHSDA	H Reliance	M Reliance	L Reliance			Direct Care Only No 3P	Direct Care, CHS (*No Choice*)	Direct Care, CHS (Choice)	Direct Care, CHS, 3P (*Medicaid Only*)	Direct Care, CHS, 3P (Medicaid Reduced)	Direct Care, CHS, 3P	*M Reliance No Choice*	*M Reliance Choice*	# of Alt Care in route (Sec or Trty)	Direct Care Only No 3P	Direct Care, CHS (No Choice)	Direct Care, CHS (Choice)	Direct Care, CHS, 3P (*Medicaid Only*)	Direct Care, CHS, 3P (Medicaid Reduced)	Direct Care, CHS, 3P	*M Reliance - CHS No Choice & Medicaid Only*		*M Reliance - Choice*	
#	%	#	%	#	%	All/CHSDA Blended %	All/CHSDA Blended %	All/CHSDA Blended %	Total Users (or) CHSDA Users	Direct Care Only No 3P w/out 3rd Party Coverage	Direct Care, CHS w/out 3rd Party Coverage	Direct Care, CHS, 3P w 3rd party Coverage	Regional Center Location	SU/PSA Drive Time to RC (in minutes)	w/out 3rd Party Coverage	w/out 3rd Party Coverage	w/out 3rd Party Coverage	w 3rd party Coverage	w 3rd party Coverage	w 3rd party Coverage	Net Users	Net Users		w/out 3rd Party Coverage	w/out 3rd Party Coverage	w/out 3rd Party Coverage	w 3rd party Coverage	w 3rd party Coverage	w 3rd party Coverage	Total Users	% of User Pop	Total Users	% of User Pop
38	*39*	*40*	*41*	*42*	*43*	*46*	*47*	*48*	*49*	*50*	*51*	*52*	*53*	*54*	*55*	*56*	*57*	*58*	*59*	*60*	*61*	*62*	*63*	*64*	*65*	*66*	*67*	*68*	*69*	*70*	*71*	*72*	*73*
0		0		0					0				Temecula, CA	84							0	0	0							0	0.0%	0	0.0%
1,027	13.7%	4,386	58.5%	1,964	25.1%	7.2%	13.6%	79.2%	7,503	942	1,792	4,769	Fresno, CA	13	942	1,792	1,792	*1,199*	*3,570*	4,769	7,503	7,503	1	942	1,792	1,612	*1,199*	*3,570*	3,815	7,503	100.0%	6,370	84.9%
387	5.6%	1,304	18.9%	2,462	28.3%	19.2%	5.6%	75.2%	6,900	2,326	673	3,901	Sacramento, CA	37	2,326	673	673	*1,103*	*2,798*	3,901	6,900	6,900	1	2,326	673	606	*1,103*	*2,798*	3,120	6,900	100.0%	6,053	87.7%
0		0		0					0				Sacramento, CA	100							0	0	1							0	0.0%	0	0.0%
0		0		0					0				Sacramento, CA	64							0	0	1							0	0.0%	0	0.0%
234	7.8%	2,274	75.4%	563	17.0%	2.2%	7.7%	90.1%	3,016	116	410	2,491	Sacramento, CA	153	106	376	376	*390*	*1,931*	2,289	2,803	2,772	1	106	376	339	*390*	*1,931*	1,831	2,803	92.9%	2,276	75.5%
30	0.6%	2,083	45.1%	775	15.5%	7.1%	0.6%	92.2%	4,623	580	51	3,992	Sacramento, CA	67	556	49	49	*594*	*3,261*	3,831	4,460	4,436	1	556	49	44	*594*	*3,261*	3,065	4,460	96.5%	3,665	79.3%
49	6.3%	345	44.3%	307	24.1%	12.3%	5.9%	81.9%	779	168	80	531	Redding, CA	116	161	77	77	*123*	*392*	510	752	747	0	161	77	77	*123*	*392*	510	752	96.6%	747	96.0%
219	6.7%	2,561	77.9%	613	17.0%	3.3%	6.6%	90.1%	3,285	189	380	2,717	Redding, CA	126	173	349	349	*424*	*2,107*	2,497	3,053	3,019	1	173	349	314	*424*	*2,107*	1,997	3,053	92.9%	2,485	75.6%
597	12.9%	2,340	50.6%	1,544	27.8%	11.6%	12.3%	76.0%	4,628	945	1,001	2,682	Temecula, CA	29	945	1,001	1,001	*744*	*1,938*	2,682	4,628	4,628	0	945	1,001	1,001	*744*	*1,938*	2,682	4,628	100.0%	4,628	100.0%
254	12.0%	1,581	74.4%	589	22.5%	4.5%	11.5%	84.0%	2,126	167	430	1,529	Redding, CA	169	154	395	395	*316*	*1,115*	1,405	1,979	1,954	1	154	395	355	*316*	*1,115*	1,124	1,979	93.1%	1,633	76.8%
55	3.0%	1,122	60.0%	476	19.7%	10.6%	2.9%	86.6%	1,870	346	94	1,429	Sacramento, CA	124	318	87	87	*259*	*1,075*	1,314	1,740	1,719	1	318	87	78	*259*	*1,075*	1,051	1,740	93.0%	1,447	77.4%
0		0		0					0				Sacramento, CA	83							0	0	1							0	0.0%	0	0.0%
12	6.9%	161	93.1%	29	15.3%	0.0%	7.4%	92.6%	173	0	23	150	Redding, CA	144	0	21	21	*21*	*119*	138	161	159	1	0	21	19	*21*	*119*	111	161	92.9%	129	74.7%
42	1.9%	822	37.3%	735	21.5%	13.6%	1.7%	84.7%	2,206	527	67	1,612	Sacramento, CA	90	506	64	64	*333*	*1,227*	1,547	2,130	2,117	1	506	64	57	*333*	*1,227*	1,238	2,130	96.6%	1,801	81.6%
20	2.6%	400	52.2%	303	23.2%	16.1%	2.2%	81.7%	767	217	29	521	Redding, CA	156	199	27	27	*111*	*377*	479	714	705	1	199	27	24	*111*	*377*	383	714	93.1%	606	79.1%
10	6.1%	102	63.9%	58	19.2%	4.8%	5.1%	90.1%	160	13	14	132	Redding, CA	113	13	14	14	*24*	*104*	127	155	154	1	13	14	12	*24*	*104*	102	155	96.6%	127	79.2%
0		0		0					0				Redding, CA	6							0	0	0							0	0.0%	0	0.0%
523	4.2%	2,925	23.6%	3,567	28.5%	21.1%	4.2%	74.6%	12,408	4,603	918	6,886	Temecula, CA	58	4,603	918	918	*1,964*	*4,923*	6,886	12,408	12,408	0	4,603	918	918	*1,964*	*4,923*	6,886	12,408	100.0%	12,408	100.0%
207	17.2%	874	72.6%	317	24.2%	2.9%	16.9%	80.3%	1,204	61	356	787	Sacramento, CA	199	53	313	313	*168*	*545*	692	1,078	1,058	1	53	313	281	*168*	*545*	553	1,078	89.5%	888	73.8%
99	9.3%	482	45.4%	414	29.0%	16.0%	8.2%	75.8%	1,062	298	152	612	Temecula, CA	190	262	134	134	*156*	*400*	538	952	933	4	262	134	94	*156*	*400*	215	952	89.6%	570	53.7%
10	0.9%	113	9.7%	351	22.5%	16.0%	0.8%	83.2%	1,157	325	16	816	Sacramento, CA	35	325	16	16	*184*	*633*	816	1,157	1,157	1	325	16	14	*184*	*633*	653	1,157	100.0%	992	85.8%
0		0		0					0				Sacramento, CA	155							0	0	2							0	0.0%	0	0.0%
84	3.4%	1,057	42.9%	743	21.1%	11.0%	3.0%	86.0%	2,462	474	129	1,858	Temecula, CA	66	455	124	124	*377*	*1,422*	1,783	2,378	2,362	1	455	124	112	*377*	*1,422*	1,427	2,378	96.6%	1,993	81.0%
0		0		0					0				Redding, CA	112							0	0	1							0	0.0%	0	0.0%
0	0.0%	2	1.6%	125	31.5%	22.2%	0.4%	77.4%	129	50	1	78	Temecula, CA	68	48	1	1	*23*	*52*	75	125	124	2	48	1	1	*23*	*52*	45	125	96.7%	94	72.7%
0		0		0					0				Fresno, CA	28							0	0	1							0	0.0%	0	0.0%
0		0		0					0				Fresno, CA	130							0	0	3							0	0.0%	0	0.0%
39	1.3%	1,850	62.5%	484	14.8%	5.4%	1.3%	93.3%	2,961	281	66	2,614	Fresno, CA	269	224	53	53	*309*	*1,838*	2,085	2,424	2,361	1	224	53	48	*309*	*1,838*	1,668	2,424	81.9%	1,939	65.5%
0		0		0					0				Fresno, CA	84							0	0	2							0	0.0%	0	0.0%
7	1.3%	316	53.8%	174	20.3%	10.8%	1.1%	88.1%	587	112	11	464	Sacramento, CA	104	107	11	11	*90*	*359*	446	567	563	1	107	11	9	*90*	*359*	356	567	96.6%	473	80.6%
0		0		0					0				Redding, CA	151							0	0	1							0	0.0%	0	0.0%
0		0		0					0				Redding, CA	200							0	0	1							0	0.0%	0	0.0%
1	0.1%	1	0.3%	180	29.8%	27.7%	0.1%	72.2%	416	202	1	213	Temecula, CA	163	186	1	1	*58*	*142*	196	387	382	4	186	1	1	*58*	*142*	78	387	93.0%	265	63.6%
0	0.0%	0	0.0%	235	11.5%	2.8%	0.0%	97.2%	1,472	73	0	1,399	Temecula, CA	53	73	0	0	*161*	*1,238*	1,399	1,472	1,472	2	73	0	0	*161*	*1,238*	839	1,472	100.0%	913	62.0%
0	0.0%	3	0.2%	414	19.5%	12.7%	0.0%	87.3%	1,812	404	0	1,408	Sacramento, CA	2	404	0	0	*274*	*1,134*	1,408	1,812	1,812	0	404	0	0	*274*	*1,134*	1,408	1,812	100.0%	1,812	100.0%
1	0.0%	0	0.0%	703	51.4%	55.6%	0.0%	44.3%	1,171	1,143	1	27	Sacramento, CA	73	1,097	1	1	*13*	*13*	26	1,124	1,124	2	1,097	1	1	*13*	*13*	15	1,124	96.0%	1,113	95.1%
1	0.0%	1	0.0%	1,292	43.2%	44.9%	0.0%	55.0%	2,850	2,246	2	602	Temecula, CA	79	2,155	2	2	*250*	*338*	578	2,745	2,735	0	2,155	2	2	*250*	*338*	578	2,745	96.3%	2,735	96.0%
1	0.2%	0	0.1%	249	52.3%	56.8%	0.1%	43.1%	334	333	1	0	Sacramento, CA	107	319	1	1	*0*	*0*	0	320	320	2	319	1	1	*0*	*0*	0	320	96.0%	320	95.9%
0	0.0%	1	0.2%	294	45.9%	48.4%	0.0%	51.6%	631	536	0	95	Sacramento, CA	153	492	0	0	*40*	*51*	88	583	580	3	492	0	0	*40*	*51*	35	583	92.4%	527	83.6%
371	33.9%	616	56.3%	472	37.9%	4.5%	33.2%	62.3%	1,094	87	637	370	Temecula, CA	172	80	586	586	*129*	*221*	340	1,016	1,005	3	80	586	410	*129*	*221*	136	1,016	92.9%	626	57.2%
0		0		0					0				Temecula, CA	79							0	0	0							0	0.0%	0	0.0%
					20.4%	6.3%	7.3%	86.4%	**7,290**																								**Redding, CA**	6,814	93.5%	5,728	78.6%
					22.1%	6.7%	10.0%	83.3%	**10,464**																								**Fresno, CA**	9,927	94.9%	8,309	79.4%
					24.1%	15.3%	3.7%	81.0%	**25,511**																								**Sacramento, CA**	24,674	96.7%	21,367	83.8%
					28.3%	19.0%	6.1%	74.9%	**26,521**																								**Temecula, CA**	26,110	98.4%	24,231	91.4%

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Regional Ambulatory Surgical and Specialty Health Services Feasibility Study

IHS, California Area Office

Market Erosion Calculation Table (Unabbreviated)

Medicaid Assumption → **9.4%**

Erosion Factor #1 - Who is truly reliant on Regional Care?

Erosion Factor #2 - Who will be reliant on Regional Care after Reform?

	1	2	3		4		5		6		8		9		7		Pre-Reform Payer Distribution Market %			1		2		3		4		5		6	
	Users by Payer		Direct Care Only				CHS Eligible								All Payers Rate		H Reliance	M Reliance	L Reliance	Direct Care Only								CHS E			
	All	CHSDA	All		CHSDA		All		CHSDA											All		CHSDA						All			
	Does not include "Other Eligible" or "Non-Indian" payers		No 3rd Party Coverage		w 3rd Party Coverage		No 3rd Party Coverage		w 3rd Party Coverage		No 3rd Party Coverage		w 3rd Party (All)		*w 3rd Party (Medicaid Only)*		Direct Care Only No 3P	Direct Care, CHS	Direct Care, CHS, 3P	No 3rd Party Coverage		w 3rd Party Coverage		No 3rd Party Coverage		w 3rd Party Coverage		No 3rd Party Coverage		w 3rd Party (All)			
Service Area	Total	Total	#	%	#	%	#	%	#	%	#	%	#	%	#	%	All/CHSDA Blended %	All/CHSDA Blended %	All/CHSDA Blended %	#	%	#	%	#	%	#	%	#	%	#	%		
	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*	*18*	*19*	*20*	*23*	*24*	*25*	*26*	*27*	*28*	*29*	*30*	*31*	*32*	*33*	*34*	*35*	*36*	*37*
Cabazon Band of Mission Indians																			0	9.4%				0		0		0		0		0		0	
Central Valley	7,809	7,503	1,012	13.0%	1,281	16.4%	912	12.2%	1,178	15.7%	1,855	23.8%	3,661	46.9%	1,801	24.0%	3,612	48.1%	734	9.4%	12.6%	23.9%	63.6%	577	7.4%	1,716	22.0%	520	6.9%	1,570	20.9%	1,057	13.5%	4,459	57.1%
Chapa-De Indian Health Project	8,705	6,900	2,988	34.3%	3,669	42.1%	2,284	33.1%	2,925	42.4%	842	9.7%	1,206	13.9%	679	9.8%	1,012	14.7%	818	9.4%	33.7%	9.8%	56.5%	1,703	19.6%	4,954	56.9%	1,302	18.9%	3,907	56.6%	480	5.5%	1,568	18.0%
Chicken Ranch																			0	9.4%				0		0		0		0		0		0	
Colusa Tribal Health																			0	9.4%				0		0		0		0		0		0	
Consolidated Tribal Health Care	3,310	3,016	142	4.3%	529	16.0%	102	3.4%	406	13.5%	448	13.5%	2,191	66.2%	411	13.6%	2,097	69.5%	311	9.4%	3.8%	13.6%	82.6%	81	2.4%	590	17.8%	58	1.9%	450	14.9%	255	7.7%	2,384	72.0%
Feather River Tribal Health	5,000	4,623	661	13.2%	2,203	44.1%	548	11.9%	1,962	42.4%	54	1.1%	2,082	41.6%	52	1.1%	2,061	44.6%	470	9.4%	12.5%	1.1%	86.4%	377	7.5%	2,487	49.7%	312	6.8%	2,198	47.5%	31	0.6%	2,105	42.1%
Greenville Rancheria Tribal Health Program	1,271	779	316	24.9%	452	35.6%	142	18.2%	243	31.2%	121	9.5%	382	30.1%	86	11.0%	308	39.5%	119	9.4%	21.5%	10.3%	68.2%	180	14.2%	588	46.3%	81	10.4%	304	39.0%	69	5.4%	434	34.1%
Hoopa Health Association	3,608	3,285	230	6.4%	455	12.6%	168	5.1%	337	10.3%	411	11.4%	2,512	69.6%	385	11.7%	2,395	72.9%	339	9.4%	5.7%	11.6%	82.7%	131	3.6%	554	15.4%	96	2.9%	409	12.5%	234	6.5%	2,689	74.5%
Indian Health Council, Inc.	5,563	4,628	1,231	22.1%	1,128	20.3%	865	18.7%	826	17.8%	1,149	20.7%	2,055	36.9%	1,047	22.6%	1,890	40.8%	523	9.4%	20.4%	21.6%	58.0%	702	12.6%	1,657	29.8%	493	10.7%	1,198	25.9%	655	11.8%	2,549	45.8%
Karuk Tribal Health Program	2,618	2,126	291	11.1%	322	12.3%	98	4.6%	193	9.1%	509	19.4%	1,496	57.1%	446	21.0%	1,389	65.3%	246	9.4%	7.9%	20.2%	71.9%	166	6.3%	447	17.1%	56	2.6%	235	11.1%	290	11.1%	1,715	65.5%
Lake County Tribal Health Consortium, Inc.	2,413	1,870	464	19.2%	509	21.1%	333	17.8%	360	19.3%	118	4.9%	1,322	54.8%	97	5.2%	1,080	57.8%	227	9.4%	18.5%	5.0%	76.4%	264	11.0%	709	29.4%	190	10.2%	503	26.9%	67	2.8%	1,373	56.9%
MACT Health Board																			0	9.4%				0		0		0		0		0		0	
Modoc Indian Health Project	187	173	0	0.0%	0	0.0%	0	0.0%	0	0.0%	26	13.9%	161	86.1%	21	12.1%	152	87.9%	18	9.4%	0.0%	13.0%	87.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	15	7.9%	172	92.1%
Northern Valley Indian Health	3,413	2,206	874	25.6%	1,511	44.3%	489	22.2%	853	38.7%	93	2.7%	935	27.4%	73	3.3%	791	35.9%	321	9.4%	23.9%	3.0%	73.1%	498	14.6%	1,887	55.3%	279	12.6%	1,063	48.2%	53	1.6%	975	28.6%
Pit River Health Service	1,305	767	382	29.3%	370	28.4%	209	27.2%	138	18.0%	39	3.0%	514	39.4%	35	4.6%	385	50.2%	123	9.4%	28.3%	3.8%	68.0%	218	16.7%	534	40.9%	119	15.5%	228	29.7%	22	1.7%	531	40.7%
Quartz Valley Indian Reservation CHS	303	160	47	15.5%	115	38.0%	2	1.3%	46	28.8%	22	7.3%	119	39.3%	17	10.6%	95	59.4%	28	9.4%	8.4%	8.9%	82.7%	27	8.8%	135	44.6%	1	0.7%	47	29.3%	13	4.1%	128	42.4%
Redding Rancheria Indian Health Services																			0	9.4%				0		0		0		0		0		0	
Riverside/San Bernardino County Indian Health	12,508	12,408	4,645	37.1%	4,395	35.1%	4,599	37.1%	4,361	35.1%	927	7.4%	2,541	20.3%	917	7.4%	2,531	20.4%	1,176	9.4%	37.1%	7.4%	55.5%	2,648	21.2%	6,392	51.1%	2,621	21.1%	6,339	51.1%	528	4.2%	2,940	23.5%
Round Valley Indian Health Center	1,308	1,204	74	5.7%	92	7.0%	53	4.4%	70	5.8%	378	28.9%	764	58.4%	364	30.2%	717	59.6%	123	9.4%	5.0%	29.6%	65.4%	42	3.2%	124	9.5%	30	2.5%	93	7.7%	215	16.5%	927	70.8%
Santa Ynez Tribal Health Program	1,426	1,062	476	33.4%	358	25.1%	241	22.7%	240	22.6%	177	12.4%	415	29.1%	173	16.3%	408	38.4%	134	9.4%	28.0%	14.4%	57.6%	271	19.0%	563	39.5%	137	12.9%	344	32.4%	101	7.1%	491	34.4%
Shingle Springs Tribal Health Program	1,560	1,157	458	29.4%	973	62.4%	310	26.8%	724	62.6%	18	1.2%	111	7.1%	18	1.6%	105	9.1%	147	9.4%	28.1%	1.4%	70.6%	261	16.7%	1,170	75.0%	177	15.3%	857	74.1%	10	0.7%	119	7.6%
Sonoma County Indian Health																			0	9.4%				0		0		0		0		0		0	
Southern Indian Health Council	3,519	2,462	803	22.8%	1,523	43.3%	387	15.7%	934	37.9%	159	4.5%	1,034	29.4%	147	6.0%	994	40.4%	331	9.4%	19.3%	5.2%	75.5%	458	13.0%	1,868	53.1%	221	9.0%	1,100	44.7%	91	2.6%	1,102	31.3%
Susanville Indian Rancheria																			0	9.4%				0		0		0		0		0		0	
Sycuan Band of Mission Indians	397	129	199	50.1%	183	46.1%	36	27.9%	91	70.5%	5	1.3%	10	2.5%	0	0.0%	2	1.6%	37	9.4%	39.0%	0.6%	60.4%	113	28.6%	269	67.6%	21	15.9%	106	82.5%	3	0.7%	12	3.1%
Table Mountain Rancheria	0	0	0		0		0		0		0		0		0		0		0	9.4%				0		0		0		0		0		0	
Tejon Tribe																			0	9.4%				0		0		0		0		0		0	
Toiyabe Indian Health Project	3,266	2,961	343	10.5%	1,012	31.0%	251	8.5%	821	27.7%	71	2.2%	1,840	56.3%	68	2.3%	1,821	61.5%	307	9.4%	9.5%	2.2%	88.3%	196	6.0%	1,159	35.5%	143	4.8%	929	31.4%	40	1.2%	1,871	57.3%
Tule River Indian Health Center, Inc.																			0	9.4%				0		0		0		0		0		0	
Tuolumne Me-Wuk Indian Health Center	858	587	205	23.9%	325	37.9%	83	14.1%	181	30.8%	13	1.5%	315	36.7%	13	2.2%	310	52.8%	81	9.4%	19.0%	1.9%	79.1%	117	13.6%	413	48.2%	47	8.1%	217	36.9%	7	0.9%	321	37.4%
United Indian Health Services																			0	9.4%				0		0		0		0		0		0	
Warner Mountain Indian Health Program																			0	9.4%				0		0		0		0		0		0	
American Indian HSC (Santa Barbara)	603	416	286	47.4%	315	52.2%	207	49.8%	207	49.8%	1	0.2%	1	0.2%	1	0.2%	1	0.2%	57	9.4%	48.6%	0.2%	51.2%	163	27.0%	438	72.6%	118	28.4%	296	71.2%	1	0.1%	1	0.2%
San Diego American Indian Health Center	2,045	1,472	101	4.9%	1,944	95.1%	74	5.0%	1,398	95.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	192	9.4%	5.0%	0.0%	95.0%	58	2.8%	1,987	97.2%	42	2.9%	1,430	97.1%	0	0.0%	0	0.0%
Sacramento Native American Health Center	2,126	1,812	500	23.5%	1,623	76.3%	381	21.0%	1,428	78.8%	0	0.0%	3	0.1%	0	0.0%	3	0.2%	200	9.4%	22.3%	0.0%	77.7%	285	13.4%	1,838	86.5%	217	12.0%	1,592	87.8%	0	0.0%	3	0.1%
Native American Health Center, Inc. (Oakland)	1,367	1,171	1,336	97.7%	30	2.2%	1,142	97.5%	28	2.4%	1	0.1%	0	0.0%	1	0.1%	0	0.0%	128	9.4%	97.6%	0.1%	2.3%	762	55.7%	604	44.2%	651	55.6%	519	44.3%	1	0.0%	0	0.0%
United American Indian Involvement (LA)	2,987	2,850	2,352	78.7%	633	21.2%	2,247	78.8%	601	21.1%	2	0.1%	0	0.0%	2	0.1%	0	0.0%	281	9.4%	78.8%	0.1%	21.1%	1,341	44.9%	1,644	55.1%	1,281	44.9%	1,567	55.0%	1	0.0%	1	0.0%
Indian HC of Santa Clara Valley (San Jose)	476	334	474	99.6%	1	0.2%	333	99.7%	0	0.0%	1	0.2%	0	0.0%	1	0.3%	0	0.0%	45	9.4%	99.6%	0.3%	0.1%	270	56.8%	205	43.0%	190	56.8%	143	42.9%	1	0.1%	0	0.1%
Fresno American Indian Health Project	641	631	544	84.9%	96	15.0%	536	84.9%	94	14.9%	0	0.0%	1	0.2%	0	0.0%	1	0.2%	60	9.4%	84.9%	0.0%	15.1%	310	48.4%	330	51.5%	306	48.4%	324	51.4%	0	0.0%	1	0.2%
Bakersfield American Indian Health Project	1,244	1,094	117	9.4%	46	3.7%	71	6.5%	37	3.4%	710	57.1%	371	29.8%	650	59.4%	336	30.7%	117	9.4%	7.9%	58.2%	33.8%	67	5.4%	96	7.7%	40	3.7%	68	6.2%	405	32.5%	676	54.4%
American Indian Free Clinic (Los Angeles)																			0	9.4%				0		0		0		0		0		0	
Sacramento, CA																				9.4%	25.4%	10.4%	64.2%												

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1 Area Wide Medical Center Market Share Calculation

57.0% <=*Remaining % of Pre-Reform Uninsured Users*

Erosion Factor #3 - How far is Regional Care? | *Erosion Factor #4 - How many alternative care opportunities are there?* | *Erosion Factor #5 -Can you direct Medicaid?*

8		9		7		Post-Reform Payer Distribution Market %			Entry	Post Reform Uneroded Market				Market Erosion by Distance								Sub Market Erosion by Competitors						Market Share			
Eligible CHSDA				All Payers Rate		H Reliance	M Reliance	L Reliance	CHSDA	H Reliance	M Reliance	L Reliance																M Reliance - CHS No Choice & Medicaid Only		M Reliance - Choice	
No 3rd Party Coverage		w 3rd Party (All)		*w 3rd Party (Medicaid Only)*		Direct Care Only No 3P	Direct Care, CHS	Direct Care, CHS, 3P	Total Users (or)	Direct Care Only No 3P	Direct Care, CHS	Direct Care, CHS, 3P	Regional Center Location	SU/PSA Drive Time to RC (in minutes)	Direct Care Only No 3P	Direct Care, CHS (*No Choice*)	Direct Care, CHS (Choice)	Direct Care, CHS, 3P (*Medicaid Only*)	Direct Care, CHS, 3P (Medicaid Reduced)	Direct Care, CHS, 3P	*M Reliance No Choice*	*M Reliance Choice*	# of Alt Care in route (Sec or Trty)	Direct Care Only No 3P	Direct Care, CHS (No Choice)	Direct Care, CHS (Choice)	Direct Care, CHS, 3P (*Medicaid Only*)	Direct Care, CHS, 3P (Medicaid Reduced)	Direct Care, CHS, 3P				
#	%	#	%	#	%	All/CHSDA Blended %	All/CHSDA Blended %	All/CHSDA Blended %	CHSDA Users	w/out 3rd Party Coverage	w/out 3rd Party Coverage	w 3rd party Coverage			w/out 3rd Party Coverage	w/out 3rd Party Coverage	w/out 3rd Party Coverage	w 3rd party Coverage	w 3rd party Coverage	w 3rd party Coverage	Net Users	Net Users		w/out 3rd Party Coverage	w/out 3rd Party Coverage	w/out 3rd Party Coverage	w 3rd party Coverage	w 3rd party Coverage	w 3rd party Coverage	Total Users	% of User Pop	Total Users	% of User Pop
38	*39*	*40*	*41*	*42*	*43*	*46*	*47*	*48*	*49*	*50*	*51*	*52*	*53*	*54*	*55*	*56*	*57*	*58*	*59*	*60*	*61*	*62*	*63*	*64*	*65*	*66*	*67*	*68*	*69*	*70*	*71*	*72*	*73*
0		0		0					0				Sacramento, CA	438							0	0	3							0	0.0%	0	0.0%
1,027	13.7%	4,386	58.5%	1,967	25.2%	7.2%	13.6%	79.2%	7,503	942	1,792	4,769	Sacramento, CA	156	866	1,647	1,647	*1,104*	*3,368*	4,383	6,985	6,895	2	866	1,647	1,317	*1,104*	*3,368*	2,630	6,985	93.1%	4,813	64.1%
387	5.6%	1,304	18.9%	2,465	28.3%	19.2%	5.6%	75.2%	6,900	2,326	673	3,901	Sacramento, CA	37	2,326	673	673	*1,105*	*2,796*	3,901	6,900	6,900	1	2,326	673	606	*1,105*	*2,796*	3,120	6,900	100.0%	6,053	87.7%
0		0		0					0				Sacramento, CA	100							0	0	1							0	0.0%	0	0.0%
0		0		0					0				Sacramento, CA	64							0	0	1							0	0.0%	0	0.0%
234	7.8%	2,274	75.4%	565	17.1%	2.2%	7.7%	90.1%	3,016	116	410	2,491	Sacramento, CA	153	106	376	376	*391*	*1,930*	2,289	2,803	2,772	1	106	376	339	*391*	*1,930*	1,831	2,803	92.9%	2,276	75.5%
30	0.6%	2,083	45.1%	777	15.5%	7.1%	0.6%	92.2%	4,623	580	51	3,992	Sacramento, CA	67	556	49	49	*596*	*3,259*	3,831	4,460	4,436	1	556	49	44	*596*	*3,259*	3,065	4,460	96.5%	3,665	79.3%
49	6.3%	345	44.3%	307	24.2%	12.3%	5.9%	81.9%	779	168	80	531	Sacramento, CA	148	154	74	74	*118*	*380*	488	725	716	0	154	74	74	*118*	*380*	488	725	93.1%	716	91.9%
219	6.7%	2,561	77.9%	615	17.0%	3.3%	6.6%	90.1%	3,285	189	380	2,717	Sacramento, CA	266	150	303	303	*369*	*1,872*	2,167	2,695	2,620	2	150	303	242	*369*	*1,872*	1,300	2,695	82.0%	1,693	51.5%
597	12.9%	2,340	50.6%	1,546	27.8%	11.6%	12.3%	76.0%	4,628	945	1,001	2,682	Sacramento, CA	428	753	799	799	*595*	*1,665*	2,139	3,811	3,691	2	753	799	639	*595*	*1,665*	1,283	3,811	82.4%	2,676	57.8%
254	12.0%	1,581	74.4%	590	22.5%	4.5%	11.5%	84.0%	2,126	167	430	1,529	Sacramento, CA	372	133	343	343	*275*	*1,000*	1,220	1,751	1,695	3	133	343	240	*275*	*1,000*	488	1,751	82.4%	861	40.5%
55	3.0%	1,122	60.0%	477	19.8%	10.6%	2.9%	86.6%	1,870	346	94	1,429	Sacramento, CA	124	318	87	87	*260*	*1,075*	1,314	1,740	1,719	1	318	87	78	*260*	*1,075*	1,051	1,740	93.0%	1,447	77.4%
0		0		0					0				Sacramento, CA	83							0	0	1							0	0.0%	0	0.0%
12	6.9%	161	93.1%	29	15.4%	0.0%	7.4%	92.6%	173	0	23	150	Sacramento, CA	267	0	18	18	*18*	*105*	120	142	138	2	0	18	14	*18*	*105*	72	142	81.9%	86	49.9%
42	1.9%	822	37.3%	737	21.6%	13.6%	1.7%	84.7%	2,206	527	67	1,612	Sacramento, CA	90	506	64	64	*334*	*1,227*	1,547	2,130	2,117	1	506	64	57	*334*	*1,227*	1,238	2,130	96.6%	1,801	81.6%
20	2.6%	400	52.2%	304	23.3%	16.1%	2.2%	81.7%	767	217	29	521	Sacramento, CA	189	190	25	25	*107*	*364*	458	687	674	2	190	25	20	*107*	*364*	275	687	89.5%	486	63.3%
10	6.1%	102	63.9%	58	19.2%	4.8%	5.1%	90.1%	160	13	14	132	Sacramento, CA	248	11	11	11	*20*	*89*	105	132	128	2	11	11	9	*20*	*89*	63	132	82.3%	83	51.9%
0		0		0					0				Sacramento, CA	138							0	0	2							0	0.0%	0	0.0%
523	4.2%	2,925	23.6%	3,572	28.6%	21.1%	4.2%	74.6%	12,408	4,603	918	6,886	Sacramento, CA	407	3,671	732	732	*1,568*	*4,241*	5,492	10,213	9,895	4	3,671	732	513	*1,568*	*4,241*	2,197	10,213	82.3%	6,381	51.4%
207	17.2%	874	72.6%	317	24.3%	2.9%	16.9%	80.3%	1,204	61	356	787	Sacramento, CA	199	53	313	313	*168*	*544*	692	1,078	1,058	1	53	313	281	*168*	*544*	553	1,078	89.5%	888	73.8%
99	9.3%	482	45.4%	415	29.1%	16.0%	8.2%	75.8%	1,062	298	152	612	Sacramento, CA	317	237	122	122	*142*	*375*	488	876	847	6	237	122	85	*142*	*375*	195	876	82.5%	518	48.7%
10	0.9%	113	9.7%	351	22.5%	16.0%	0.8%	83.2%	1,157	325	16	816	Sacramento, CA	35	325	16	16	*184*	*633*	816	1,157	1,157	1	325	16	14	*184*	*633*	653	1,157	100.0%	992	85.8%
0		0		0					0				Sacramento, CA	155							0	0	2							0	0.0%	0	0.0%
84	3.4%	1,057	42.9%	744	21.2%	11.0%	3.0%	86.0%	2,462	474	129	1,858	Sacramento, CA	453	378	103	103	*314*	*1,232*	1,482	2,027	1,963	7	378	103	72	*314*	*1,232*	593	2,027	82.3%	1,043	42.4%
0		0		0					0				Sacramento, CA	185							0	0	1							0	0.0%	0	0.0%
0	0.0%	2	1.6%	125	31.5%	22.2%	0.4%	77.4%	129	50	1	78	Sacramento, CA	452	40	1	1	.		62	0	103	7	40	1	0			25	0	0.0%	65	50.7%
0		0		0					0				Sacramento, CA	160							0	0	2							0	0.0%	0	0.0%
0		0		0					0				Sacramento, CA	272							0	0	3							0	0.0%	0	0.0%
39	1.3%	1,850	62.5%	485	14.9%	5.4%	1.3%	93.3%	2,961	281	66	2,614	Sacramento, CA	268	224	53	53	*310*	*1,838*	2,085	2,424	2,361	1	224	53	48	*310*	*1,838*	1,668	2,424	81.9%	1,939	65.5%
0		0		0					0				Sacramento, CA	231							0	0	3							0	0.0%	0	0.0%
7	1.3%	316	53.8%	174	20.3%	10.8%	1.1%	88.1%	587	112	11	464	Sacramento, CA	104	107	11	11	*91*	*359*	446	567	563	1	107	11	9	*91*	*359*	356	567	96.6%	473	80.6%
0		0		0					0				Sacramento, CA	291							0	0	2							0	0.0%	0	0.0%
0		0		0					0				Sacramento, CA	322							0	0	2							0	0.0%	0	0.0%
1	0.1%	1	0.3%	180	29.9%	27.7%	0.1%	72.2%	416	202	1	213	Sacramento, CA	345	161	1	1	*51*	*129*	170	342	332	7	161	1	0	*51*	*129*	68	342	82.2%	230	55.2%
0	0.0%	0	0.0%	236	11.5%	2.8%	0.0%	97.2%	1,472	73	0	1,399	Sacramento, CA	435	58	0	0	*129*	*1,013*	1,115	1,200	1,174	7	58	0	0	*129*	*1,013*	446	1,200	81.5%	505	34.3%
0	0.0%	3	0.2%	415	19.5%	12.7%	0.0%	87.3%	1,812	404	0	1,408	Sacramento, CA	2	404	0	0	*275*	*1,134*	1,408	1,812	1,812	0	404	0	0	*275*	*1,134*	1,408	1,812	100.0%	1,812	100.0%
1	0.0%	0	0.0%	703	51.5%	55.6%	0.0%	44.3%	1,171	1,143	1	27	Sacramento, CA	73	1,097	1	1	*13*	*13*	26	1,124	1,124	2	1,097	1	1	*13*	*13*	15	1,124	96.0%	1,113	95.1%
1	0.0%	1	0.0%	1,293	43.3%	44.9%	0.0%	55.0%	2,850	2,246	2	602	Sacramento, CA	332	1,791	2	2	*208*	*315*	480	2,315	2,273	4	1,791	2	1	*208*	*315*	192	2,315	81.2%	1,984	69.6%
1	0.2%	0	0.1%	249	52.3%	56.8%	0.1%	43.1%	334	333	1	0	Sacramento, CA	107	319	1	1	*0*	*0*	0	320	320	2	319	1	1	*0*	*0*	0	320	96.0%	320	95.9%
0	0.0%	1	0.2%	294	45.9%	48.4%	0.0%	51.6%	631	536	0	95	Sacramento, CA	153	492	0	0	*40*	*51*	88	583	580	3	492	0	0	*40*	*51*	35	583	92.4%	527	83.6%
371	33.9%	616	56.3%	473	38.0%	4.5%	33.2%	62.3%	1,094	87	637	370	Sacramento, CA	242	69	508	508	*112*	*206*	295	895	872	4	69	508	356	*112*	*206*	118	895	81.8%	543	49.6%
0		0		0					0				Sacramento, CA	332							0	0	4							0	0.0%	0	0.0%
					25.0%	14.5%	5.9%	79.6%	**69,786**																				**Sacramento, CA**		61,894	88.7%	45,988	65.9%

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Projected Services by Scenario

The California Area Planning Workgroup directed this effort to produce a variety of planning scenarios for Regional healthcare as illustrated by the graphic below.

	One Inpatient Facility Anchoring Additional Outpatient Facilities			Multiple Inpatient Facilities		
	IP + OP			ALL IP		
Scenario	1	2	3	4	5	6
Redding	OP	OP		IP	IP	
Sacramento	IP	IP	IP	IP	IP	IP
Fresno	OP			IP		
Temecula	OP	OP	OP	IP	IP	IP
# of Centers	4	3	2	4	3	2
OP or IP	3 OP/1 IP	2 OP/1 IP	1 OP/1 IP	4 IP	3 IP	2 IP

Six scenarios in total were developed that considered a range of opportunity for desired regional services relative to different locations. The desired goal of the scenarios was to understand whether consolidating or dispersing regional healthcare produced improved and efficient services.

The scenarios are as follows:

1. 4 sites of regional healthcare, 3 of which offer outpatient services only, anchored by 1 Area Wide Medical Center
    a. Redding – Outpatient
    b. Sacramento – Inpatient (Area Wide Medical Center)
    c. Fresno – Outpatient
    d. Temecula – Outpatient
2. 3 sites of regional healthcare, 2 of which offer outpatient services only, anchored by 1 Area Wide Medical Center
    a. Redding – Outpatient
    b. Sacramento – Inpatient (Area Wide Medical Center)
    c. Temecula - Outpatient
3. 2 sites of regional healthcare, 1 of which offer outpatient services only, anchored by 1 Area Wide Medical Center
    a. Sacramento – Inpatient (Area Wide Medical Center)
    b. Temecula - Outpatient

4. 4 sites of regional healthcare, all of which offer inpatient services
    a. Redding – Inpatient
    b. Sacramento – Inpatient
    c. Fresno – Inpatient
    d. Temecula – Inpatient
5. 3 sites of regional healthcare, all of which offer inpatient services only
    a. Redding – Inpatient
    b. Sacramento – Inpatient
    c. Temecula - Inpatient
6. 2 sites of regional healthcare, both of which offer outpatient services only
    a. Sacramento – Inpatient
    b. Temecula - Inpatient

The tables on the following pages summarize the following for each facility by scenario:

Services Key Characteristics, Staff and Space Requirements table

This table is the easiest single page summary from which to evaluate how the six different scenarios perform at providing regional healthcare. This table details:

- Service lines supportable at each facility by scenario (purple shading signifies service line is sustainable based on population market share assumptions; no shading signifies service line is not sustainable)
- Number of key characteristics supported at each facility by scenario (typically providers, rooms or beds)
- Regional site locations and relative user population and market share assumptions
- Resource projections (department gross square meters, building gross square meters, and total staff requirements)

Services Staff and Space Requirements table

This table, while similar to the one above, isolates each scenario and provides additional information related to user population and space requirements. This table details:

- Service lines supportable at each facility by scenario
- Projected impact of telemedicine on lost workload recovery (H=High, M=Moderate, L=Low)
- Number of key characteristics supported at each facility by scenario (typically providers, rooms or beds)
- Projected department size
- Regional site locations and comprehensive relative user population and market share assumptions
- Resource projections (department gross square meters, building gross square meters, and total staff requirements)

F Fresno | R Redding | T Temecula | S Sacramento

Scenarios Services Comparison

	Outpatient Referral Centers with Area Medical Center												Out & Inpatient Referral Centers with Area Wide Medical Center											
	4 Center Option					3 Center Option				2 Center Option			4 Center Option					3 Center Option				2 Center Option		
Proj. Regional Location	F	R	T	S	Total	R	T	S	Total	T	S	Total	F	R	T	S	Total	R	T	S	Total	T	S	Total
2025 Proj. HSP Regional User Pop Market Share	14,768	22,328	26,974	35,573	99,643	22,328	26,974	49,606	98,908	26,974	70,921	97,895	14,768	22,328	26,974	35,573	99,643	22,328	26,974	49,606	98,908	26,974	70,921	97,895
2025 Proj. HSP Inpatient User Pop Market Share	0	0	0	93,686	93,686	0	0	93,686	93,686	0	93,686	93,686	14,768	22,328	26,974	35,573	99,643	22,328	26,974	49,606	98,908	26,974	70,921	97,895
2025 Proj. HSP Regional Center SCPV's	6,931	11,123	16,194	36,736	70,984	11,123	16,194	57,777	85,094	16,194	88,629	104,823	6,931	11,123	16,194	36,736	70,984	11,123	16,194	57,777	85,094	16,194	88,629	104,823
2025 Proj. HSP Regional Center IP Beds	0	0	0	109	109	0	0	109	109	0	109	109	10	27	30	71	137	27	30	77	134	30	93	123
	KC #	KC #	KC #	KC #	KC #	KC #	KC #	KC #	KC #	KC#	KC#	KC #	KC #	KC #	KC #	KC #	KC #	KC #	KC #	KC #	KC #	KC#	KC#	KC #
Ambulatory																								
Audiology (Audiologist)	0.8	1.3	1.5	1.9	5.5	1.3	1.5	2.7	5.5	1.5	3.9	5.4	0.8	1.3	1.5	1.9	5.5	1.3	1.5	2.7	5.5	1.5	3.9	5.4
Dental Care - Specialty Only [1] (Chairs)	3.1	4.6	5.6	7.3	20.6	4.6	5.6	10.2	20.3	5.6	14.5	20.1	3.1	4.6	5.6	7.3	20.6	4.6	5.6	10.2	20.3	5.6	14.5	20.1
Specialty Care																								
Medical Specialties (Providers)																								
Cardiologist								1.6	1.6		2.4	2.4								1.6	1.6		2.4	2.4
Dermatologist				0.9	0.9			1.2	1.2		1.8	1.8				0.9	0.9			1.2	1.2		1.8	1.8
Neurologist								0.8	0.8		1.2	1.2								0.8	0.8		1.2	1.2
Other Medical Specialists [2]	2.3	3.6	4.0	5.4	15.3	3.6	4.0	7.7	15.3	4.0	11.3	15.3	2.3	3.6	4.0	5.4	15.3	3.6	4.0	7.7	15.3	4.0	11.3	15.3
Surgical Specialties (Providers)																								
General Surgeon				1.6	1.6			2.2	2.2		3.1	3.1				1.6	1.6			2.2	2.2		3.1	3.1
Ophthalmologist				1.7	1.7			2.4	2.4		3.5	3.5				1.7	1.7			2.4	2.4		3.5	3.5
Orthopedist			1.3	1.8	3.1		1.3	2.6	3.9	1.3	3.8	5.1			1.3	1.8	3.1		1.3	2.6	3.9	1.3	3.8	5.1
Otolaryngologist				0.9	0.9			1.2	1.2		1.8	1.8				0.9	0.9			1.2	1.2		1.8	1.8
Urologist											1.4	1.4											1.4	1.4
Other Surgical Specialists [3]	0.5	0.8	0.9	1.2	3.4	0.8	0.9	1.6	3.3	0.9	2.4	3.3	0.5	0.8	0.9	1.2	3.4	0.8	0.9	1.6	3.3	0.9	2.4	3.3
Ancillary																*				*			*	
Outpatient Endoscopy (Suites)				1.0	1.0			1.0	1.0		2.0	2.0	1.0			1.0	2.0			1.0	1.0		2.0	2.0
Outpatient Surgery Cases (OP ORs)	1.0	2.0	2.0	4.0	9.0	2.0	2.0	5.0	9.0	2.0	7.0	9.0	2.0	2.0	3.0	4.0	11.0	2.0	3.0	5.0	10.0	3.0	7.0	10.0
Laboratory (FTE)	1.0	2.0	2.0	7.5	12.5	2.0	2.0	11.0	15.0	2.0	16.0	18.0	3.0	3.0	3.0	7.5	16.5	3.0	3.0	11.0	17.0	3.0	16.0	19.0
Diagnostic Imaging																*				*			*	
Radiography (Rooms)	1.0	2.0	2.0	3.0	8.0	2.0	2.0	4.0	8.0	2.0	6.0	8.0	1.0	2.0	2.0	3.0	8.0	2.0	2.0	4.0	8.0	2.0	6.0	8.0
Fluoroscopy (Rooms)			1.0	1.0	2.0		1.0	2.0	3.0	1.0	2.0	3.0			1.0	1.0	2.0		1.0	2.0	3.0	1.0	2.0	3.0
Ultrasound (Rooms)		1.0	1.0	2.0	4.0	1.0	1.0	2.0	4.0	1.0	3.0	4.0		1.0	1.0	2.0	4.0	1.0	1.0	2.0	4.0	1.0	3.0	4.0
Mammography (Rooms)	1.0	1.0	1.0	2.0	5.0	1.0	1.0	2.0	4.0	1.0	3.0	4.0	1.0	1.0	1.0	2.0	5.0	1.0	1.0	2.0	4.0	1.0	3.0	4.0
CT (Rooms)			1.0	1.0	2.0		1.0	1.0	2.0	1.0	2.0	3.0			1.0	1.0	2.0		1.0	1.0	2.0	1.0	2.0	3.0
MRI (Rooms)								1.0	1.0		1.0	1.0								1.0	1.0		1.0	1.0
Radiologist	0.7	1.2	1.6	2.5	6.0	1.2	1.6	3.6	6.4	1.6	5.1	6.7	0.7	1.3	1.7	2.5	6.2	1.3	1.7	3.6	6.6	1.7	5.1	6.8
Pharmacy (Pharmacists)	1.5	3.0	3.4	10.9	18.7	3.0	3.4	15.1	21.5	3.4	21.3	24.6	2.5	3.4	4.5	9.7	20.1	3.4	4.5	14.1	22.0	4.5	20.8	25.2
Inpatient Care																								
Pediatric (Beds)				8.4	8.4			8.4	8.4		8.4	8.4		2.4	2.6	6.4	11.4	2.4	2.6	6.2	11.2	2.6	7.3	9.9
Adult Medical (Beds)				51.7	51.7			51.7	51.7		51.7	51.7	9.5	14.3	15.7	25.5	65.0	14.3	15.7	32.0	62.0	15.7	41.6	57.3
Adult Surgical (Beds)				34.4	34.4			34.4	34.4		34.4	34.4		6.3	7.0	28.0	41.3	6.3	7.0	28.0	41.3	7.0	31.2	38.2
ICU (Beds)				14.9	14.9			14.9	14.9		14.9	14.9		4.0	4.4	10.9	19.3	4.0	4.4	10.9	19.3	4.4	12.9	17.3
Physical Rehab Services																								
Occupational Therapist	1.1	1.7	2.0	2.7	7.6	1.7	2.0	3.8	7.5	2.0	5.4	7.5	1.1	1.7	2.0	2.7	7.6	1.7	2.0	3.8	7.5	2.0	5.4	7.5
Speech Pathologist	0.3	0.4	0.5	0.6	1.8	0.4	0.5	0.9	1.8	0.5	1.3	1.8	0.3	0.4	0.5	0.6	1.8	0.4	0.5	0.9	1.8	0.5	1.3	1.8
Behavioral Health (FTE's)																								
Psychiatry (Psychiatrists)	0.8	1.2	1.5	2.0	5.5	1.2	1.5	2.8	5.5	1.5	4.0	5.5	0.8	1.2	1.5	2.0	5.5	1.2	1.5	2.8	5.5	1.5	4.0	5.5
Department Gross Square Feet (DGSF)	30,242	43,313	53,494	165,281	292,330	43,313	53,494	195,136	291,943	53,494	233,580	287,074	49,662	72,273	86,964	142,427	351,326	72,273	88,816	174,513	335,603	88,816	223,747	312,563
Total RRM FTE's	81	106	129	589	906	106	129	677	912	129	811	941	142	230	269	501	1,143	228	269	603	1,101	269	774	1,044
Building Gross Square Feet (BGSF)	40,646	58,213	71,896	222,137	392,892	58,213	71,896	262,262	392,371	71,896	313,931	385,828	66,746	97,135	116,880	191,421	472,182	97,135	119,369	234,545	451,050	119,369	300,715	420,085

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4 Center Scenario: 3 Regional Centers, 1 Area Wide Medical Center

		4 Regional Centers								4 Regional Centers							
Proj. Regional Location		Fresno		Redding		Temecula		Sacramento		Fresno		Redding		Temecula		Sacramento	
Facility Services Type		Outpatient		Outpatient		Outpatient		Inpatient		Inpatient		Inpatient		Inpatient		Inpatient	
Inpatient Services Scope		None		None		None		Area Wide		Regional		Regional		Regional		Regional	
2025 Proj. HSP Regional User Pop (100%)		15,451		23,670		27,204		36,420		15,451		23,670		27,204		36,420	
2025 Proj. HSP Inpatient User Pop (100%)		0		0		0		104,581		15,451		23,670		27,204		36,420	
Proj. User Pop Market Share (MS) Driving RC Services		***94.9%***		***93.5%***		***98.4%***		***96.7%***		***94.9%***		***93.5%***		***98.4%***		***96.7%***	
Proj. User Pop Market Share (MS) Driving IP Services		***0.0%***		***0.0%***		***0.0%***		***88.7%***		***94.9%***		***93.5%***		***98.4%***		***96.7%***	
2025 Proj. HSP Regional User Pop Market Share		14,768		22,328		26,974		35,573		14,768		22,328		26,974		35,573	
2025 Proj. HSP Inpatient User Pop Market Share		0		0		0		93,686		14,768		22,328		26,974		35,573	
2025 Proj. HSP Regional Center SCPV's		6,931		11,123		16,194		36,736		6,931		11,123		16,194		36,736	
2025 Proj. HSP Regional Center IP Beds		0		0		0		109		10		27		30		71	
TMI = Telemed MS Impact: H=High, M=Moderate, N=Neglible		KC #	DGSF	KC #	DGSF	KC #	DGSF	KC #	DGSF	KC #	DGSF	KC #	DGSF	KC #	DGSF	KC #	DGSF
		B	D	F	H	J	L	N	P	R	T	V	X	Z	BB	DD	FF
		HSP Auth'd		*HSP Auth'd*		*HSP Auth'd*		*HSP Auth'd*		*HSP Auth'd*		*HSP Auth'd*		*HSP Auth'd*		*HSP Auth'd*	
Ambulatory	TMI																
Audiology (Audiologist)	N	0.8	872	1.3	872	1.5	872	1.9	1,534	0.8	872	1.3	872	1.5	872	1.9	1,534
Dental Care - Specialty Only [1] (Chairs)	N	3.1	4,739	4.6	7,087	5.6	8,549	7.3	11,241	3.1	4,739	4.6	7,102	5.6	8,553	7.3	11,241
[1] *Includes Pediatric, Endodontics, Orthodontics, Prosthodontics, Periodontics, Maxiofacial*																	
Specialty Care																	
Medical Specialties (Providers)																	
Cardiologist	H	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
Dermatologist	H	0.0		0.0		0.0		0.9		0.0		0.0		0.0		0.9	
Neurologist	H	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
Other Medical Specialists [2]	H	2.3		3.6		4.0		5.4		2.3		3.6		4.0		5.4	
[2] *Includes Endocrinologist, Nephrologist, Allergist, Gerontologist, Rheumatologist, Gastroenterologist,*																	
Surgical Specialties (Providers)																	
General Surgeon	H	0.0	2,232	0.0	4,901	0.0	9,052	1.6	12,314	0.0	2,232	0.0	4,901	0.0	9,052	1.6	12,314
Ophthalmologist	N	0.0		0.0		0.0		1.7		0.0		0.0		0.0		1.7	
Orthopedist	H	0.0		0.0		1.3		1.8		0.0		0.0		1.3		1.8	
Otolaryngologist	H	0.0		0.0		0.0		0.9		0.0		0.0		0.0		0.9	
Urologist	N	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
Other Surgical Specialists [3]	H	0.5		0.8		0.9		1.2		0.5		0.8		0.9		1.2	
[3] *Includes Throacic, Plastic, Vascular, etc.*																	
Preventive																	
Regional Support/Epi-Center	N																
Ancillary																	
Outpatient Endoscopy (Suites)	N	0.0		0.0		0.0		1.0		1.0		0.0		0.0		1.0	
Outpatient Surgery Cases (OP ORs)	N	1.0	3,617	2.0	6,852	2.0	6,852	4.0	13,993	2.0	6,852	2.0	6,852	3.0	9,286	4.0	13,993
Short Stay / Observation (Beds)	N	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
Laboratory (FTE)	N	1.0	861	2.0	861	2.0	861	7.5	3,541	3.0	1,415	3.0	2,158	3.0	2,158	7.5	3,541
Diagnostic Imaging																	
Radiography (Rooms)	N	1.0		2.0		2.0		3.0		1.0		2.0		2.0		3.0	
Fluoroscopy (Rooms)		0.0		0.0		1.0		1.0		0.0		0.0		1.0		1.0	
Ultrasound (Rooms)	N	0.0	2,067	1.0	3,828	1.0	6,814	2.0	9,103	0.0	3,528	1.0	5,199	1.0	6,862	2.0	9,103
Mammography (Rooms)	N	1.0		1.0		1.0		2.0		1.0		1.0		1.0		2.0	
CT (Rooms)	N	0.0		0.0		1.0		1.0		0.0		0.0		1.0		1.0	
MRI (Rooms)	N	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
Radiologist	H	0.7		1.2		1.6		2.5		0.7		1.3		1.7		2.5	
Pharmacy (Pharmacists)	N	1.5	1,798	3.0	1,798	3.4	1,798	10.9	2,745	2.5	1,798	3.4	1,798	4.5	2,400	9.7	2,745
Inpatient Care																	
Pediatric (Beds)	N	0.0		0.0		0.0		8.4		0.0		2.4		2.6		6.4	
Adult Medical (Beds)	N	0.0	0	0.0	0	0.0	0	51.7	50,827	9.5	5,133	14.3	12,368	15.7	13,627	25.5	32,216
Adult Surgical (Beds)	N	0.0		0.0		0.0		34.4		0.0		6.3		7.0		28.0	
ICU (Beds)	N	0.0	0	0.0	0	0.0	0	14.9	8,030	0.0	0	4.0	2,153	4.4	2,357	10.9	5,899
Physical Rehab Services																	
Occupational Therapist	N	1.1	538	1.7	822	2.0	938	2.7	1,238	1.1	538	1.7	822	2.0	938	2.7	1,238
Speech Pathologist	N	0.3		0.4		0.5		0.6		0.3		0.4		0.5		0.6	
Behavioral Health																	
Psychiatry (Psychiatrists)	H	0.8	423	1.2	681	1.5	681	2.0	681	0.8	423	1.2	681	1.5	681	2.0	681
Administration																	
Administration (FTE's)	N	8.0	2,275	8.0	2,275	8.0	1,854	33.5	5,952	11.0	2,667	17.5	3,805	19.0	2,164	33.5	5,952
Information Management (FTE's)	N	3.0	853	3.0	853	4.0	969	10.0	2,041	3.5	911	5.0	1,208	5.5	1,324	10.0	2,041
Business Office (FTE's)	N	4.0	784	5.0	874	8.0	1,326	18.0	2,057	4.0	784	6.0	964	8.0	1,324	18.0	2,057
Health Information Management (FTE's)	N	8.0	2,260	10.0	2,785	15.0	3,364	42.0	6,512	10.0	2,422	13.5	3,122	17.0	3,552	42.0	6,512
Security (FTE's)	N	1.0	168	1.0	168	2.0	168	3.0	220	1.5	245	2.0	245	2.5	245	3.0	220
Facility Support																	
Clinical Engineering (FTE's)	N	1.0	110	1.0	175	1.0	214	4.0	996	2.5	452	2.5	678	2.5	678	4.0	996
Facility Management (FTE's)	N	5.0	657	6.0	657	7.0	657	20.5	2,271	9.5	1,066	12.0	1,480	14.0	1,857	20.5	2,271
Support Services																	
Central Sterile/Medical Supply (FTE's)	N	1.0	321	1.0	321	1.0	321	1.5	5,986	1.0	1,313	1.5	1,477	1.5	1,625	1.5	3,874
Property & Supply (FTE's)	N	1.0	936	1.0	936	2.0	936	5.5	5,048	1.5	1,776	2.5	1,776	2.5	1,776	5.5	5,048
Housekeeping & Linen (FTE's)	N	6.0	840	7.0	840	8.0	934	26.5	2,558	12.0	1,085	16.0	1,719	23.0	1,837	26.5	2,558
Other Programs																	
Case Management (FTE's)	H	5.1	965	7.5	1,425	8.6	1,638	11.4	2,155	5.1	965	7.5	1,425	8.6	1,638	11.4	2,155
Pain Management (Specialists)	H	0.3	502	0.5	762	0.6	911	0.7	1,205	0.3	502	0.5	762	0.6	911	0.7	1,205
Research	N																
Transportation (Patients to/from RHC)	N																
Summary																	
DGSF		**30,242**		**43,313**		**53,494**		**165,281**		**49,662**		**72,273**		**86,964**		**142,427**	
Total RRM FTE's		**81**		**106**		**129**		**589**		**142**		**230**		**269**		**501**	
BGSF		**40,646**		**58,213**		**71,896**		**222,137**		**66,746**		**97,135**		**116,880**		**191,421**	

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3 Center Scenario: 2 Regional Centers, 1 Area Wide Medical Center

		3 Regional Centers						3 Regional Centers					
Proj. Regional Location		Redding		Temecula		Sacramento		Redding		Temecula		Sacramento	
Facility Services Type		Outpatient		Outpatient		Inpatient		Inpatient		Inpatient		Inpatient	
Inpatient Services Scope		None		None		Area Wide		Regional		Regional		Regional	
2025 Proj. HSP Regional User Pop (100%)		23,670		27,204		51,871		23,670		27,204		51,871	
2025 Proj. HSP Inpatient User Pop (100%)		0		0		104,581		23,670		27,204		51,871	
Proj. User Pop Market Share (MS) Driving RC Services		***93.5%***		***98.4%***		***94.7%***		***93.5%***		***98.4%***		***94.7%***	
Proj. User Pop Market Share (MS) Driving IP Services		***0.0%***		***0.0%***		***88.7%***		***93.5%***		***98.4%***		***94.7%***	
2025 Proj. HSP Regional User Pop Market Share		22,328		26,974		49,606		22,328		26,974		49,606	
2025 Proj. HSP Inpatient User Pop Market Share		0		0		93,686		22,328		26,974		49,606	
2025 Proj. HSP Regional Center SCPV's		11,123		16,194		57,777		11,123		16,194		57,777	
2025 Proj. HSP Regional Center IP Beds		0		0		109		27		30		77	
TMI = Telemed MS Impact: H=High, M=Moderate, N=Neglible		*KC #*	*DGSF*	*KC #*	*DGSF*	*KC #*	*DGSF*	*KC #*	*DGSF*	*KC #*	*DGSF*	*KC #*	*DGSF*
		B	D	F	H	L	N	P	R	T	V	X	Z
		HSP Auth'd		*HSP Auth'd*		*HSP Auth'd*		*HSP Auth'd*		*HSP Auth'd*		*HSP Auth'd*	
Ambulatory	**TMI**												
Audiology (Audiologist)	N	1.3	872	1.5	872	2.7	2,180	1.3	872	1.5	872	2.7	2,180
Dental Care - Specialty Only [1] (Chairs)	N	4.6	7,087	5.6	8,549	10.2	15,625	4.6	7,102	5.6	8,553	10.2	15,625
[1] Includes Pediatric, Endodontics, Orthodontics, Prosthodontics, Periodontics, Maxiofacial													
Specialty Care													
Medical Specialties (Providers)													
Cardiologist	H	0.0		0.0		1.6		0.0		0.0		1.6	
Dermatologist	H	0.0		0.0		1.2		0.0		0.0		1.2	
Neurologist	H	0.0		0.0		0.8		0.0		0.0		0.8	
Other Medical Specialists [2]	H	3.6		4.0		7.7		3.6		4.0		7.7	
Surgical Specialties (Providers)													
General Surgeon	H	0.0	4,901	0.0	9,052	2.2	19,057	0.0	4,901	0.0	9,052	2.2	19,057
Ophthalmologist	N	0.0		0.0		2.4		0.0		0.0		2.4	
Orthopedist	H	0.0		1.3		2.6		0.0		1.3		2.6	
Otolaryngologist	H	0.0		0.0		1.2		0.0		0.0		1.2	
Urologist	N	0.0		0.0		0.0		0.0		0.0		0.0	
Other Surgical Specialists [3]	H	0.8		0.9		1.6		0.8		0.9		1.6	
[3] Includes Throacic, Plastic, Vascular, etc.													
Preventive													
Regional Support/Epi-Center	N												
Ancillary													
Outpatient Endoscopy (Suites)	N	0.0		0.0		1.0		0.0		0.0		1.0	
Outpatient Surgery Cases (OP ORs)	N	2.0	6,852	2.0	6,852	5.0	15,792	2.0	6,852	3.0	9,286	5.0	15,792
Short Stay / Observation (Beds)	N	1.0		1.0		1.0		1.0		1.0		1.0	
Laboratory (FTE)	N	2.0	861	2.0	861	11.0	4,187	3.0	2,158	3.0	2,158	11.0	4,187
Diagnostic Imaging													
Radiography (Rooms)	N	2.0		2.0		4.0		2.0		2.0		4.0	
Fluoroscopy (Rooms)		0.0		1.0		2.0		0.0		1.0		2.0	
Ultrasound (Rooms)	N	1.0	3,828	1.0	6,814	2.0	12,061	1.0	5,199	1.0	6,862	2.0	12,061
Mammography (Rooms)	N	1.0		1.0		2.0		1.0		1.0		2.0	
CT (Rooms)	N	0.0		1.0		1.0		0.0		1.0		1.0	
MRI (Rooms)	N	0.0		0.0		1.0		0.0		0.0		1.0	
Radiologist	H	1.2		1.6		3.6		1.3		1.7		3.6	
Pharmacy (Pharmacists)	N	3.0	1,798	3.4	1,798	15.1	6,378	3.4	1,798	4.5	2,400	14.1	6,378
Inpatient Care													
Pediatric (Beds)	N	0.0		0.0		8.4		2.4		2.6		6.2	
Adult Medical (Beds)	N	0.0	0	0.0	0	51.7	50,827	14.3	12,368	15.7	13,627	32.0	35,618
Adult Surgical (Beds)	N	0.0		0.0		34.4		6.3		7.0		28.0	
ICU (Beds)	N	0.0	0	0.0	0	14.9	8,030	4.0	2,153	4.4	2,357	10.9	5,856
Physical Rehab Services													
Occupational Therapist	N	1.7	822	2.0	938	3.8	1,752	1.7	822	2.0	938	3.8	1,752
Speech Pathologist	N	0.4		0.5		0.9		0.4		0.5		0.9	
Behavioral Health													
Psychiatry (Psychiatrists)	H	1.2	681	1.5	681	2.8	1,049	1.2	681	1.5	681	2.8	1,049
Administration													
Administration (FTE's)	N	8.0	2,275	8.0	1,854	37.0	6,608	17.5	3,805	19.0	4,016	37.0	6,608
Information Management (FTE's)	N	3.0	853	4.0	969	12.0	2,338	5.0	1,208	5.5	1,324	12.0	2,338
Business Office (FTE's)	N	5.0	874	8.0	1,326	25.0	2,735	6.0	964	8.0	1,324	25.0	2,735
Health Information Management (FTE's)	N	10.0	2,785	15.0	3,364	49.5	8,006	13.5	3,122	17.0	3,552	49.5	8,006
Security (FTE's)	N	1.0	168	2.0	168	4.0	271	2.0	245	2.5	245	4.0	271
Facility Support													
Clinical Engineering (FTE's)	N	1.0	175	1.0	214	4.0	904	2.5	678	2.5	678	4.0	904
Facility Management (FTE's)	N	6.0	657	7.0	657	25.0	2,648	12.0	1,480	14.0	1,857	25.0	2,648
Support Services													
Central Sterile/Medical Supply (FTE's)	N	1.0	321	1.0	321	1.5	5,983	1.5	1,477	1.5	1,625	1.5	4,218
Property & Supply (FTE's)	N	1.0	936	2.0	936	6.5	6,534	2.5	1,776	2.5	1,776	6.5	6,534
Housekeeping & Linen (FTE's)	N	7.0	840	8.0	934	29.5	2,818	16.0	1,719	23.0	1,837	29.5	2,818
Other Programs													
Case Management (FTE's)	H	7.5	1,425	8.6	1,638	15.9	3,017	7.5	1,425	8.6	1,638	15.9	3,017
Pain Management (Specialists)	H	0.5	762	0.6	911	1.0	1,688	0.5	762	0.6	911	1.0	1,688
Research	N												
Transportation (Patients to/from RHC)	N												
Summary													
DGSF		**43,313**		**53,494**		**195,136**		**72,273**		**88,816**		**174,513**	
Total RRM FTE's		**106**		**129**		**677**		**228**		**269**		**603**	
BGSF		**58,213**		**71,896**		**262,262**		**97,135**		**119,369**		**234,545**	

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2 Center Scenario: 1 Regional Center, 1 Area Wide Medical Center

		2 Regional Centers				2 Regional Centers			
Proj. Regional Location		Temecula		Sacramento		Temecula		Sacramento	
Facility Services Type		Outpatient		Inpatient		Inpatient		Inpatient	
Inpatient Services Scope		None		Area Wide		Regional		Regional	
2025 Proj. HSP Regional User Pop (100%)		27,204		75,541		27,204		75,541	
2025 Proj. HSP Inpatient User Pop (100%)		0		104,581		27,204		75,541	
Proj. User Pop Market Share (MS) Driving RC Services		***98.4%***		***92.9%***		***98.4%***		***92.9%***	
Proj. User Pop Market Share (MS) Driving IP Services		***0.0%***		***88.7%***		***98.4%***		***92.9%***	
2025 Proj. HSP Regional User Pop Market Share		26,974		70,921		26,974		70,921	
2025 Proj. HSP Inpatient User Pop Market Share		0		93,686		26,974		70,921	
2025 Proj. HSP Regional Center SCPV's		16,194		88,629		16,194		88,629	
2025 Proj. HSP Regional Center IP Beds		0		109		30		93	
TMI = Telemed MS Impact:		*KC #*	*DGSF*	*KC #*	*DGSF*	*KC #*	*DGSF*	*KC #*	*DGSF*
		B	C	G	I	K	M	O	Q
		HSP Auth'd		*HSP Auth'd*		*HSP Auth'd*		*HSP Auth'd*	
Ambulatory	**TMI**								
Audiology (Audiologist)	N	1.5	872	3.9	3,148	1.5	872	3.9	3,148
Dental Care - Specialty Only [1] (Chairs)	N	5.6	8,549	14.5	22,284	5.6	8,553	14.5	22,284
[1] Includes Pediatric, Endodontics, Orthodontics, Prosthodontics, Periodontics, Maxiofacial									
Specialty Care									
Medical Specialties (Providers)									
Cardiologist	H	0.0		2.4		0.0		2.4	
Dermatologist	H	0.0		1.8		0.0		1.8	
Neurologist	H	0.0		1.2		0.0		1.2	
Other Medical Specialists [2]	H	4.0		11.3		4.0		11.3	
[2] Includes Endocrinologist, Nephrologist, Allergist, Gerontologist, Rheumatologist, Gastroenterologist,									
Surgical Specialties (Providers)									
General Surgeon	H	0.0	9,052	3.1	27,907	0.0	9,052	3.1	27,907
Ophthalmologist	N	0.0		3.5		0.0		3.5	
Orthopedist	H	1.3		3.8		1.3		3.8	
Otolaryngologist	H	0.0		1.8		0.0		1.8	
Urologist	N	0.0		1.4		0.0		1.4	
Other Surgical Specialists [3]	H	0.9		2.4		0.9		2.4	
[3] Includes Throacic, Plastic, Vascular, etc.									
Preventive									
Regional Support/Epi-Center	N								
Ancillary									
Outpatient Endoscopy (Suites)	N	0.0		2.0		0.0		2.0	
Outpatient Surgery Cases (OP ORs)	N	2.0	6,852	7.0	20,502	3.0	9,286	7.0	20,502
Short Stay / Observation (Beds)	N	1.0		1.0		1.0		1.0	
Laboratory (FTE)	N	2.0	861	16.0	4,187	3.0	2,158	16.0	4,187
Diagnostic Imaging									
Radiography (Rooms)	N	2.0		6.0		2.0		6.0	
Fluoroscopy (Rooms)		1.0		2.0		1.0		2.0	
Ultrasound (Rooms)	N	1.0	6,814	3.0	16,049	1.0	6,862	3.0	16,049
Mammography (Rooms)	N	1.0		3.0		1.0		3.0	
CT (Rooms)	N	1.0		2.0		1.0		2.0	
MRI (Rooms)	N	0.0		1.0		0.0		1.0	
Radiologist	H	1.6		5.1		1.7		5.1	
Pharmacy (Pharmacists)	N	3.4	1,798	21.3	9,257	4.5	2,400	20.8	9,115
Inpatient Care									
Pediatric (Beds)	N	0.0		8.4		2.6		7.3	
Adult Medical (Beds)	N	0.0	0	51.7	50,827	15.7	13,627	41.6	43,131
Adult Surgical (Beds)	N	0.0		34.4		7.0		31.2	
ICU (Beds)	N	0.0	0	14.9	8,030	4.4	2,357	12.9	6,932
Physical Rehab Services									
Occupational Therapist	N	2.0	938	5.4	2,537	2.0	938	5.4	2,537
Speech Pathologist	N	0.5		1.3		0.5		1.3	
Behavioral Health									
Psychiatry (Psychiatrists)	H	1.5	681	4.0	1,398	1.5	681	4.0	1,398
Administration									
Administration (FTE's)	N	8.0	1,854	41.5	7,000	19.0	4,016	41.5	7,000
Information Management (FTE's)	N	4.0	969	15.0	2,693	5.5	1,324	15.0	2,693
Business Office (FTE's)	N	8.0	1,326	36.0	3,556	8.0	1,324	36.0	3,556
Health Information Management (FTE's)	N	15.0	3,364	62.5	10,286	17.0	3,552	62.5	10,286
Security (FTE's)	N	2.0	168	5.0	271	2.5	245	5.0	271
Facility Support									
Clinical Engineering (FTE's)	N	1.0	214	6.5	1,690	2.5	678	6.5	1,690
Facility Management (FTE's)	N	7.0	657	27.5	2,648	14.0	1,857	27.5	2,648
Support Services									
Central Sterile/Medical Supply (FTE's)	N	1.0	321	1.5	5,986	1.5	1,625	1.5	5,088
Property & Supply (FTE's)	N	2.0	936	8.5	8,216	2.5	1,776	8.5	8,216
Housekeeping & Linen (FTE's)	N	8.0	934	32.5	3,055	23.0	1,837	32.5	3,055
Other Programs									
Case Management (FTE's)	H	8.6	1,638	22.9	4,335	8.6	1,638	22.9	4,335
Pain Management (Specialists)	H	0.6	911	1.5	2,422	0.6	911	1.5	2,422
Research	N								
Transportation (Patients to/from RHC)	N								
Summary									
DGSF		**53,494**		**233,580**		**88,816**		**223,747**	
Total RRM FTE's		**129**		**811**		**269**		**774**	
BGSF		**71,896**		**313,931**		**119,369**		**300,715**	

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Resource Requirements

The following summary was created to allow single page viewing of important metrics that offer clues regarding which scenario performs best relative to

- Delivery of specialty healthcare
- Operational costs
- Construction and project costs
- Various metrics

The blue shading identifies the lowest entry for each row in the table, while the yellow shading identifies the highest entry. Depending on the row, high or low could hold different meanings. On the whole, the 2 location scenarios appear to perform better, delivering more specialty healthcare in balance with acute healthcare at a greater operational efficiency and moderate construction costs.

			OP Scenarios with AWMC			OP/IP Scenarios		
			OP4	OP3	OP2	IP4	IP3	IP2
Resources	1	Number of Beds	109	109	109	137	134	123
	2	Number of Staff	906	912	941	1,143	1,101	1,044
	3	Number of Specialty Care Provider Vists	70,984	85,094	104,823	70,984	85,094	104,823
	4	Building Gross Sqaure Feet	392,892	392,371	385,828	472,182	451,050	420,085
Costs	5	Construction Cost (millions)	$162.06	$166.75	$170.76	$221.14	$216.99	$197.97
	6	Project Cost (millions)	$207.92	$214.53	$220.25	$281.27	$275.82	$253.46
	7	Operational Cost (millions)	$120.02	$122.04	$127.11	$138.29	$136.84	$134.62
	8	Annual Cost (Millions)	$131.98	$134.42	$139.87	$154.25	$152.48	$149.15
Metrics	9	Specialty Care Provider Vists per OP User Pop	0.69	0.83	1.02	0.69	0.83	1.02
	10	IP Pop per Bed	856	857	856	727	739	798
	11	Construction Cost per Bed (millions)	$1.49	$1.53	$1.57	$1.61	$1.62	$1.61
	12	Project Cost per Bed (millions)	$1.91	$1.97	$2.02	$2.05	$2.06	$2.06
	13	Annual Cost per Bed (millions)	$1.21	$1.23	$1.28	$1.13	$1.14	$1.21
	14	Annual Cost per Specialty Care Provider Visit	$1,859	$1,580	$1,334	$2,173	$1,792	$1,423
	15	Proj. Cost per Specialty Care Provider Visit	$2,929	$2,521	$2,101	$3,962	$3,241	$2,418

In presenting information to Tribal Leaders near the end of the project, specific criteria were applied to each scenario and the relative performance of each was ranked.

1. Which scenario best completes the continuum of healthcare?
2. Which scenario provides the most specialty healthcare?
3. Which scenario satisfies the most specialty healthcare demand?
4. Which scenario provides the most acute healthcare?
5. Which scenario most reduces the Contract Health Services burden on health programs?
6. Which scenario offers the most revenue potential?

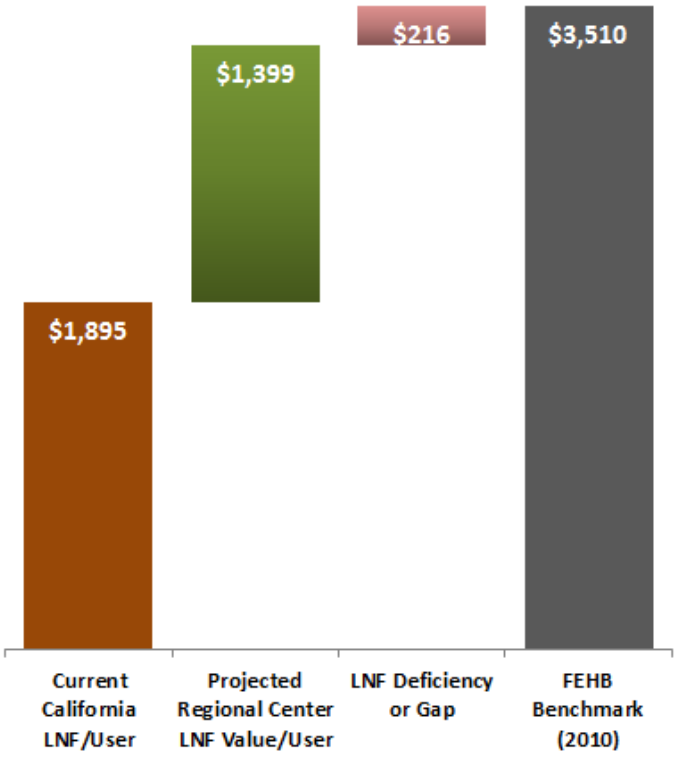
7. Which scenario anticipates other important questions?

As the figure below illustrates, Scenarios 6 and 3 performed best relative to those criteria. Either could outperform the other depending on criteria are selected and carious planning assumptions – its close. Additional criteria could certainly be considered. But scenario 6 represents the recommendation of this study.

	IP + OP			ALL IP		
Scenario	1	2	3	4	5	6
Redding	OP	OP		IP	IP	
Sacramento	IP	IP	IP	IP	IP	IP
Fresno	OP			IP		
Temecula	OP	OP	OP	IP	IP	IP
# of Centers	4	3	2	4	3	2
Average Score	4.8	3.8	2	3.6	2.8	1.6
Rank	6	5	2	4	3	1

Impact of Regional Healthcare Relative to Need

The ultimate value of Regional healthcare to American Indian/Alaska Natives residing in California can be thought of relative to Level of Need Funded (LNF). Level of Need Funded compares funding for Native healthcare relative to a Federal Employee Health Benefit benchmark. That federal benchmark currently stands at $3,510 annually. It does not include certain services like preventive healthcare or environmental services. And it certainly falls far short of the annual spending per capita on healthcare, a number that is twice as large. Historically, it represents a baseline funding target for American Indian/Alaska Natives who reside in California.



Any of the scenarios modeled have the potential to significantly close the gap between current Level of Need Funded per user in California and the FEHB benchmark, a current shortfall of 46%

The average value of healthcare (annual operational plus depreciation costs) of all scenarios divided by the California state Health Systems Planning software AI/AN user population, produces a value of regional healthcare per user in today's dollars: $1,399. That number suggests an impact in closing the Level of Need Funded gap for every AI/AN in California of 39.8% basis points.

In other words, by establishing two Regional Ambulatory Surgical & Specialty Centers, the gap in Level of Need Funded would close from 46% to 6.2% or from $1,615 per user to $216. That means the present LNF of $1,895 per user would increase to $3,294 toward the Federal Benchmark of $3,510 per user.

While further refinement of Level of Need Funded impact could be pursued, this projection of resources for California in raising the healthcare of American Indian/Alaska Natives who reside in California to the highest level is significant. It does not address all of California's needs, but it does identify the value of regional healthcare and a Contract Health Services funding increase equivalent.

Financials

The financials utilized in and emerging from this report are primarily focused on costs and required resources. In other words,

- How many staff are required?
- What size departments are required?
- What size facility is required?
- How much will it cost to build?
- How much will it cost to operate?
- What is the value of projected referred healthcare provided at each location?

No revenue or margin projections are included. Revenue projections should be included at some point in future planning prior to implementation.

There are two major elements to consider related to costs:

- Operational costs (and the resulting scenario costs)
- Facility costs (and the resulting scenario costs)
- Referred Healthcare costs (Contract Health Services Impact)

Operation Costs Projections

The methodology utilized is consistent with IHS' process in determining operating costs for a proposed new clinic.

1. The first step was the development of a staffing plan based on projected workloads using IHS Required Resources Methodology allocations. Such a detailed staffing plan was developed by facility and by scenario.
2. The second step was the development of an average salary by job function. Since salary rates are geographically specific, a source of data was required capable of providing standardized annual staff salaries and overhead costs based on the location of each of the facilities by job function. Ultimately, web based resources, such as Salaries.com, were utilized in conjunction with the Consultant's in-house salary records. Parameters used to develop these costs included:
    - City the facility is located in
    - Job Title/Function description
    - Utilized the Median wage rate for like positions in the geographic area
    - Assumed that all individuals had 5+ years or work experience in the position considered
    - All positions were full-time
    - Benefit factor of 23.5% of direct salaries was applied as overhead costs
3. The other operating expenses were developed consistent with IHS' metrics in determining the annual funding amount for new facilities.

- This methodology assumes that personnel costs (includes direct salaries and benefits) make up 70% of total operation costs while other costs comprise the remaining 30% of total operating costs.
    - Consequently, direct salaries were determined, benefit ratios were applied, and that total was assumed to be 70% of total costs
    - The remainder includes operating costs such as utilities, repairs, maintenance, and other fixed costs which exclude any payment for Contract Health Services outside the facility.

Facility Cost Projections (Construction and Project)

Capital costs were determined using the Facility Budget Estimating software (FBES) cost modeling software. This estimating tool takes into account geographic variances relating to cost of construction. It also takes into account the various building clinic and department types as well as any special requirements of federal government financed buildings.

Facilities with inpatient services were calculated using a hospital building type. Facilities with office visits, and some ancillary services were calculated using a medical office building type.

The software includes a per square foot estimator for each type of functional use. Space design square footages calculated from the Health Systems Planning software by functional department were inputted into the Facility Budget Estimating software to facilitate the calculation of cost per square foot by functional use.

These departmental costs were then aggregated and grossed up using a standard government grossing factor to arrive at a total cost per square foot.

The Facility Budget Estimating software applies a standardized factor for developing a total project cost which includes any architectural/engineering costs, building systems costs, furniture/fixtures costs, and any medical equipment costs. Large expensive pieces of medical equipment (such as radiology units) had to be called out separately.

This analysis does not consider or quantify the cost of land, nor does it consider any type of extraordinary site development costs. Costs for land and any extraordinary site development must be added to the estimates projected by facility.

Value of Healthcare Cost Projections (Contract Health Services Impact/Revenue Potential)

In order to evaluate the relative value performance of various scenarios, the value of referred healthcare was calculated based on per encounter referral costs. These costs were projected based upon data acquired from the Fiscal Intermediary in Albuquerque including per encounter costs from nine of the twelve IHS areas. California is one of the IHS Areas for which costs were not available.

The data was combined and averaged to arrive at a national cost of healthcare by service line where available. This was done to normalize cost outliers and minimalize the likelihood of error from smaller data sets per service line from various Areas.

The national average cost of healthcare per encounter was then geographically adjusted to the appropriate California regional site under study using a Medicare reimbursement rate ratio relative to the national standard: Redding, Sacramento, Fresno, or Temecula

Site specific per encounter costs were then applied to anticipated referral volumes for each facility by scenario.

For example, an orthopedic specialty healthcare visit was projected to vary in cost depending on location.

- $298.34 in Redding
- $299.11 in Sacramento
- $272.48 in Fresno
- $265.19 in Temecula

From these location-specific per encounter costs, all facility referral values were totaled to form scenario totals. These totals were compared to understand which scenario performs better relative to three points of concern:

- What is the total value of referred healthcare anticipated per scenario?
- What is the total potential revenue anticipated per scenario?
- What is the potential impact on the Contract Health Services burden for the state and on average for local Health Programs?

The second bullet above was assumed to mirror the answer from the first bullet. In other words, if a certain scenario anticipated the most referred healthcare value, the study assumed it also offered the greatest potential revenue. This assumption would require much greater scope to study revenue by payer – something future planning efforts may wish to consider, assuming more comprehensive payer information could be obtained.

The Contract Health Services burden impact was understood as the total scenario value of referred healthcare relative to the total value of all referred secondary healthcare for the state, expressed as a percentage.

The table on the following page shows the final per encounter costs used to determine facility and scenario cost of healthcare and Contract Health Services impact.

Note - The value of healthcare and Contract Health Services burden impact projections do not include all service lines, since even on a national scale per encounter costs are not available for some lines of

healthcare. The following services do not have a per encounter cost and consequently are not included in the total referred healthcare values:

- Dental Specialty Care
- Pharmacy
- Occupational Therapy
- Speech Therapy
- Case Management
- Pain Management

This means that the projected value of referred healthcare is likely conservative and already includes a "built-in" risk limiter relative to Level of Need Funded Impact and potential revenue.

Assigning a value to that limiter is difficult. But national Contract Health Services per encounter cost data from the IHS Fiscal Intermediary in Albuquerque shows that the value of the cost of additional healthcare paid relative to the cost of healthcare assignable to a per encounter cost, ranges from an additional 8.5% to 20.1%. This would suggest that the value of referred healthcare as shown in this study is either:

a. Conservative by 8.5 – 20.1%

or

b. Market share could be that much less than projected and the model still produce the value of referred healthcare identified

Regionally Adjusted CHS Costs	TIG National Data	Redding	Fresno	Temecula	Sacramento
Definition of Source=>	Per MSA Reports	Per MSA Reports	Per MSA Reports	Per MSA Reports	Per MSA Reports
Primary Care					
Family Practice	$ 73.00	$ 89.88	$ 82.09	$ 79.90	$ 90.12
Internal Medicine	$ 73.00	$ 89.88	$ 82.09	$ 79.90	$ 90.12
Pediatric	$ 58.66	$ 72.22	$ 65.96	$ 64.20	$ 72.41
Ob/Gyn	$ 237.57	$ 292.53	$ 267.18	$ 260.03	$ 293.29
Emergency Care					
Emergency Care	$ 433.85	$ 534.20	$ 487.91	$ 474.85	$ 535.59
EMS	$ 1,676.91	$ 2,064.78	$ 1,885.86	$ 1,835.38	$ 2,070.15
Specialty Care					
Orthopedics	$ 242.29	$ 298.34	$ 272.48	$ 265.19	$ 299.11
Ophthalmology	$ 248.35	$ 305.79	$ 279.29	$ 271.82	$ 306.59
Dermatology	$ 113.63	$ 139.91	$ 127.79	$ 124.37	$ 140.27
General Surgery	$ 214.81	$ 264.49	$ 241.57	$ 235.11	$ 265.18
Otolaryngology	$ 176.92	$ 217.85	$ 198.97	$ 193.64	$ 218.41
Cardiology	$ 214.18	$ 263.72	$ 240.87	$ 234.42	$ 264.41
Urology	$ 214.81	$ 264.49	$ 241.57	$ 235.11	$ 265.18
Neurology	$ 204.39	$ 251.66	$ 229.85	$ 223.70	$ 252.32
Other Surg Specialties	$ 331.24	$ 407.86	$ 372.51	$ 362.54	$ 408.92
Other Med Specialties	$ 113.98	$ 140.34	$ 128.18	$ 124.75	$ 140.70
Other Ambulatory Care					
Dental Service Minutes	$ 9.65	$ 11.88	$ 10.85	$ 10.56	$ 11.92
		$ -	$ -	$ -	$ -
Optometry Visits	$ 189.99	$ 233.94	$ 213.66	$ 207.95	$ 234.54
Audiology Visits	$ 433.41	$ 533.66	$ 487.41	$ 474.37	$ 535.04
Outpatient Behavioral Health					
Mental Health	$ -	$ -	$ -	$ -	$ -
Psychiatry	$ 468.24	$ 576.55	$ 526.59	$ 512.49	$ 578.05
Social Service	$ -	$ -	$ -	$ -	$ -
Alcohol & Substance Abuse	$ -	$ -	$ -	$ -	$ -
Behavioral Health Total					
Inpatient Care					
Births	$ 2,960.50	$ 3,645.27	$ 3,329.38	$ 3,240.27	$ 3,654.74
Obstetrics Days		$ -	$ -	$ -	$ -
Neonatology Days	$ 574.67	$ 707.60	$ 646.28	$ 628.98	$ 709.43
Pediatrics Days	$ 1,651.59	$ 2,033.61	$ 1,857.38	$ 1,807.67	$ 2,038.89
Adult Medical Acute Care Days	$ 1,218.07	$ 1,499.81	$ 1,369.85	$ 1,333.18	$ 1,503.71
Adult Surgical Acute Care Days	$ 1,218.07	$ 1,499.81	$ 1,369.85	$ 1,333.18	$ 1,503.71
Intensive Care Days	$ 1,710.37	$ 2,105.98	$ 1,923.49	$ 1,872.00	$ 2,111.46
Psychiatric Days	$ 627.95	$ 773.20	$ 706.20	$ 687.29	$ 775.21
Medical Detox Days	$ 1,218.07	$ 1,499.81	$ 1,369.85	$ 1,333.18	$ 1,503.71

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Regionally Adjusted CHS Costs	TIG National Data	Redding	Fresno	Temecula	Sacramento
Definition of Source=>	Per MSA Reports	Per MSA Reports	Per MSA Reports	Per MSA Reports	Per MSA Reports
Ancillary Services					
Laboratory Services					
Clinical Lab	$ 166.75	$ 205.32	$ 187.53	$ 182.51	$ 205.85
Pharmacy					
Scripts		$ -	$ -	$ -	$ -
Diagnostic Imaging					
Radiographic	$ 226.55	$ 278.95	$ 254.78	$ 247.96	$ 279.68
Ultrasound	$ 178.16	$ 219.36	$ 200.35	$ 194.99	$ 219.93
Mammography	$ 123.03	$ 151.49	$ 138.36	$ 134.66	$ 151.88
Fluoroscopy	$ 339.36	$ 417.85	$ 381.64	$ 371.43	$ 418.94
CT	$ 361.55	$ 445.17	$ 406.59	$ 395.71	$ 446.33
MRI	$ 407.74	$ 502.05	$ 458.54	$ 446.27	$ 503.35
Rehabilitation Services					
Physical Therapy	$ 286.58	$ 352.87	$ 322.29	$ 313.67	$ 353.79
Occupational Therapy		$ -	$ -	$ -	$ -
Speech Therapy		$ -	$ -	$ -	$ -
Surgery					
Outpatient Endoscopy	$ 1,243.29	$ 1,530.87	$ 1,398.21	$ 1,360.78	$ 1,534.84
Outpatient Surgery	$ 1,388.78	$ 1,710.01	$ 1,561.83	$ 1,520.03	$ 1,714.45
Outreach/Preventive Care					
Home Health Care	$ 1,417.38	$ 1,745.22	$ 1,593.99	$ 1,551.32	$ 1,749.76
Other Funded Programs					
Podiatry	$ 748.33	$ 921.42	$ 841.57	$ 819.05	$ 923.81

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Recommendation

The content and process of this study support the following premises:

1. The concept of regional centers in California appears to be a viable means of delivering secondary healthcare to AI/ANs from across the state
2. There is interest among tribal leaders and health program directors in the concept as shared through multiple meetings/venues, but that interest is not universal – a visible minority are opposed for reasons relative to either the study's process or the local Health Program's Regional Healthcare delivery preferences
3. There is no known geographic configuration of locating regional centers in California that would create equal and fair access to all American Indian/Alaska Natives who reside in California while delivering a comprehensive menu of specialized services that constitutes true secondary healthcare
4. There is presently no apparent equal and fair access to secondary healthcare for American Indian/Alaska Natives who reside in California when they are referred to the private sector
5. The more centralized such healthcare is, the greater the menu of specialized services becomes, thereby truly addressing the gaps in the continuum of healthcare California AI/ANs are currently experiencing
6. The greater the population served by a regional center, the more efficient the capital and operational costs become
7. Not everyone will seek covered regional healthcare at a distant location, whether that distance is 2 hours away or 4 hours away – distance erodes market share
8. Considering the criteria applied to evaluate Regional Center modeling, the Two Center Regional Concept delivers the most secondary healthcare by volume and best addresses the unmet need for services in California
9. Due to the untested nature of such healthcare facilities relative to IHS Funding as well as the perennial limited funding of traditional facility models, seeking funding for fewer highly efficient regional sites appear to be a better path than seeking funding for many

This study has not explored alternative means of delivering regional healthcare. These include:

1. Seek increased Contract Health Services funding from IHS to address a comparable level of unmet need. This is simply not possible under the current funding methodology.
2. Create appropriate contractual agreements between local hospitals and each Health Program that address the level of unmet need identified in this study. This is a separate work effort requiring deep alignment and involvement from Health Program directors. While conceptually doable, assuming available funding and equal interest among all Health Programs, many limiting issues remain:
    a. Not all health programs can produce volumes sufficient to create any leverage in negotiating favorable rates with local hospitals

b. Not all hospitals offer a consistent menu of services – some health programs will fare much better than others in finding an accessible facility offering the services they need
c. Not all services for a local Health Program will be available under "one roof" (see the point above)
d. Many health programs will still have to travel significant distances to access true secondary healthcare
e. Patients or Health Programs will often still have to pay for the service if its delivered by a local hospital
f. Local hospitals do not provide a culturally appropriate place for delivering secondary healthcare to American Indian/Alaska Natives who reside in California

Consequently, this study concludes that a Two-Center Regional Facility solution provides the best chance of delivering effective, culturally appropriate, secondary healthcare to American Indian/Alaska Natives who reside in California. Specifically:

- One inpatient facility centrally located for the central/northern region, such as Sacramento, to serve the referral needs of central and northern California tribal governments. The facility would be sized at 300,715 building gross square feet and require a staff of 774 FTE.

  Services would include:

  - Audiology
  - Dental Specialty Care
  - Medical Specialty Care
  - Surgical Specialty Care
  - Outpatient Endoscopy
  - Outpatient Surgery
  - Short Stay/Observation
  - Lab
  - Diagnostic Imaging
    - Radiography
    - Fluoroscopy
    - Ultrasound
    - CT
    - MRI
    - Radiologist
  - Pharmacy
  - Inpatient
    - Pediatrics
    - Adult Medical
    - Adult Surgical
    - ICU
  - Physical Rehab
    - Occupational
    - Speech
  - Psychiatry
  - Case Management
  - Pain Management

  As this center develops regional "buy-in" from remote populations and approaches capacity, a second facility should be considered.

- One inpatient facility centrally located in agreement with southern California tribal governments, such as Temecula, to serve the referral needs of the federally recognized tribes in southern California. The facility would be sized at 119,369 building gross square feet and require a staff of 269 FTE.

  Services would include:

  - Audiology
  - Dental Specialty Care
  - Limited Medical Specialty Care
  - Limited Surgical Specialty Care
  - Outpatient Surgery
  - Short Stay/Observation
  - Lab
  - Diagnostic Imaging
    - Radiography
    - Fluoroscopy
    - Ultrasound
    - CT
    - Radiologist
  - Pharmacy
  - Inpatient
    - Pediatrics
    - Adult Medical
    - Adult Surgical
    - ICU
  - Physical Rehab
    - Occupational
    - Speech
  - Psychiatry
  - Case Management
  - Pain Management

  Note - The southern populations supporting sizing and services of the Temecula center should be revisited prior to design and construction because population growth variances in southern California and market share realities from the Sacramento facility may suggest a larger/smaller menu of services than forecasted under current assumptions

The table on the following page provides the services, staff, space, and site requirements for the two center solution as recommended.

KC = Key Characteristic =>	2 Regional Centers			
	Temecula		Sacramento	
	KC #	DGSF	KC #	DGSF
Ambulatory				
Audiology (Audiologist)	1.5	872	3.9	3,148
Dental Care - Specialty Only[1] (Chairs)	5.6	8,553	14.5	22,284
Specialty Care				
Medical Specialties (Providers)				
Cardiologist	0.0		2.4	
Dermatologist	0.0		1.8	
Neurologist	0.0		1.2	
Other Medical Specialists[2]	4.0		11.3	
Surgical Specialties (Providers)				
General Surgeon	0.0	9,052	3.1	27,907
Ophthalmologist	0.0		3.5	
Orthopedist	1.3		3.8	
Otolaryngologist	0.0		1.8	
Urologist	0.0		1.4	
Other Surgical Specialists[3]	0.9		2.4	
Ancillary				
Outpatient Endoscopy (Suites)	0.0		2.0	
Outpatient Surgery Cases (OP ORs)	3.0	9,286	7.0	20,502
Short Stay / Observation (Beds)	1.0		1.0	
Laboratory (FTE)	3.0	2,158	16.0	4,187
Diagnostic Imaging				
Radiography (Rooms)	2.0		6.0	
Fluoroscopy (Rooms)	1.0		2.0	
Ultrasound (Rooms)	1.0	6,862	3.0	16,049
Mammography (Rooms)	1.0		3.0	
CT (Rooms)	1.0		2.0	
MRI (Rooms)	0.0		1.0	
Radiologist	1.7		5.1	
Pharmacy (Pharmacists)	4.5	2,400	20.8	9,115
Inpatient Care				
Pediatric (Beds)	2.6		7.3	
Adult Medical (Beds)	15.7	13,627	41.6	43,131
Adult Surgical (Beds)	7.0		31.2	
ICU (Beds)	4.4	2,357	12.9	6,932
Physical Rehab Services				
Occupational Therapist	2.0	938	5.4	2,537
Speech Pathologist	0.5		1.3	
Behavioral Health				
Psychiatry (Psychiatrists)	1.5	681	4.0	1,398
Other Programs				
Case Management (FTE's)	8.6	1,638	22.9	4,335
Pain Management (Specialists)	0.6	911	1.5	2,422
Summary				
DGSF	**88,816**		**223,747**	
Total RRM FTE's	**269**		**774**	
BGSF	**119,369**		**300,715**	

Recommendation

The feasibility study completed by the IHS, California Area Office, indicates that two Regional Ambulatory Centers are the best solution to close the disparity gap in funding.

One center for northern and central California and one for southern California would provide desperately needed access to secondary, inpatient, surgical, and specialty care.

Costs

- **Total Project Cost for Regional Ambulatory Center development in two locations is estimated at $253.5m.**
- **The Annual Operating Cost for Regional Ambulatory Center development in two locations is estimated at $134.6m.**

Impact

- **Total Project Cost for Regional Ambulatory Center development in two locations is estimated at $253.5m.**
- **The Annual Operating Cost for Regional Ambulatory Center development in two locations is estimated at $134.6m.**
- **The Level of Need Funded (LNF) could improve from 54% to 93.8%, closing the gap toward the Federal Benchmark by 39.8 % basis points. This represents a projected increase from $1,895 per-user to $3,294, or an additional $1,399 per user toward the Federal Benchmark of $3,510.**
- **The LNF increase is based on a projected 2025 area-wide user population of 102,745 (or a projected regional user population of 97,895).**

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Appendices

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Appendices

A wealth of material supports this extended Regional planning effort. The appendices following are provided to assist the reader in understanding the path, challenges, decisions, assumptions, and planning elements associated with the recommendations put forth in this report. The reader should be aware that terms and vocabulary evolve over a planning process. This section of the report shows that evolution.

The planning process utilized the metric system. During final documentation the process changed to imperial measure. Please note that metric measurements are not changed in the appendices. Conversion from square meters to square feet is roughly accomplished through multiplying the former by ten. The precise calculation is square meters x 10.76391 = square feet.

Discussion Guide Handout

Project Meeting One

Participants in California IHS Regional Centers Development Kickoff Meeting (#1)

Thursday, January 5, 2012, Sacramento, California

Participant Contact Information

Name	Position/Team Role	Email	Phone
Margo Kerrigan	Area Director	Margo.Kerrigan@ihs.gov	916-930-3981 x 306
Beverly Miller	Associate Director /Executive Officer	Beverly.Miller@ihs.gov	916-930-3981 x 312
Edwin Fluette	Associate Director OEHE	Edwin.Fluette@ihs.gov	916-930-3927 x 334
David Sprenger, M.D.	Chief Medical Officer	David.Sprenger@ihs.gov	916-930-3981 x 321
Christine Brennan	Public Health Analyst/Statistics	Christine.Brennan@ihs.gov	916-930-3981 x 333
Dawn Phillips	Operations/Clinical Administration	Dawn.Phillips@ihs.gov	916-930-3981
Travis Coleman	Contract Specialist/Tribal Representative	Travis.Coleman@ihs.gov	916-930-3981 x 319
Steve Riggio	Health Systems Specialist/Urban Coordinator	Steve.Riggio@ihs.gov	916-930-3981 x 322
Toni Johnson	IT Specialist/CHS	Toni.Johnson@ihs.gov	916-930-3981 x 354
Rick Wermers	Health Facilities Engineer	Richard.Wermers@ihs.gov	916-930-3981 x 341
Vinay Behl	Financial Officer	Vinay.Behl@ihs.gov	916-930-3981 x 310
John Temple	Vice President – The Innova Group	John.Temple@TheInnovaGroup.com	520-886-8650
Anthony Laird	Senior Medical Planner – The Innova Group	Anthony. Laird@TheInnovaGroup.com	520-886-8650
Nate Estrada	Analyst – The Innova Group	Nate.Estrada@TheInnovaGroup.com	520-886-8650

Slide 6

What is the motivation for a Regional Center?

Why do this?

What other conversations are driving this effort?

Slide 7

What services would most stretch Contract Health dollars if implemented at appropriate regional locations?

Slide 8

From the local service areas' perspective, which services are most desired at a regional location?

Are there any requested services that surprise you?

Are there any missing services (not requested) that surprise you?

RANK	Service	Total # of Requests
1	Adolescent Residential Treatment	50
2	Adult Residential Treatment	49
3	Home Health Care	38
4	Assisted Living	29
5	Hospice	28
6	Nursing Home	25
7	Substance Abuse Transitional Care	24
8	Specialty - Neurology	21
9	Specialty - Orthopedics	20
10	Ob/Gyn	15
11	Specialty - Cardiology	15
12	Specialty - Urology	15
13	Specialty - Dermatology	14
14	Specialty - Otolaryngology	14
15	Specialty - Gastroenterology	11
16	Specialty - General Surgery	11
17	Oncology	11
18	Medical Specialties (All Other)	10
19	Specialty - Ophthalmology	9
20	Pulmonology	9
21	Dialysis	9
22	Pain Management	8
23	Psychiatry	8
24	Allergy	7
25	Rheumatology	6
26	Ophthalmology	6
27	Podiatry Visits	5
28	Dental Service	5
29	Optometry	5

RANK	Service	Total # of Requests
30	Audiology	4
31	Pediatric	3
32	Prenatal Care	3
33	Physical Therapy	3
34	Specialty - Oral/Periodontal Surgery	3
35	Nephrology	3
36	Laboratory Services	1
37	Pharmacy	1
38	Radiographic	1
39	Ultrasound	1
40	Mental Health	1
41	Public Health Nursing	1
42	Hospital Care	1
43	Family Practice	0
44	Internal Medicine	0
45	Emergency Care	0
46	Urgent Care Clinic	0
47	Occupational Therapy	0
48	Speech Therapy	0
49	Gerontology	0
50	Pediatric-Genetics	0
51	Mammography	0
52	CT Exams	0
53	Fluoroscopy Exams	0
54	Health Education	0
55	Social Service	0
56	Public Health Nurtrition	0
57	Security	0

Method –

1) Where possible, responses to Question #12 of the Health Systems Master Plan conducted in **2005** were logged for requested Regional Level services.

Question #12: "Which of the services you presently refer to a distant referral center do you believe could be adequately provided at a regional center, or at your facility?"

2) When a response for a Regional Service request was not available from a questionnaire, the Service Delivery Plan Regional services column was chosen as the default response.

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Regional Requests **Primary Service Area**

List of Services	Total # of Requests	Central Valley - Clovis	Central Valley - North Fork	Central Valley - Prather	Central Valley - Tachi	Chapa De - Auburn	Chapa De - Grass Valley	Chapa De - Woodland	Colusa	Consolidated	Feather River - Oroville	Feather River - Yuba City	Greenville - Greenville	Greenville - Red Bluff	IHC - Santa Ysabel	IHC - Valley Center	Karuk - Happy Camp	Karuk - Orleans	Karuk - Yreka	Hoopa	Lake County	MACT - Jackson	MACT - Mariposa	MACT - Sonora	MACT - Tuolumne	MACT - West Point	Modoc	Northern Valley - Chico	Northern Valley - Willows	Pit River - Burney	Pit River - XL Clinic	Quartz Valley	Redding	Round Valley	RSB - Anza	RSB - Morongo	RSB - Pechanga	RSB - San Manuel	RSB - Soboba	RSB - Torres Martinez	Santa Ynez	Shingle Springs	Sonoma County - Manches	Sonoma County - Santa Ros	Southern IHC - Campo	Southern IHC - Alpine	Susanville - Lassen	Sycuan	Toiyabe - Bishop	Toiyabe - Lone Pine	Tule River - Tule River	Tule River - Visalia	UIHS - Crescent City	UIHS - Fortuna	UIHS - Howonquet/Smith R	UIHS - Klamath	UIHS - Potawot/Arcata	UIHS - Weitchpec	Warner Mountain
	GEOID*	C	C	C	C	N	N	N	N	N	N	N	N	N	S	S	N	N	N	N	C	C	C	C	C	C	N	N	N	N	N	N	N	W	S	S	S	S	S	S	W	C	C	C	N	N	N	S	W	W	W	W	N	N	N	N	N	N	N
Primary / Ambulatory Care																																																											
Family Practice	0																																																										
Internal Medicine	0																																																										
Pediatric	3																x	x	x																																								
Ob/Gyn	15																x	x	x		x	x	x	x	x	x		x	x			x																	x	x									x
Prenatal Care	3																	x														x		x																									
Emergency Care	0																																																										
Urgent Care Clinic	0																																																										
Podiatry Visits	5																x	x	x		x																																						x
Dental Service	5																	x			x											x		x																									x
Optometry	5																x	x	x															x																									x
Audiology	4																x	x	x		x																																						
Specialty Care																																																											
Specialty - Orthopedics	20					x	x	x									x	x	x		x	x	x	x	x	x		x	x					x									x	x					x	x									x
Specialty - Ophthalmology	9																					x	x	x	x	x		x	x			x																											x
Specialty - Dermatology	14					x	x	x			x	x										x	x	x	x	x		x	x																				x	x									
Specialty - Gastroenterology	11					x	x	x													x	x	x	x	x	x																							x	x									
Specialty - General Surgery	11																x	x	x		x	x	x	x	x	x		x	x																														
Specialty - Oral/Periodontal Sur	3																x	x	x																																								
Specialty - Otolaryngology	14																x	x	x		x	x	x	x	x	x		x	x														x	x															x
Specialty - Cardiology	15																x	x	x		x	x	x	x	x	x		x	x			x																	x	x									x
Specialty - Urology	15					x	x	x									x	x	x			x	x	x	x	x		x	x																				x	x									
Specialty - Neurology	21					x	x	x			x	x					x	x	x		x	x	x	x	x	x		x	x					x									x	x					x	x									
Medical Specialties (All Other)	10										x	x					x	x	x			x	x	x	x	x																																	
Other Subspecialties																																																											
Nephrology	3																											x	x					x																									
Allergy	7																					x	x	x	x	x		x	x																														
Pulmonology	9																					x	x	x	x	x		x	x																				x	x									
Gerontology	0																																																										
Rheumatology	6																				x							x	x					x															x	x									
Oncology	11																x	x	x			x	x	x	x	x		x	x			x																											
Ophthalmology	6																x	x	x		x							x	x																														
Pediatric-Genetics	0																																																										
Pain Management	8					x	x	x														x	x	x	x	x																																	
Behavioral Health Services																																																											
Mental Health	1																				x																																						
Social Service	0																																																										
Psychiatry	8												x									x	x	x	x	x								x																x									
Inpatient Services																																																											
Hospital Care	1	x																																																									

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PSA Requested Regional Services

Regional Requests

Primary Service Area

List of Services	Total # of Requests	Central Valley - Clovis	Central Valley - North Fork	Central Valley - Prather	Central Valley - Tachi	Chapa De - Auburn	Chapa De - Grass Valley	Chapa De - Woodland	Colusa	Consolidated	Feather River - Oroville	Feather River - Yuba City	Greenville - Greenville	Greenville - Red Bluff	IHC - Santa Ysabel	IHC - Valley Center	Karuk - Happy Camp	Karuk - Orleans	Karuk - Yreka	Hoopa	Lake County	MACT - Jackson	MACT - Mariposa	MACT - Sonora	MACT - Tuolumne	MACT - West Point	Modoc	Northern Valley - Chico	Northern Valley - Willows	Pit River - Burney	Pit River - XL Clinic	Quartz Valley	Redding	Round Valley	RSB - Anza	RSB - Morongo	RSB - Pechanga	RSB - San Manuel	RSB - Soboba	RSB - Torres Martinez	Santa Ynez	Shingle Springs	Sonoma County - Manches	Sonoma County - Santa Ros	Southern IHC - Campo	Southern IHC - Alpine	Susanville - Lassen	Sycuan	Toiyabe - Bishop	Toiyabe - Lone Pine	Tule River - Tule River	Tule River - Visalia	UIHS - Crescent City	UIHS - Fortuna	UIHS - Howonquet/Smith R	UIHS - Klamath	UIHS - Potawot/Arcata	UIHS - Weitchpec	Warner Mountain
	GEOID*	C	C	C	C	N	N	N	N	N	N	N	N	N	S	S	N	N	N	N	C	C	C	C	C	C	N	N	N	N	N	N	N	W	S	S	S	S	S	S	W	C	C	C	N	N	N	S	W	W	W	W	N	N	N	N	N	N	N
Ancillary Services																																																											
Diagnostic Imaging	1																x																																										
Radiographic	1																				x																																						
Ultrasound	1																				x																																						
Mammography	0																																																										
CT Exams	0																																																										
Fluoroscopy Exams	0																																																										
Dialysis	9												x	x								x	x	x	x	x				x		x																											
Laboratory Services	1																				x																																						
Pharmacy	1																				x																																						
Rehabilitation Services																																		x																									
Occupational Therapy	0																																																										
Physical Therapy	3																x	x	x																																								
Speech Therapy	0																																																										
Alcohol and Substance Abuse Non-Acute Care																																																											
Adult Residential Treatment	49	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x		x	x	x			x			x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x		x	x	x
Adolescent Residential Treatme	50	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x		x	x	x			x			x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x
Substance Abuse Transitional C	24	x	x	x	x	x	x	x	x	x	x	x	x	x								x	x	x						x												x					x		x	x	x						x		x
Elder Care																									x									x																									
Nursing Home	25					x	x	x	x	x	x	x						x	x	x		x	x	x						x							x										x		x	x	x	x		x	x		x	x	x
Assisted Living	29	x	x	x	x	x	x	x	x	x	x	x						x	x	x		x	x	x						x							x										x		x	x	x	x		x	x		x	x	x
Hospice	28	x	x	x	x	x	x	x	x	x	x	x						x	x	x		x	x	x						x																	x		x	x	x	x		x	x		x	x	x
Preventative Care Services																																																											
Home Health Care	38	x	x	x	x	x	x	x		x	x	x	x		x	x				x		x	x	x							x			x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x					x		x
Health Education	0																																																										
Public Health Nursing	1																				x																																						
Public Health Nurtrition	0																																																										
Security	0																																																											

Method –

1) Where possible, responses to Question #12 of the Health Systems Master Plan conducted in **2005** were logged for requested Regional Level services.
Question #12: "Which of the services you presently refer to a distant referral center do you believe could be adequately provided at a regional center, or at your facility?"
2) When a response for a Regional Service Request was not available from a questionnaire, the Service Delivery Plan Regional services column was chosen as the default response.

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Slide 9

How is a Regional Center different from a…

- Primary Care Facility?
- Hospital?
- Medical Center?

What services are you expecting to offer at a Regional Center?

What services are you expecting to offer at an Area Wide Medical Center?

Are there any services that should not be offered?

Slide 10

What is a Regional Center's user population?

- User Population?
- Service Population?
- Census AI/AN Population?
- Other?

Slide 17

Where should Regional Centers be located in California for maximum benefit to those who would use them?

Where are those potential users located? How many are there?

List of Locations	Sacramento	Redding	Santa Rosa	Fresno	Western Placer Cnty (Roseville)	Loyalton, Downieville	Red Bluff	Corning	Los Angeles	Ukiah	Santa Maria	Bay Area	Lakeport	Eureka	Rationale
Central Valley - Clovis	1														
Central Valley - North Fork	1														
Central Valley - Prather	1														
Central Valley - Tachi	1														
Chapa De - Auburn	1				1	1									
Chapa De - Grass Valley	1				1	1									
Chapa De - Woodland	1				1	1									
Colusa															
Consolidated	1		1							1					Santa Rosa has a larger number of hospitals and specialty care providers in most fields of health care. Ukiah, as a county seat offers more services and infrastructure than most other rural communities in a 3 county area.
Feather River - Oroville	1	1		1					1						Central location, high pop, & accessibility. These areas would be accessibel via car, bus, air.
Feather River - Yuba City	1	1		1					1						
Greenville - Greenville															
Greenville - Red Bluff															
IHC - Santa Ysabel															
IHC - Valley Center															
Karuk - Happy Camp															
Karuk - Orleans															Medford, Oregon (see comment # 3 below)
Karuk - Yreka															
Hoopa			1									1			We recommend these areas because the coast is highly populated with NA/AI tribs. These areas also provide an abundance of specialty services that are not available further north. Airport services is also readily available.
Lake County (K)													1		
MACT - Jackson	1														
MACT - Mariposa	1														
MACT - Sonora	1														Large population center, relatively easy access for N/Central CA tribal programs
MACT - Tuolumne	1														
MACT - West Point	1														
Modoc															
Northern Valley - Chico							1	1							
Northern Valley - Willows							1	1							
Pit River - Burney															
Pit River - XL Clinic															
Quartz Valley		1													
Redding															
Round Valley			1											1	
RSB - Anza															
RSB - Morongo															
RSB - Pechanga															
RSB - San Manuel															
RSB - Soboba															
RSB - Torres Martinez															

List of Locations	Sacramento	Redding	Santa Rosa	Fresno	Western Placer Cnty (Roseville)	Loyalton, Downieville	Red Bluff	Corning	Los Angeles	Ukiah	Santa Maria	Bay Area	Lakeport	Eureka	Rationale
Santa Ynez (K)											1				Santa Maria is probably the best because the availability of sites is much better there than in Santa Barbara.
Shingle Springs															
Sonoma County - Manchester Point			1												
Sonoma County - Santa Rosa			1												
Southern IHC - Campo															
Southern IHC - Alpine															
Susanville - Lassen															
Sycuan (K)															Any facility that has easy access to interstate highways would be the best choice, but with the population distribution being spread out in East County traveling distance becomes a concern.
Toiyabe - Bishop															
Toiyabe - Lone Pine															
Tule River - Tule River				1											Center for existing IH Centers
Tule River - Visalia				1											
UIHS - Crescent City	1	1													Easily accessible by land transportation for N California tribes and has full array of health and social services. Redding is an alternative; also centrally located specialized facility that could serve the tribes residing in the counties of Del Norte, Humboldt, and Trinity.
UIHS - Fortuna	1	1													
UIHS - Howonquet/Smith Riv	1	1													
UIHS - Klamath	1	1													
UIHS - Potawot/Arcata	1	1													
UIHS - Weitchpec	1	1													
Warner Mountain															
Grand Total	**21**	**9**	**5**	**4**	**3**	**3**	**2**	**2**	**2**	**1**	**1**	**1**	**1**	**1**	

Method –

1) Where possible, responses to Question #11 of the Health Systems Master Plan conducted in **2005** were logged for requested Regional Level services.

Question #11: "Where are the natural location(s) for an Area hub(s) that would allow for increased and better quality services to be provided to the Area or region population? Why should it be located there?"

2) When a response for a Regional Service request was not available from a questionnaire, the Service Delivery Plan Regional services column was chosen as the default response.

3) Karuk is located in Northern California and are within a 60 minute drive time to Medford, Oregon.

			User Population					Service Population					CA AI/AN Population				
County	**Facility**	**Region (Concept)**	**2010**	**2020**	**2025**	**2030[1]**	**Δ**	**2010**	**2020**	**2025**	**2030[2]**	**Δ**	**2010**	**2020**	**2030[3]**	**Δ**	**Census - User Δ**
Alameda	U	Central	721	*721*	*721*	*721*	0	0	0	0	*0*	0	7,935	10,691	13,657	5,722	12,936
Alpine		Central	283	*301*	*306*	*310*	23	301	321	326	*331*	25	236	275	308	72	-2
Amador	T	Central	500	*587*	*641*	*697*	141	908	1,083	1,189	*1,299*	281	619	690	728	109	31
Butte	T	North	4,126	*4,689*	*4,999*	*5,318*	873	5,681	6,520	6,970	*7,432*	1,289	4,345	6,092	7,642	3,297	2,324
Calaveras	T	Central	383	*417*	*433*	*449*	50	1,045	1,142	1,187	*1,233*	142	681	749	791	110	342
Colusa	T	North	223	*242*	*251*	*260*	28	642	701	726	*751*	84	382	451	505	123	245
Contra Costa	T	Central	96	*96*	*96*	*96*	0	0	0	0	*0*	0	5,045	6,554	8,049	3,004	7,953
Del Norte	T	North	2,507	*2,832*	*2,990*	*3,150*	483	2,502	2,852	3,016	*3,184*	514	2,043	2,587	3,818	1,775	668
El Dorado	T	North	1,062	*1,180*	*1,245*	*1,310*	183	2,327	2,603	2,750	*2,900*	423	1,355	1,430	1,416	61	106
Fresno	T/U	Central	5,120	*5,741*	*6,103*	*6,475*	983	9,241	10,443	11,129	*11,832*	1,888	8,412	10,730	12,880	4,468	6,405
Glenn	T	North	709	*813*	*880*	*949*	171	805	934	1,015	*1,099*	210	512	706	899	387	-50
Humboldt	T	North	8,387	*9,632*	*10,319*	*11,025*	1,932	10,191	11,841	12,724	*13,632*	2,533	8,148	9,542	10,664	2,516	-361
Imperial	*	South	1,672	*1,814*	*1,891*	*1,969*	219	3,613	3,936	4,107	*4,281*	494	2,412	2,984	3,321	909	1,352
Inyo	T	Central	2,558	*2,932*	*3,158*	*3,391*	600	2,288	2,652	2,867	*3,089*	579	1,908	2,115	2,204	296	-1,187
Kern		South	378	*378*	*378*	*378*	0	0	0	0	*0*	0	7,162	8,069	8,966	1,804	8,588
Kings	T	Central	1,254	*1,414*	*1,492*	*1,572*	238	3,423	3,894	4,116	*4,343*	693	1,470	1,635	1,735	265	163
Lake	T	North	2,056	*2,284*	*2,386*	*2,490*	330	2,614	2,923	3,057	*3,193*	443	1,737	2,143	2,462	725	-28
Lassen	T	North	1,078	*1,160*	*1,191*	*1,222*	113	1,510	1,630	1,674	*1,718*	164	1,053	1,136	1,170	117	-52
Los Angeles	T	South	340	*340*	*340*	*340*	0	0	0	0	*0*	0	31,089	34,640	36,044	4,955	35,704
Madera	T	Central	1,243	*1,305*	*1,333*	*1,362*	90	4,567	4,802	4,907	*5,013*	340	2,494	3,532	4,745	2,251	3,383
Marin	T	North	36	*36*	*36*	*36*	0	0	0	0	*0*	0	683	707	715	32	679
Mariposa	T	Central	438	*468*	*484*	*500*	46	831	891	921	*951*	90	615	707	750	135	250
Mendocino	T	North	4,143	*4,771*	*5,120*	*5,479*	977	5,829	6,795	7,315	*7,850*	1,486	5,861	9,156	13,205	7,344	7,726
Merced		Central	119	*119*	*119*	*119*	0	0	0	0	*0*	0	1,232	1,306	1,321	89	1,202
Modoc	T	North	366	*361*	*349*	*338*	0	488	481	466	*451*	-22	384	396	399	15	61
Mono	T	Central	209	*233*	*246*	*258*	37	404	454	479	*505*	75	303	338	342	39	84
Monterey		Central	40	*40*	*40*	*40*	0	0	0	0	*0*	0	1,978	2,112	2,166	188	2,126
Napa		North	64	*64*	*64*	*64*	0	0	0	0	*0*	0	697	728	730	33	666
Nevada	T	North	1,021	*1,052*	*1,056*	*1,059*	35	1,250	1,289	1,293	*1,297*	43	729	767	766	37	-293
Orange		South	110	*110*	*110*	*110*	0	0	0	0	*0*	0	12,880	13,873	15,423	2,543	15,313
Placer	T	North	4,165	*4,878*	*5,324*	*5,785*	1,159	3,339	3,972	4,356	*4,754*	1,017	1,899	2,007	1,982	83	-3,803
Plumas	T	North	428	*462*	*479*	*496*	51	729	789	819	*849*	90	517	581	618	101	122
Riverside	T*	South	9,432	*10,611*	*11,285*	*11,976*	1,853	28,463	32,288	34,423	*36,612*	5,960	11,987	15,956	18,650	6,663	6,674
Sacramento	U	North	1,341	*1,341*	*1,341*	*1,341*	0	0	0	0	*0*	0	10,489	11,161	11,888	1,399	10,547
San Benito		Central	1	*1*	*1*	*1*	0	0	0	0	*0*	0	315	416	479	164	478
San Bernardino	T*	South	4,707	*4,988*	*5,097*	*5,207*	390	31,656	33,610	34,355	*35,106*	2,699	13,776	16,147	17,928	4,152	12,721
San Diego	T/U	South	9,301	*9,778*	*9,884*	*9,991*	583	27,942	29,416	29,738	*30,061*	1,796	28,776	40,845	50,435	21,659	40,444
San Francisco	U	Central	605	*605*	*605*	*605*	0	0	0	0	*0*	0	2,858	3,598	4,129	1,271	3,524
San Joaquin		Central	322	*322*	*322*	*322*	0	0	0	0	*0*	0	4,838	6,388	7,520	2,682	7,198
San Luis Obispo		Central	174	*174*	*174*	*174*	0	0	0	0	*0*	0	1,617	1,677	1,640	23	1,466
San Mateo		Central	36	*36*	*36*	*36*	0	0	0	0	*0*	0	1,838	2,351	2,896	1,058	2,860
Santa Barbara	T	South	1,276	*1,311*	*1,313*	*1,314*	37	1,819	1,870	1,872	*1,874*	53	2,648	3,159	3,561	913	2,247
Santa Clara	T	Central	642	*642*	*642*	*642*	0	0	0	0	*0*	0	8,517	12,589	17,407	8,890	16,765
Santa Cruz		Central	18	*18*	*18*	*18*	0	0	0	0	*0*	0	1,528	2,042	2,532	1,004	2,514
Shasta	T	North	4,071	*4,334*	*4,356*	*4,377*	285	6,472	6,905	6,940	*6,975*	468	4,896	5,994	6,910	2,014	2,533
Sierra		North	16	*17*	*18*	*19*	2	74	80	85	*90*	11	62	80	83	21	64
Siskiyou	T	North	1,890	*2,272*	*2,524*	*2,786*	634	2,529	3,106	3,475	*3,860*	946	1,860	2,166	2,438	578	-348
Solano		North	275	*275*	*275*	*275*	0	0	0	0	*0*	0	3,029	4,452	5,920	2,891	5,645
Sonoma	T	North	4,907	*5,330*	*5,517*	*5,706*	610	8,307	9,060	9,384	*9,713*	1,077	4,953	6,375	7,533	2,580	1,827
Stanislaus		Central	415	*415*	*415*	*415*	0	0	0	0	*0*	0	4,653	5,891	6,850	2,197	6,435
Sutter	T	North	723	*781*	*802*	*824*	79	1,845	1,999	2,055	*2,112*	210	1,024	1,100	1,232	208	408
Tehama	T	North	1,083	*1,315*	*1,461*	*1,614*	378	1,837	2,284	2,557	*2,842*	720	1,145	1,347	1,482	337	-132
Trinity		North	161	*168*	*170*	*172*	9	870	910	919	*928*	49	659	714	757	98	585
Tulare	T	Central	2,462	*2,809*	*3,029*	*3,255*	567	8,973	10,345	11,196	*12,073*	2,223	4,226	5,771	7,109	2,883	3,854
Tuolumne	T	Central	826	*845*	*831*	*817*	5	1,457	1,491	1,466	*1,441*	9	950	1,040	1,083	133	266
Ventura		South	174	*174*	*174*	*174*	0	0	0	0	*0*	0	3,954	4,435	4,453	499	4,279
Yolo	T	North	983	*1,000*	*986*	*971*	3	2,916	2,968	2,925	*2,882*	9	1,453	1,731	1,814	361	843
Yuba		North	890	*1,023*	*1,101*	*1,181*	211	2,375	2,763	2,983	*3,210*	608	1,854	2,745	3,499	1,645	2,318
Totals			92,566	102,058	106,956	*111,981*	14,407	192,063	212,043	221,782	*231,765*	29,719	240,721	299,599	350,649	109,928	238,668

Regional Concept Populations (Draft for Discussion Purposes)

North	***58,246***	***81,722***	***90,547***
Central	***22,275***	***42,109***	***101,321***
South	***31,460***	***107,934***	***158,781***

Notes on Methodology

1) The Health Systems Planning software (HSP) User Population is officially projected to 2025 only. HSP User Population and Service Population on this chart were grown at the same rate.

2) The HSP returns zero values for the Service Population in the counties listed above. This is consistent with the California Area Health Services Master Plan completed in 2005.

3) US Census AI/AN population above is AI/AN only.

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2030 HSP User Population by County – PROJECTED

2030 Service Population by County - PROJECTED

2030 Census AI/AN Population by County – PROJECTED

2030 Census Population less User Population – PROJECTED

Slide 18

Are there critical user-geography relationships to consider?

Where do historic partnerships exist that would foster natural service synergy?

Where do historic impediments exist that would hinder service synergy?

Slide 19

Assuming the Regional Centers are appropriately located, who can be expected to come?

In other words, what market share should be planned for?

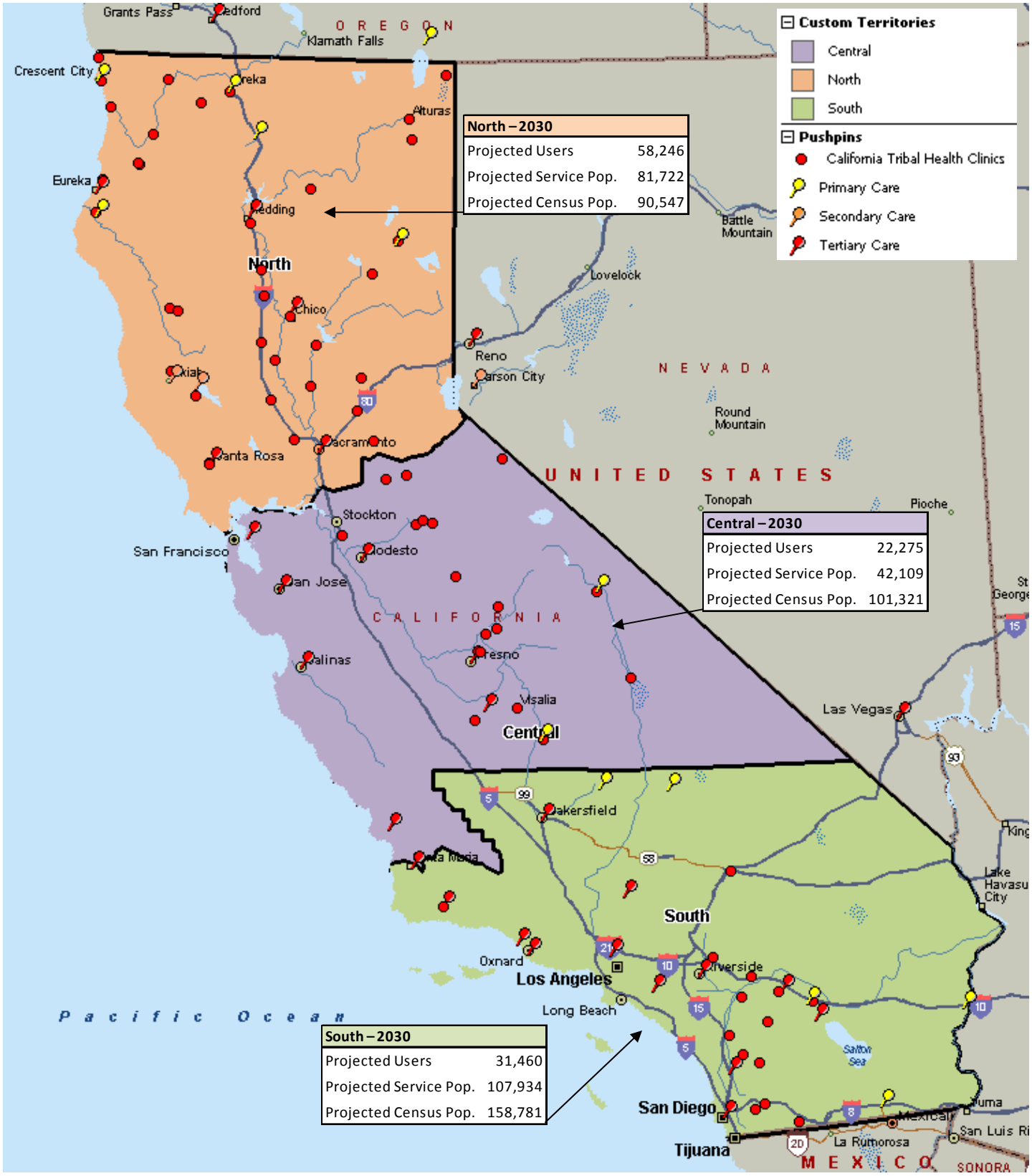
What criteria should be considered in determining appropriate market share to apply to local service area user or service populations?

Slide 20

Assuming the Area Wide Medical Center is appropriately located, who can be expected to come?

In other words, what market share should be planned for?

Concept Regions with mapped Tribal Clinic Locations – PROJECTED



What criteria should be considered in determining appropriate market share to apply to local service area user or service populations?

Slide 21

Are there any operational concerns you believe need to be addressed to support a concept of operation for this effort?

Are there any tribal concerns that you believe should be anticipated to support this effort?

Are there any concerns related to healthcare reform that should be considered?

Slide 28

Agree on Critical Decisions driving Assumptions forward

Fulfill Data Requirements

- Minutes Review and Decision “Sign-off” from this meeting
- Payer Profile Development
- Updated PSA Location Information

Develop Dates to Support Project Schedule

California IHS Regional Centers Development

Project Meeting One

Regional Centers Assumptions Development

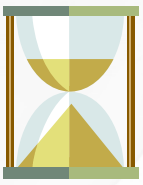
Sacramento, California
January 5, 2012

California Area Indian Health Service

1

Agenda

1:00 pm	**Welcome & Orientation**	
	Who are we?	
1:15 pm	**Regional Centers:** ***History in California***	
	What are your expectations?	
2:00 pm	**Regional Services:** ***Concept Alignment***	
		How does this work?
2:30 pm		*Break*
2:45 pm	**Regional Locations:** ***User Populations & Market Share***	
		Where will these be located and who will come?
3:45 pm	**Regional Center Project Experience:**	
Portland IHS		
		What precedent exists?
4:30 pm	**Path Forward:** ***Guiding Assumptions***	
		Where do we go next?



2

Experience — The Innova Group

Diversity of Expertise; Depth of Knowledge

- For-Profit Hospitals
- Not For-Profit Hospitals
- Academic Medical Centers
- Department of Defense
- Indian Health Service
- Veterans Affairs
- International Clients

3

Locations — The Innova Group

Expansive Problem Solving Focused on the Future

4

Services — The Innova Group

Planning

Strategy Visioning

- **Population Assessment**
  - Demographic Change Profile
  - Growth Assessment
  - Real Estate Absorption Analysis
- **Service Area Definition/Validation**
  - Workload Overview
  - Patient Profile
  - Competitor Profile
  - Population Distribution Overview
  - Service Area Decision Facilitation
- **Market Opportunity Assessment**
  - Product Line Definitions
  - Inpatient Opportunity
  - Outpatient Opportunity
  - Physician Needs Assessment
  - New Competitor Market Carve-in Modeling
- **Operational Assessment**
  - Product Line Financial Analysis
  - Physician Financial Profile Analysis
- **Capacity Analysis**
  - Key Characteristic Productivity Benchmarking
  - Bed Utilization & Peaking Evaluation
  - IP, OP, Ancillaries Key Characteristic Forecasting
- **Direction Development**
  - Executive Team and Board Facilitation

Facility Planning

- **Master Planning**
  - Functional Assessment
  - Site and Building Analysis
  - Financial Capacity Assessment
  - Concept Options and Decision
  - Phasing
  - Total Project Cost
- **Medical Equipment Planning**
  - Existing Equipment Assessment
  - Capital Budget Development
  - Room by Room Equipment List & Budget
  - Procurement Services
- **Capital Project Scope Definition**
  - RFP Development
  - Space Programming
  - Functional Programming
- **System Standards Development**
  - Space Planning Criteria
  - Room by Room Equipment & Building Criteria
  - Capital Project Cost Modeling
- **System Network Planning**
  - Multiple Facility Workload and Resource Modeling
  - System Priority Criteria Facilitation
  - System Capital Program Management

Project Management

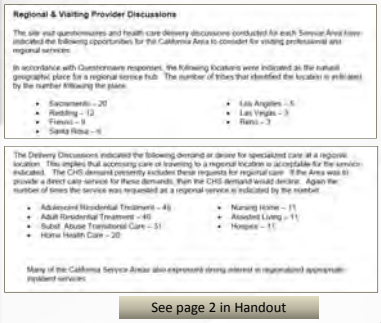
- **Owner Management**
  - User Coordination
  - Leadership & Hospital Project Communication
  - Owner-Provided Building System Coordination
  - Owner-Provided Building System Procurement
  - Budget Management & Maintenance
  - Schedule Management & Maintenance
  - Transition & Occupancy Services
  - Get Ready Project Management
- **Design Team Management**
  - AE Selection
  - AE Negotiation & Contract Coordination
  - Vendor Design Coordination & Management
  - Design Process & Schedule Management
  - City, State & Code Review Oversight
  - Construction Cost Management
  - AE Contract Management
- **Contractor Management**
  - Contractor Selection
  - Contractor Negotiation & Contract Coordination
  - Vendor Installation Coordination and Management
  - Construction Process & Schedule Management
  - City, State & Code Inspection Oversight
  - Construction Cost & Change Management
  - Contractor Contract Management

Implementation

5

History in California

- *What is the motivation for a Regional Center?*
- *Why do this?*
- Regional Analysis was not part of the California Area Health Services Master Plan.
- *What other conversations are driving this effort?*

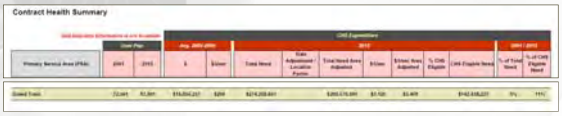


See page 2 in Handout

6

History in California

- *What services would most stretch Contract Health dollars if implemented at appropriate regional locations?*



- The 2005 California Area Health Services Master Plan projected a total CHS $ demand of $299 million (compared to a current funded amount of $15 million)

See page 2 in Handout

7

Who is your Regional Centers' mission population?

- Increasing population increases services!
- ***But*** what is a Regional Center's user population?
  - User Population?
  - Service Population?
  - Census AI/AN Population?
  - Other?

See page 8 in Handout

10

History in California

- *From the local service areas' perspective, which services are most desired at a regional location?*
- *Are there any requested services that surprise you?*
- *Are there any missing services (not requested) that surprise you?*

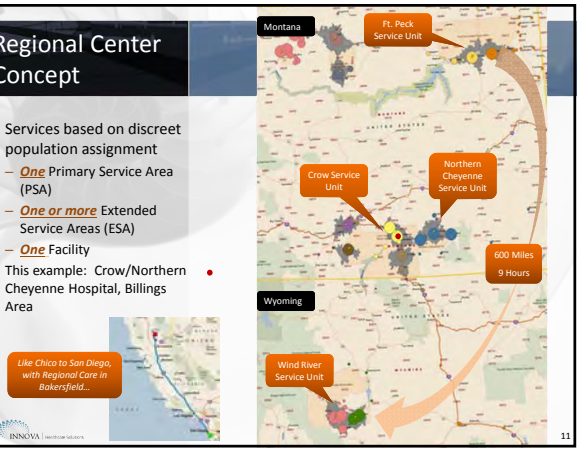
RANK	Service	Total # of Requests
1	Adolescent Residential Treatmen	50
2	Adult Residential Treatment	49
3	Home Health Care	38
4	Assisted Living	29
5	Hospice	28
6	Nursing Home	25
7	Substance Abuse Transitional Car	24
8	Specialty - Neurology	21
9	Specialty - Orthopedics	20
10	Ob/Gyn	15
11	Specialty - Cardiology	15
12	Specialty - Urology	15
13	Specialty - Dermatology	14
14	Specialty - Otolaryngology	14
15	Specialty - Gastroenterology	11
16	Specialty - General Surgery	11
17	Oncology	11

See pages 3-6 in Handout

8

Regional Center Concept

- Services based on discreet population assignment
  - ***One*** Primary Service Area (PSA)
  - ***One or more*** Extended Service Areas (ESA)
  - ***One*** Facility
- This example: Crow/Northern Cheyenne Hospital, Billings Area



11

What is a Regional Center?

- *How is a Regional Center different from a…*
  - *Primary Care Facility?*
  - *Hospital?*
  - *Medical Center?*

- *What services are you expecting to offer at a Regional Center?*

- *What services are you expecting to offer at an Area Wide Medical Center?*

- *Are there any services that should not be offered?*

See page 7 in Handout

9

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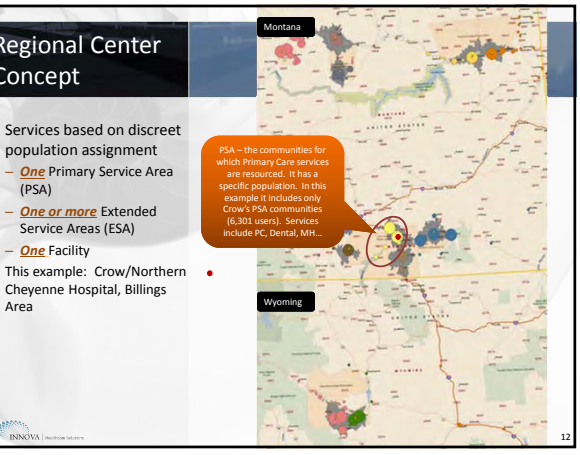

12

Regional Center Concept

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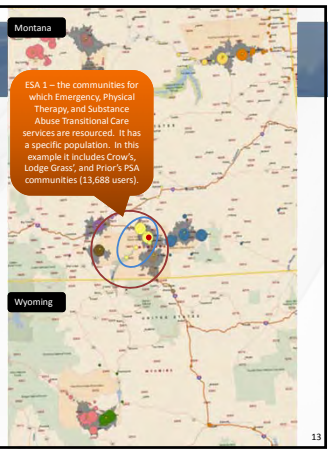
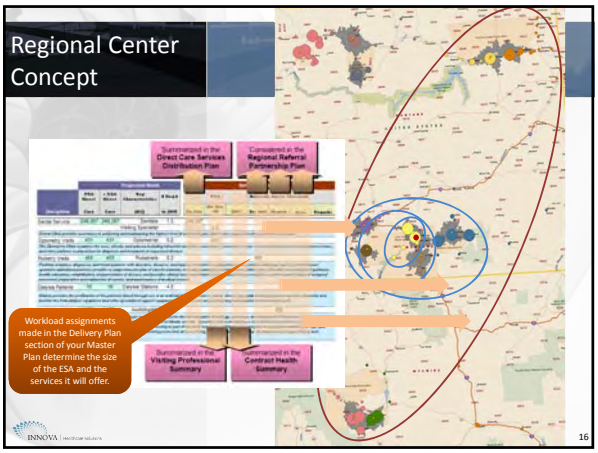


Regional Center Concept



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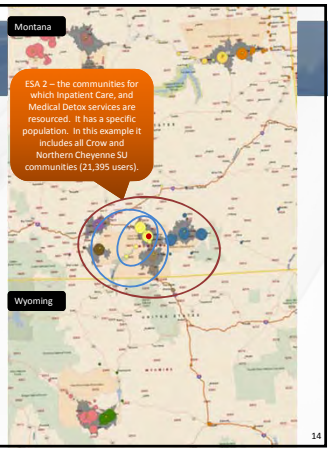

Location

- *Where should Regional Centers be located in California for maximum benefit to those who would use them?*
- *Where are those potential users located? How many are there?*

See pages 8-15 in Handout

Regional Center Concept

- Services based on discreet population assignment
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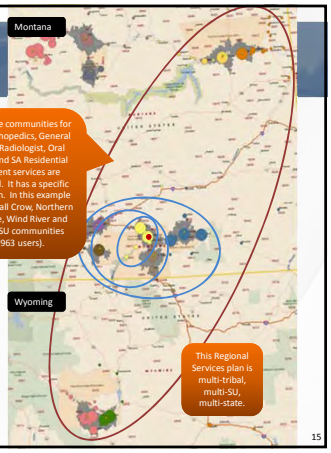


Location

- *Are there critical user-geography relationships to consider?*
- *Where do historic partnerships exist that would foster natural service synergy?*
- *Where do historic impediments exist that would hinder service synergy?*

See page 16 in Handout

Location

- Assuming the Regional Centers are appropriately located, who can be expected to come?
- In other words, *what market share* should be planned for?
- What criteria should be considered in determining appropriate market share to apply to local service area user or service populations?

North – 2030	
Projected Users	58,246
Projected Service Pop.	81,722
Projected Census Pop.	90,547

X Market Share = Pop

Central – 2030	
Projected Users	22,275
Projected Service Pop.	42,109
Projected Census Pop.	101,321

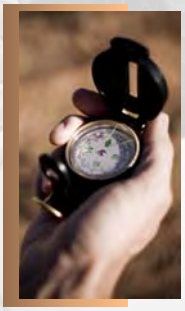
X Market Share = Pop

South – 2030	
Projected Users	31,460
Projected Service Pop.	107,934
Projected Census Pop.	158,781

X Market Share = Pop

See pages 17-18 in Handout

Our Portland Experience… Driven by a Specific Scope



Regional facilities are intended … → Definition
- *for smaller Tribes.*
- *reduce dependency on CHS funding*
- *opportunity for direct care revenues*
- *reinvested in the respective regions.*
- *geographically dispersed/autonomous user populations*

The IHS health services preliminary planning process … → Current Process
- *based upon the user population*
- *can develop preliminary demand/sizes for PC OP & IP facilities*
- *cannot determine preliminary demand/size of OP regional referral center*

The purpose of the study was to… → Purpose of Study
- *document a different means for determining demand*
- *useable over a cross-section of IHS areas*
- *recommendation(s) to modify the existing IHS preliminary process*
- *validate supportable need for a new category of health service delivery*
- *identification of additional facilities needs across Indian country*
- *ensure these facilities are scored and ranked in priority system*

Location

- Assuming the Area Wide Medical Center is appropriately located, who can be expected to come?
- In other words, *what market share* should be planned for?
- What criteria should be considered in determining appropriate market share to apply to local service area user or service populations?

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X Market Share = Pop

See pages 17-18 in Handout

Our Portland Experience… Considered HFCPS Limitations

- Facility type categories do not identify a regional facility option.
- User population input does not allow for multiple services areas. This is a critical planning element in accurate regional services forecasting.
- Required Space assumes OP has a single user population input. IP facility size based on single patient day input regardless of the OP service area complexity. More sensitivity appears to be required.
- Health Status disparities calculation is an area-wide number that does not offer appropriate detail of populations that might benefit most from regional services.
- Isolation Status assumes a single population "anchor" from which to determine the distance to an ER. This will not accurately reflect isolation issues dispersed populations face.
- Assuming one used the "other" category to rank Regional Centers, the means of comparing the need (using existing criteria) with a YTC or Dental project is unclear. Some criteria appear irrelevant.

Other Concerns

- *Are there any operational concerns you believe need to be addressed to support a concept of operation for this effort?*
- *Are there any tribal concerns that you believe should be anticipated to support this effort?*
- *Are there any concerns related to healthcare reform that should be considered?*

See page 19 in Handout

Our Portland Experience… Considered Existing Regional Centers Experience

- History of service delivery
- Their mission and opportunity
- Challenges these centers face
- The PSA & ESA structures upon which their healthcare delivery rests
- Service delivery drivers: regional populations they were commissioned to serve or some other interest
- Lessons learned from them

Our Portland Experience… Considered Existing Regional Centers Governance

Our Portland Experience… Considered Local & National Concerns

General Concerns…

- Cooperative Tribal Representation
- Equitable Cost Sharing
- Equitable Revenue Sharing
- Responsive to Regional Needs

Specific HQ Concerns…

- Patient Access
- Operation Concept
- Economic Viability
- Governance Issues

Our Portland Experience… Adopted Assumptions

- Several Regional Centers were conceptualized in their Health Services Master Plan, but only one was converted into a services specific document with associated space/staff demand.

  Seattle

- Primary Care was not included in the final concept – a radical departure from IHS' thinking about how care is delivered.

  Specialty Care with access to Inpatient Care

- Market Share was driven by assumptions related to…
  - *Who is highly reliant on help from IHS for specialty care?*
  - *How much alternative care will someone drive past on their way to a regional center?*
  - *What is the rate of erosion of market share relative to travel time?*

  Moderate Reliance : 70% Market Share (61k – 18k = 43k)

Path Forward

- Agree on Critical Decisions driving Assumptions forward
- Fulfill Data Requirements
  - Minutes Review and Decision "Sign-off" from this meeting
  - Payer Profile Development
  - Updated PSA Location Information
- Develop Dates to Support Project Schedule

See page 20 in Handout

Schedule

Existing Materials/Data Review and Discussion Guide Development

January 5, 2012 – **Kick-Off Meeting (#1)**
- *Workgroup Discussion and Identification of Guiding Assumptions and Data Requirements*

Concept Development: *Strategic Concept Development (up to 3 Regional Centers – one of which could be Area Wide Medical Center), Data Review*

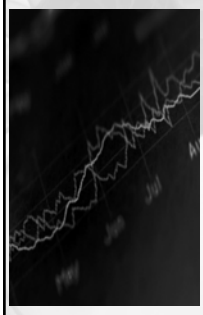
+5 Weeks – **Services Concept Meeting (#2)**
- *Review Regional Centers and Area Wide Medical Center Concepts, Services, and Guiding Assumptions*

Concept Refinement: Implement Considerations and Edits from Services Concept Meeting and Update documentation accordingly

+3 Weeks – **Pre-Final Concept Review Conference Call (#3)**
- *Review Updated Concepts, Services and Guiding Assumptions*

+2 Weeks – Revise and Publish Final Documentation

Other Questions?



For questions related to ongoing project efforts please contact us at

520-886-8650

or…

John.temple@theinnovagroup.com
Anthony.laird@theinnovagroup.com
Nate.Estrada@theinnovagroup.com

Attention - Meeting Attendees:

- ✓ Please review these minutes/notes from our January 5th meeting
- ✓ Add any comments you feel are missing and edit any comments you feel do not capture what was said on the "Edits Page"

    - o Our questions are in blue font (under headers identifying certain slides in the presentation used that day – attached)
    - o Meeting Attendee/Group answers are in black
    - o Make your edits in red

- ✓ Email any changes to Nate Estrada of The Innova Group by January 25, 2012 (at nate.estrada@theinnovagroup.com)

Discussion Guide Handout Notes

Project Meeting One

Edits Page

Please record your edits/changes here. If you must edit the body of this document, please put your edits in red text

The following comments were missing:

-

The following comments need to be changed:

-

I'd like to add the following thoughts:

-

Slide 6

What is the motivation for a Regional Center? Why do this? What other conversations are driving this effort?

- Regional Center planning should help to establish a baseline for Congress for Tribal requests.
- The primary motivation is to increase level of complex medical facilities (like Phoenix Area, Navajo Area, Aberdeen Area), to use as leverage in increasing funding levels, and to make us comparable to other IHS areas.
- We could track CHS more closely to establish better funding.
- These access problems often cause many to go without. Regional Care could foster Centers of clinical competence enhanced by telemedicine technology (provide specialty and sub-specialty care to be accessed by most remote populations in CA).
- The desire for a full range of specialty care options.

Slide 7

What services would most stretch Contract Health dollars if implemented at appropriate regional locations?

- Colonoscopy suite
- Women's Ob/Gyn outpatient type surgeries
- Orthoscopic surgeries, (knee)
- Oral Surgery
- Pediatric dentistry
- Endodontic
- preventive care,
- chronic conditions

Slide 8

From the local service areas' perspective, which services are most desired at a regional location?

Director's Note: These regional centers will not be tribally operated. They will be IHS operated. In order for the centers to be tribally run ALL tribes would have to sign resolutions – something that is not likely to happen. They'd all have to sign one for any tribally run regional center to function.

- Preventive health
- Non acute ambulatory surgery
- Treatment for chronic conditions
- General Surgeon
- Psychiatrist

- Gastroenterologist
- Endocrinologist
- Pediatric Dentistry
- Oral Surgery
- Orthopedics
- Cardiology
- Colonoscopy Suite
- Women's Health
- Knee Replacements
- Pain Management
- Mammography

Are there any requested services that surprise you?

- no

Are there any missing services (not requested) that surprise you?

- There was no surprise at the absence of inpatient care requests at a regional level. Beds are available – it's what between Ambulatory and IP care that's needed.
- Transportation: This will be an issue for everybody: how will we get users to-and-from these regional facilities?
- Pharmacy, Laboratory – but these are generally arranged locally with contracts and discounts.
    - Tele-kiosks for pharmacy could perhaps be coordinated with regional care – dispensing machine with a Pharm. Tech (but pharmacist is at a regional center checking the Rx).
    - Between 8 and 13 Tribal pharmacies, most of the facilities can do contracts with urban centers for pharmaceuticals.
- Pediatric level data may be somewhat off due to the local Nurse Practitioners rather than a dedicated pediatrician, so prenatal and pediatric requested services may be somewhat less than expected
- There is a large segment of the tribal population in this economy that does not qualify for Medi-CAL, more reliant on IHS in recent years. There are not as many 3rd party payers as one would expect.
    - Discussion ensued over the reimbursement rate - Is it in local consortiums' interest to do diagnostic testing? Base visit paid to that clinic is $290, there is no incentive to offer 'one-stop shopping' in any of the clinics – yet.

Slide 9

How is a Regional Center different from a…

- *Primary Care Facility?*
  - Currently available care
  - Basic care
  - Dental
  - Public Health Outreach
  - Behavioral Health
- *Hospital?*
  - Specialty Care (including Optometry and Audiology)
  - No deliveries
  - Ambulatory Surgery
  - Tele-Medicine
  - No ED
  - Maybe no ICU
  - Not a walk-in center for local urban Indians (tribal clinics will need to be gate-keepers)
- *Medical Center?*
  - Complex cases (like PIMC/ANMC)
  - Overnight stays
  - Acute Care
  - E-Health Center of Excellence

Additional Comments

- There might be a level of care missing – 23 Hour Short Stay Center
- CHS Eligible vs. CHS Non-Eligible population – does the Area Office capture how much CHS ineligible population exists? Over half of the rural Indian population is unaffiliated (known as "Rural California American Indians", and no longer permitted to visit a tribal facility for healthcare). Appeals go to tribal governments – CA Area IHS cannot force a tribe to 'serve somebody' healthcare. Complaints about refusals for care aren't generally registered.

What services are you expecting to offer at a Regional Center?

- *Outpatient surgeries / Ambulatory surgery*
- *Specialty care*
  - Medical Specialties (some delivered via tele-health)
  - Surgical Specialties
- Telemedicine
  - "E-health Center of Excellence" (tele-health, tele-preventive/community, tele-behavioral health)
- Retinopathy (ophthalmology) is getting better – perhaps this is a service that needs to be offered.
- Could include a Short Stay (less than 3 ALOS) Nursing Clinic?

- (Discussion Point) An Alternative Rural Health Center (ARHC) typically does not include pediatrics. ARHC's can be moved to the ambulatory care side of the facility list – can be used as a strategy for facility to build priority. Ideally a consolidation of healthcare assets to high expertise guarantees quality of care. It should be noted that ARHC's can be planned to do minimal amounts of low-risk birthing.

What services are you expecting to offer at an Area Wide Medical Center?

- *Research…? Phoenix Indian Medical Center has an entire floor of NIH researchers for Indian Population research alone. ANMC is a trauma center – highest in the city, state, and Alaska Area.*
- Short stay capability (assumed this means outpatient surgeries). Could potentially mean 23-hour stays as well for special procedures that may take longer, but still be able to be released later that evening/late night.

Are there any services that should not be offered?

- A Regional Center is not and will not be an Emergency Room.
- ICU (maybe)
- Deliveries

Slide 10

What is a Regional Center's user population?

- User Population?
- Service Population?
- Census AI/AN Population?
- Other?

- California Regional Centers will be planned with User Population (it is the most typical population to use for planning these Regional Centers)
- (Discussion Point) California is weighted to the north with users. Despite this, 10,000 users could be justified in San Diego County alone. IHS could decide on an ideal location necessitated by population distribution. Ultimately tribes may posture and push for their location of choice, but let's be straightforward and data-driven about the initial approach to locations.

Slide 17

Where should Regional Centers be located in California for maximum benefit to those who would use them? Where are those potential users located? How many are there?

- New way to count Active Users? Could these shift resources away from Phoenix, Aberdeen, and other large areas to more needy ones?
- 638 programs will have to be gatekeepers…
- Would they even come to this new Center if the Tribal User had insurance?
- (Discussed as part of the Affordable Care Act)

Slide 18

Are there critical user-geography relationships to consider?

- Certain physical barriers exist in the North, while metropolitan areas in the south and southeast portion of the State deter users from venturing south for care beyond a certain 'middle' that was discussed.
    - Bakersfield or Temecula is most probable spot over Riverside at this point (note geography, 'either side of L.A.' for the most part).
    - Avoidance of L.A. due to congestion, Bakersfield will choose Fresno over going south.
    - Modesto would probably go to Fresno… *Where is that gap/barrier/frontier or 'going here' vs. 'going there'?*
    - Is Bakersfield going to go to Temecula? - Highly unlikely
- National Parks and Mountain Ranges in the northwest – these are physical barriers Users will not/rarely traverse for care.
- Urban program funding versus tribal funding – PPACA affects users coming into a healthcare market? Policy avenues affect market share (eventually). (The Unaffiliated Population vs. the Tribal Population.)
- Recent notification that Indian Health Service beneficiaries can enroll in the Federal Insurance programs – so will these Users choose the IHS as their Point of Care or not?

Where do historic partnerships exist that would foster natural service synergy?

- (None really provided, focused on CHS concerns again, and physical/geographic barriers)

Where do historic impediments exist that would hinder service synergy?

- Lack of Transportation services

Slide 19

Assuming the Regional Centers are appropriately located, who can be expected to come? In other words, what market share should be planned for?

- No focused discussion recorded here

(See map at end of narrative)

What criteria should be considered in determining appropriate market share to apply to local service area user or service populations?

- Alternative care
- Choices in payers – insurance
- Access

Slide 20

Assuming the Area Wide Medical Center is appropriately located, who can be expected to come? In other words, what market share should be planned for?

- The PPACA/Affordable Care Act – the room focused on if the new law causes providers to improve quality of care and customer service – won't the patient draw to specific facilities over others that do not improve? How can the greatest value be provided per Tribe?

What criteria should be considered in determining appropriate market share to apply to local service area user or service populations?

- Quality of care, value, and customer service – good news spreads fast (how could we possibly measure this and apply it in our planning efforts?)

Slide 21

Are there any operational concerns you believe need to be addressed to support a concept of operation for this effort? Are there any tribal concerns that you believe should be anticipated to support this effort? Are there any concerns related to healthcare reform that should be considered?

- The State might have more User Pop in the north, but the tribes with a significant pull (gaming tribes) on the conceptual planning of this effort are in the south. Can we identify the tribes in the south that have purchased insurance for their members? These tribes may or may not choose to go to a new regional facility.
- The programs may be able to tease out this data from the RPMS – it does have this functionality. It doesn't necessarily mean the Tribe provides this insurance or not. Estimated that 60-80% of the Health programs are on the RPMS system.
- Riverside may have good data for payer profiles.
- Other questions raised: *Where is Kaiser in this? Where are the 900 lb Gorillas waiting to offer your users care at a quality facility? What's your response to their readiness? Should it affect how care is planned for?*

Slide 28

Agree on Critical Decisions driving Assumptions forward

- Effect of Affordable Care Act/Obama-care on this effort – Nothing concrete decided on here

Fulfill Data Requirements

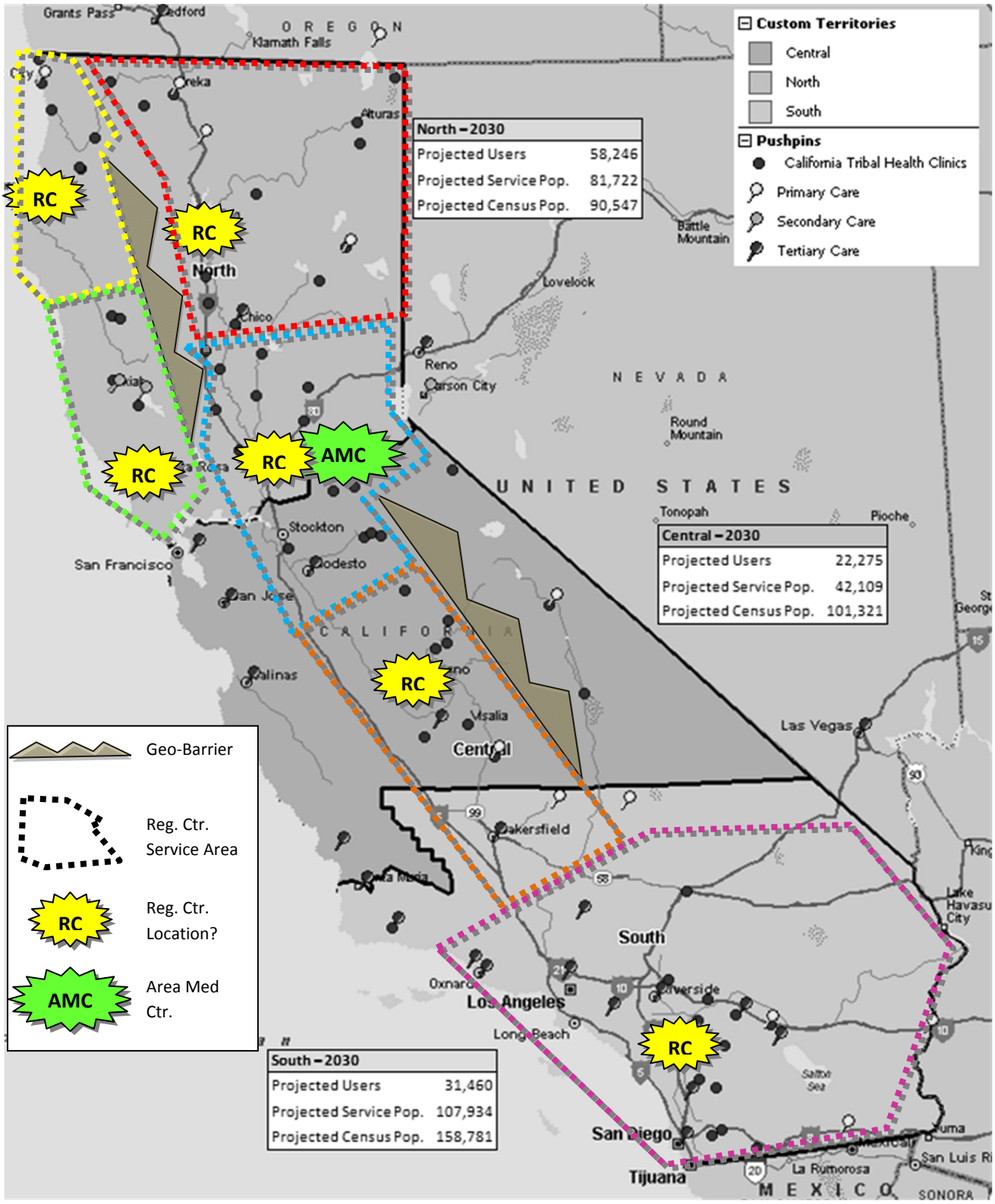
- Minutes Review and Decision "Sign-off" from this meeting
- Payer Profile Development
- Updated PSA Location Information

Develop Dates to Support Project Schedule

- One additional meeting, one follow up conference call

Following Page shows Regions (Sub-Regions) and possible considerations as locations for Regional Centers and an Area Wide Medical Center.

Map of Possible Access Patterns for Regional Care in California (Discussed, not finalized)



Orientation

- You should have 2 documents: 1 in Word (Questions) and 1 in Adobe (Tables, Maps, numbers)
- You were sent these a couple of weeks ago, or more, with the desire that you review these and answer the questions in advance of this meeting. I would like to collect those completed word questionnaires by email if I can.
- The Adobe document is intended to identify how we would anticipate populations being grouped for regional services with some supporting metrics that suggest reasons for concern or optimism…
- The Word document (Questions) is intended to support the Adobe document, by gathering variables and drivers that help us refine populations that can be expected to show up at each regional center (Market Share).
- Since Margo has limited time, we'll review the maps/concepts first, and then come back to the questions. But I want to start with the first page of the word document (Review first half of page)

PDF Handout

Page 1 – Map

- Shows native census population (CHSDA purple, Non CHSDA orange)
- Shows PSA locations as colored dots associated with their assumed regional site (6 location option)
- Shows some information about the cities where these regional sites would be located (population, growth, availability of secondary and tertiary care – tertiary care is the big issue: not easily understood in Eureka, Redding and Temecula)
- Shows in the table at the bottom of the page some information brought forward from the rest of the handout (walk through)
- Big Question: How important is nearby fully developed tertiary care for regional services? What is "nearby"? How would you define tertiary care?

Page 2-3 - Our baseline option supported by some initial metrics and a travel time map. I want to orient you to the table and map (and all these tables/maps work the same way on the following pages)

- Regional Center Icon Map – color corresponds to the sub-tables below
- Summary – Framing the big opportunity and big problem with this concept
- Sub-tables identifying PSA populations we'd plan these centers to serve
    - Total Regional Population
    - % Pop within travel time assumption (corresponding map shows travel times from RC locations)

- % Pop beyond travel time assumption
- Red font identifies PSA populations that fall within 2 or more Regional Center travel zones and therefore are at a different kind of risk. (28%)

Big Pro – Most accessible to population

Big Con – Services are limited everywhere because of smaller populations

Page 4-5 – We removed the Eureka and Santa Rosa centers

Big Pro – Populations, and therefore services at Sacramento and Redding improve.

Big Con – Accessibility drops, services are still somewhat limited, and notice there's still a lot of red font in Sacramento

Page 6-7 – We created 3 regional locations with longer drive times

Big Pro – True regional center in Redding, overlap access patterns are essentially gone.

Big Con – Accessibility drops even more, Fresno and Temecula really remain unchanged, Redding doesn't lend itself well to support Area Medical Center capability

Page 8-9 – We created 2 regional locations with longer drive times

Big Pro – True regional center in Sacramento that also naturally supports being an area medical center (Redding does not want to be that center), overlap access patterns disappear.

Big Con – Accessibility drops even more, Fresno and Temecula really remain unchanged (but remember the comments on the first page – travel seems secondary to services)

Page 10 shows that with a 3 hour travel time, no regional solution addresses the outliers…

Page 11 shows the location of VA facilities and DoD facilities, which in light of reform is something we want to be aware of because a new era in sharing services and facilities seems to be coming, one that lowers duplication of capital/operational costs.

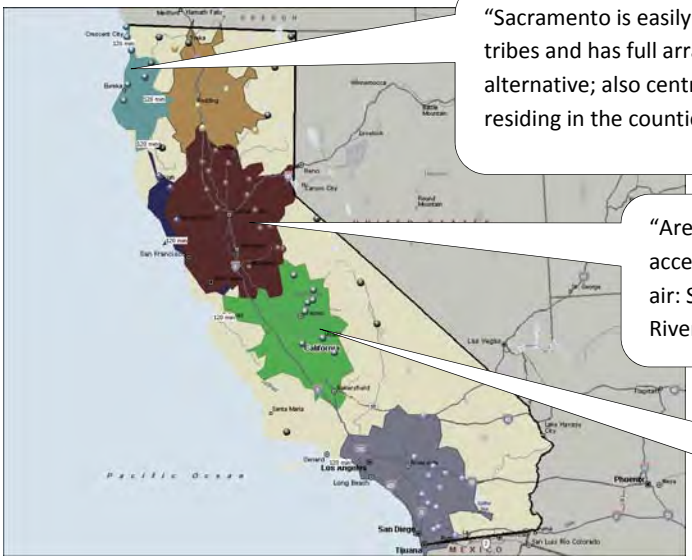
Word Document - Review

Regional Issues Conference Call

Health Services Master Plan Question to Primary Service Areas:

"Where are the natural location(s) for an Area hub(s) that would allow for increased and better quality services to be provided to the Area or regional population? Why should it be located there?"

They answered…



"Sacramento is easily accessible by land transportation for Northern California tribes and has full array of health and social services. Redding is an alternative; also centrally located. A specialized facility could serve the tribes residing in the counties of Del Norte, Humboldt, and Trinity." (UIHS)

"Areas that have a central location, high population and good accessibility. These areas would be accessible via car, bus, and air: Sacramento, Redding, Fresno, and Los Angeles" (Feather River)

"Sacramento – It's a large population center with relatively easy access for North/Central California tribal programs" (MACT)

Why is this call needed?

- To discuss regional services implications from our last meeting and ensure alignment on the best options to develop into services/resources forecasts.
- To gather additional information to assist in the development of appropriate market share for distant populations in accessing secondary care.

What should I do to prepare for the call?

- Please review the attached pages (questions, regional options, and maps).
- Think about and answer the questions prior to our call.

When is this call scheduled?

- Wednesday April 11th at 9:00 AM Pacific Time. Workgroup will call Innova at 520-886-8650

What is our schedule forward?

- Regional Centers Meeting 2 – Draft Regional Services (tentatively May 8th)
- Regional Centers Conference Call – Final Regional Services (late May/early June)

Critical Questions for Regional Definitions

As a member of the California IHS Area Planning Workgroup on Regional Centers Development, please answer the following questions carefully.

1. What do the answers on the previous page (see callouts next to the small map) suggest about access tolerances and the number of regional centers needed in California?

- Acute Care = NOT willing to drive farther
- Planned Care that has financial incentive = willing to travel farther
- Sleeping arrangements, transportation, etc. should be addressed

2. Is there any reason why an AI/AN patient would not travel to a distant California Native American Regional Center to receive free Secondary Care (specialty/advanced diagnostic/surgical)? If so, please list them.

- Cost of trip, transportation, personal commitments (family, kids, job, car of elders, etc.), Distance, not literate, not likely for preventative, but likely to remedy pain

3. Considering the reasons identified above, can the impact of telemedicine on any of these reasons be anticipated and quantified? If so, how?

- All California clinics currently are equipped with teleconference and telecommunication equipment, which is serviced by a full-time technician

4. How do you envision telemedicine being utilized and what services will it most affect?

- Specialty Care is already a critical part of California tribal care (i.e., psych through UCLA, dermatology, dietician, eye exams, endocrinologists, etc.)
- Add Cardiology?

5. What characteristic of a California Native American Regional Center would have the most powerful effect in drawing remote populations for healthcare services?

- Facility, services, Board certified providers, financial incentive versus CHS, culturally-appropriate care

6. Assuming an AI/AN patient has a choice (insurance) in accessing Secondary Care (specialty/advanced diagnostic/surgical), how many Alternative Care opportunities will they travel past on the way to a distant California Native American Regional Center?

- Cultural relevance, finance driven, referral driven

   a. What characteristics of an Alternative Care center/location would be decisive in causing an AI/AN patient with choice to *choose to travel past* on the way to a distant California Native American Regional Center?
   - [none]

   b. What characteristics of an Alternative Care center/location would be decisive in causing an AI/AN patient with choice to *choose not to travel past* on the way to a distant California Native American Regional Center?
   - Transportation

7. After studying the Regional Center /PSA alignment options in the Adobe Attachment (pages 2, 4, 6, and 8), please rank them by order of effectiveness in serving the true Regional Center needs of California users (with 1 being most effective and 4 being least)

Regional Center/PSA Alignment Option	Rank
Baseline – 6 Regional Centers	4
Option 1 – 4 Regional Centers	3
Option 2 – 3 Regional Centers	2
Option 3 – 2 Regional Centers	1

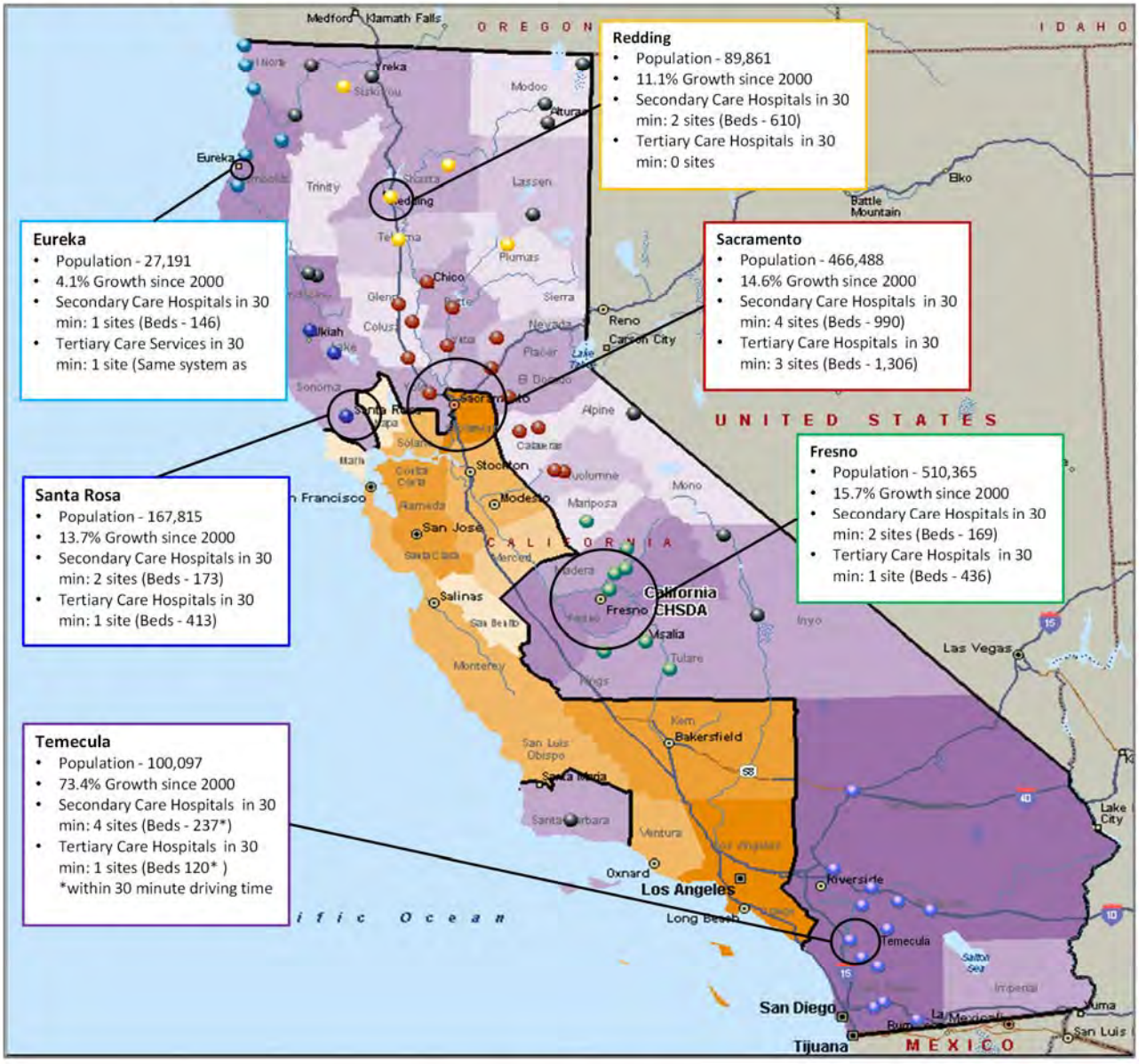
8. Is there another Regional Center/PSA alignment option that you feel should be considered that has not already been identified?

- 4 hour drive time
- 1 Regional Center, we don't expect to get funding for more than 2
- Plan for 2 Regional Centers, but initially only 1 in Sacramento with another to follow in the South later

Director's Comments:

- California tribal communities are envious of IHS Areas with facilities taking the majority of funding, technology, new construction, etc.
- CA AI/ANs are funded at $2,200 each annually, which limits purchase of private sector care due to lack of money. So, focus is put on preventative care to avoid costly complications/procedures later.
- Margo will review data available in the 35 databases regarding insurance coverage and will submit request for a data pull next week to IHS analyst.
- UCLA did a California Health Survey. Some results have been published, but the majority of literature should be released within the next 6 months. Margo has access to some of this information and will review to see what may be applicable to this effort. (i.e., might give insight to how care is pieced together in the absence of insurance, etc.)
- Current tribal care revolves around "convenience" in the sense that care that costs less is more convenient. Tribal members are impoverished.

Regional Center City Summaries



Options	# of RC's	Travel Time Assumption	Pop within Travel	%	Population at Risk	%
Baseline	6	2 Hours	73,133	90.5%	7,677	9.5%
Option 1	4	2 Hours	57,489	71.1%	23,321	28.9%
Option 2	3	3 Hours	63,425	78.5%	17,385	21.5%
Option 3	2	3 Hours	57,695	71.4%	23,115	28.6%

Baseline – Six Regional Centers

2 Hour Drive Time

The option in the small map featured here is the concept approved by the Planning Workgroup in the January 2012 meeting at the IHS California Area Office. Populations shown are 2011 and assume 100% market share at the regional center they are aligned with. Green shading indicates PSAs within travel time. Pink shading identifies PSAs outside travel time. **Concept provides best access to populations but lacks true regional services.**

Regional Center 1	16,820	Sacramento		Pros	Cons
% PSA Pop <2hr travel	99.1%	% PSA Pop >2hr travel	0.9%	Natural regional location	No dedicated Spec Care
Chapa De	6,576	Colusa IHCC	129		No Psychiatry
Feather River	4,751	Chicken Ranch	28		No CT/MRI
Northern Valley	2,309				No endo suites
MACT	1,915				No speech therapy
Shingle Springs	1,112				High PSA Pop Overlap
Reliable PSA Pop	16,663	At Risk PSA Pop	157		

Regional Center 2	9,260	Redding			
% PSA Pop <2hr travel	75.1%	% PSA Pop >2hr travel	24.9%	Closer to North than Sac.	Smaller user pop
Redding Rancheria	3,609	Susanville Rancheria	1,073		Toiyabe questionable
Karuk	1,931	Pit River	916		No dedicated Spec Care
Greenville Rancheria	1,204	Modoc	190		No Podiatry, Psychiatry
Quartz Valley	211	Warner Mountain	126		No CT/MRI or endo suites
Reliable PSA Pop	6,955	At Risk PSA Pop	2,305		No speech therapy
					PSA Pop Overlap

Regional Center 3	10,711	Fresno			
% PSA Pop <2hr travel	71.8%	% PSA Pop >2hr travel	28.2%	Centrally located for C. PSAs	relatively small user pop
Central Valley	4,737	Toiyabe	2,790		No dedicated Spec Care
Tule River	2,576	Tuolumne Me-Wuk	231		No Podiatry, Psychiatry
Tejon Tribe	372				No CT/MRI
Table Mountain	5				No endo suites
Reliable PSA Pop	7,690	At Risk PSA Pop	3,021		No speech therapy
					PSA Pop Overlap

Regional Center 4	21,928	Temecula			
% PSA Pop <2hr travel	95.5%	% PSA Pop >2hr travel	4.5%	Out of LA Congestion	No dedicated Spec Care
Riverside/San Bernardino	13,391	Santa Ynez	988	Podiatry	No Psychiatry
Indian Health Council	4,691	Cabazon Band	7	Ultrasound	No CT/MRI
Southern IHC	2,725			No PSA Overlap	No endo suites
Sycuan Band	126				No speech therapy
Reliable PSA Pop	20,933	At Risk PSA Pop	995		No Tertiary Care <30 min.

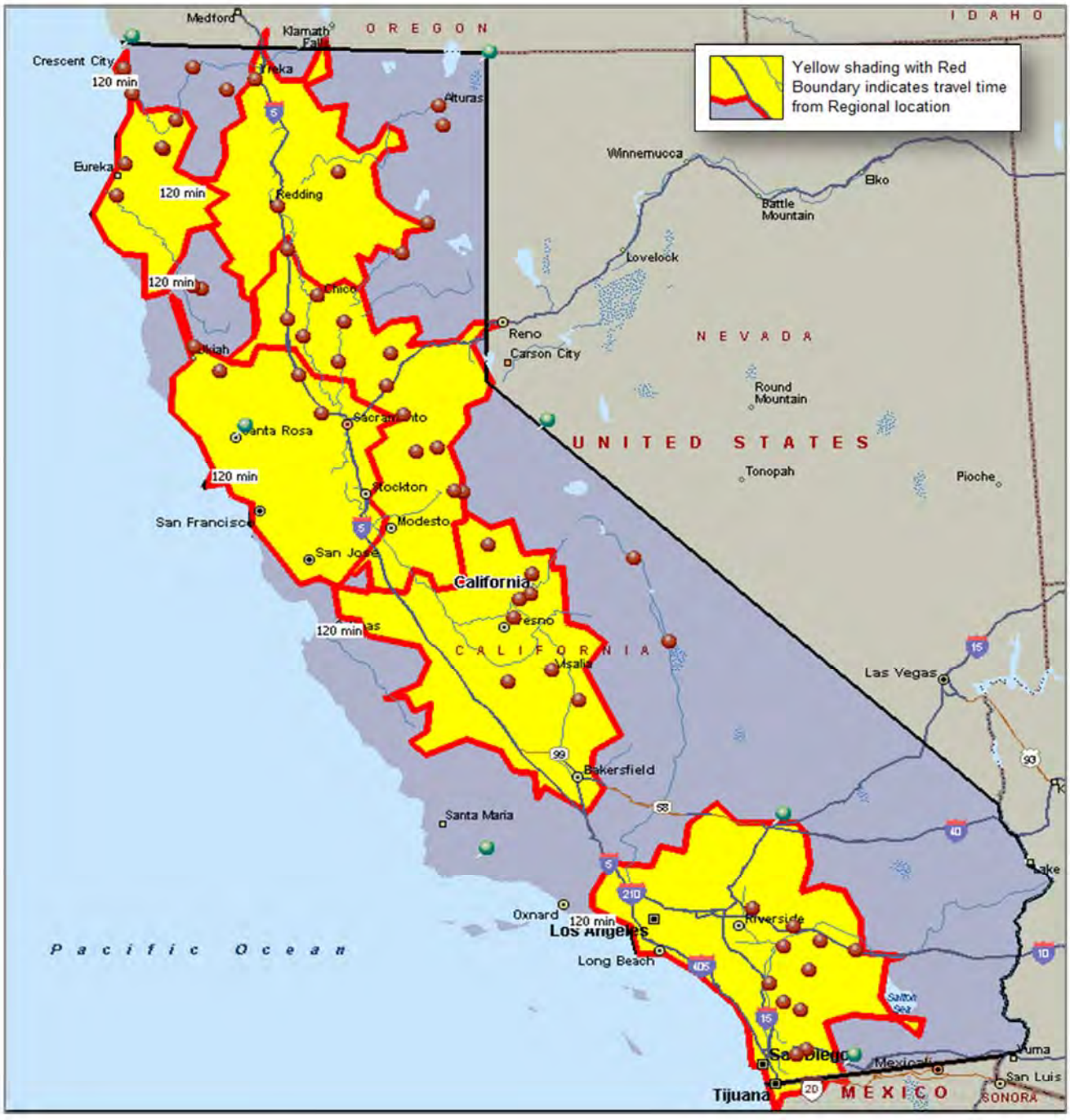
Regional Center 5	10,748	Eureka			
% PSA Pop <2hr travel	100.0%	% PSA Pop >2hr travel	0.0%	Close to NW PSAs	No dedicated Spec Care
United Indian Health Svc	7,898				No Podiatry, Psychiatry
Hoopa	2,850				No CT/MRI, endo suites
Reliable PSA Pop	10,748	At Risk PSA Pop	-		No speech therapy
					No Tertiary Care <30 min.

Regional Center 6	11,343	Santa Rosa			
% PSA Pop <2hr travel	89.4%	% PSA Pop >2hr travel	10.6%	Avoids SF/Oak Interface	No dedicated Spec Care
Sonoma County	5,248	Round Valley	1,199	No PSA Overlap	No Podiatry, Psychiatry
Consolidated	2,806				No CT/MRI, endo suites
Lake County	2,090				No speech therapy
Reliable PSA Pop	10,144	At Risk PSA Pop	1,199		

Total Reliable PSA Pop	73,133	Total At Risk PSA Pop	7,677
% of 2011 Users	90.5%	% of 2011 Users	9.5%

Indicates drive time overlap

Baseline – Six Regional Centers Concept (2 Hour Drive Times)



Option 1 – Four Regional Centers

2 Hour Drive Time

The option in the small map featured here is an option to the concept approved by the Planning Workgroup in the January 2012 meeting at the IHS California Area Office. Populations are 2011 and assume 100% market share . Green shading indicates PSAs within travel time. Pink shading identifies PSAs outside travel time. **Concept reduces access for some PSA pops but begins to offer new regional services for those populations.**

Regional Center 1	28,163	Sacramento		Pros	Cons
% PSA Pop <2hr travel	77.8%	% PSA Pop >2hr travel	22.2%	Central location	Limited Spec Care
Chapa De	6,576	Consolidated - SR	2,806	Plentiful Tertiary Care	No Psychiatry
Sonoma County - SR	5,248	Lake County - SR	2,090	Orthopedics	No MRI, endo suites
Feather River	4,751	Round Valley - SR	1,199	Ultrasound, CT	No speech therapy
Northern Valley	2,309	Colusa IHCC	129	Podiatry	PSA Pop Overlap
MACT	1,915	Chicken Ranch	28		
Shingle Springs	1,112				
Reliable PSA Pop	**21,911**	**At Risk PSA Pop**	**6,252**		

Regional Center 2	20,008	Redding			
% PSA Pop <2hr travel	34.8%	% PSA Pop >2hr travel	65.2%	Closer to North than Sac.	No dedicated Spec Care
Redding Rancheria	3,609	United Indian Health Svc- EUR	7,898	Podiatry	No Psychiatry
Karuk	1,931	Hoopa - EUR	2,850	Ultrasound	No CT/MRI
Greenville Rancheria	1,204	Susanville Rancheria	1,073		No endo suites
Quartz Valley	211	Pit River	916		No speech therapy
		Modoc	190		PSA Pop Overlap
		Warner Mountain	126		
Reliable PSA Pop	**6,955**	**At Risk PSA Pop**	**13,053**		

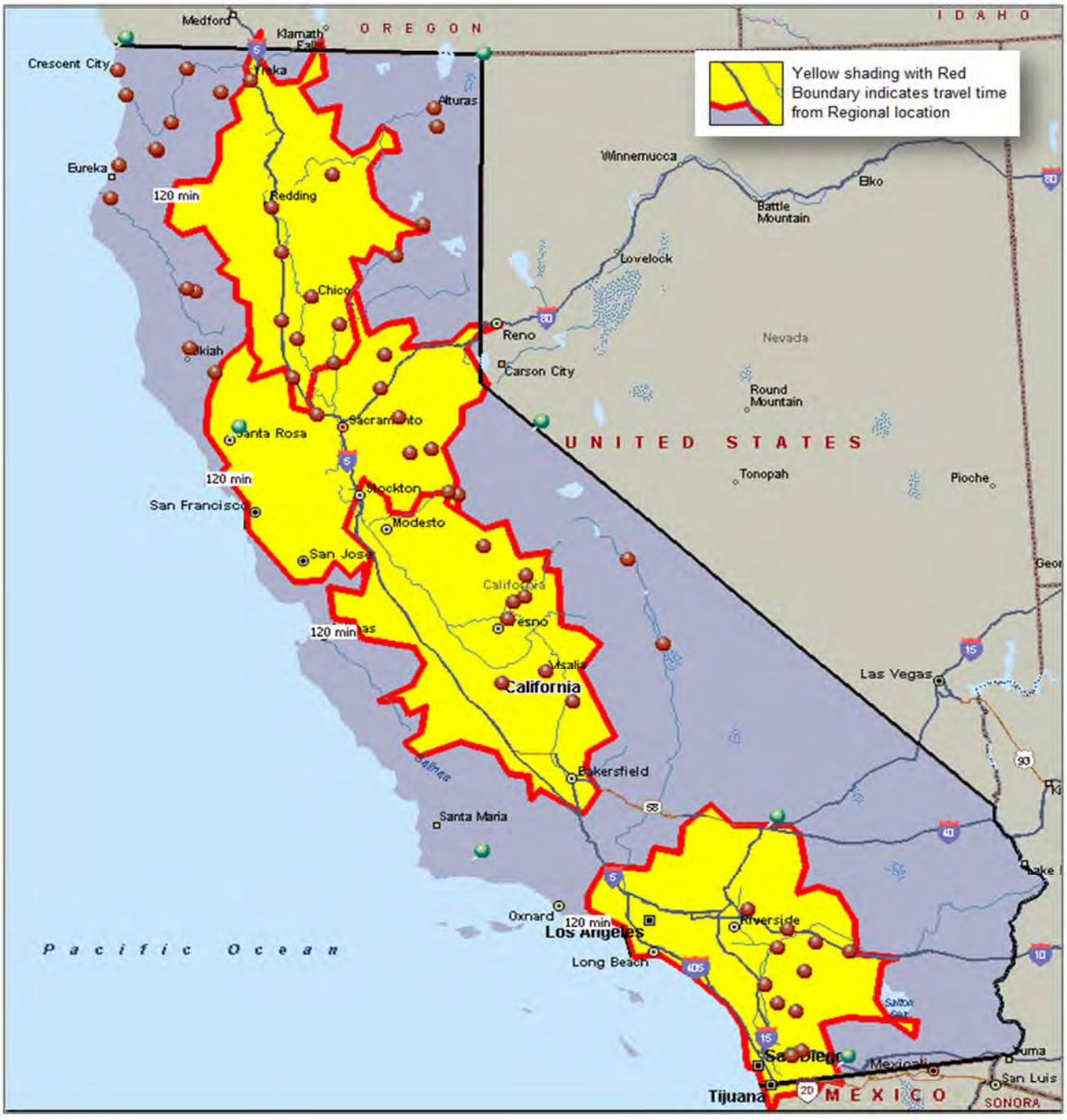
Regional Center 3	10,711	Fresno			
% PSA Pop <2hr travel	71.8%	% PSA Pop >2hr travel	28.2%	Centrally located for C. PSAs	No dedicated Spec Care
Central Valley	4,737	Toiyabe	2,790		No Podiatry, Psychiatry
Tule River	2,576	Tuolumne Me-Wuk	231		No CT/MRI, endo suites
Tejon Tribe	372				No speech therapy
Table Mountain	5				PSA Pop Overlap
(PSA User Pop 100% MS)	**7,690**	**At Risk PSA Pop**	**3,021**		Toiyabe questionable

Regional Center 4	21,928	Temecula			
% PSA Pop <2hr travel	95.5%	% PSA Pop >2hr travel	4.5%	Out of LA Congestion	No dedicated Spec Care
Riverside/San Bernardino	13,391	Santa Ynez	988	Podiatry	No Psychiatry
Indian Health Council	4,691	Cabazon Band	7	Ultrasound	No CT/MRI
Southern IHC	2,725			No PSA overlap	No endo suites
Sycuan Band	126				No speech therapy
Reliable PSA Pop	**20,933**	**At Risk PSA Pop**	**995**		No Tertiary Care <30 min.

Total Reliable PSA Pop	57,489	Total At Risk PSA Pop	23,321
% of 2011 Users	71.1%	% of 2011 Users	28.9%
Δ to Baseline	(15,644)	Δ to Baseline	15,644
% of Baseline Served	78.6%	% of Baseline at Risk	303.8%

Indicates drive time overlap

Option 1 – Four Regional Centers Concept (2 Hour Drive Times)



Option 2 – Three Regional Centers

3 Hour Drive Time

The option in the small map featured here is an option to the concept approved by the Planning Workgroup in the January 2012 meeting at the IHS California Area Office. Populations are 2011 and assume 100% market share . Green shading indicates PSAs within travel time. Pink shading identifies PSAs outside travel time. **Concept reduces access for some PSA pops but offers new, robust regional services for the northern populations.**

Regional Center 1	48,171	Redding		Pros	Cons
% PSA Pop <3hr travel	72.2%	% PSA Pop >3hr travel	27.8%	Regional Services capable	Limited Tertiary Support
United Indian Health Svc-EUR	7,898	Sonoma County - SR	5,248	Minimal PSA overlap	Greater "at risk" pop
Chapa De	6,576	Hoopa - EUR	2,850	Full Specialty (No Urology)	
Feather River	4,751	Consolidated - SR	2,806	More accessible to North	
Redding Rancheria	3,609	Round Valley - SR	1,199	Speech Therapy	
Northern Valley	2,309	Shingle Springs	1,112	US/CT/MRI	
Lake County - SR	2,090	Warner Mountain	126	Endo Suite	
Karuk	1,931	Chicken Ranch	28	Psychiatry	
MACT	1,915				
Greenville Rancheria	1,204				
Susanville Rancheria	1,073				
Pit River	916				
Quartz Valley	211				
Modoc	190				
Colusa IHCC	129				
Reliable PSA Pop	34,802	At Risk PSA Pop	13,369		

Regional Center 2	10,711	Fresno			
% PSA Pop <3hr travel	71.8%	% PSA Pop >3hr travel	28.2%	Centrally located for C. PSAs	No dedicated Spec Care
Central Valley	4,737	Toiyabe	2,790	Minimal PSA overlap	No Podiatry, Psychiatry
Tule River	2,576	Tuolumne Me-Wuk	231		No CT/MRI, endo suites
Tejon Tribe	372				No speech therapy
Table Mountain	5				Incr. Drive Time little impact
Reliable PSA Pop	7,690	At Risk PSA Pop	3,021		Toiyabe questionable

Regional Center 3	21,928	Temecula			
% PSA Pop <3hr travel	95.5%	% PSA Pop >3hr travel	4.5%	Out of LA Congestion	No dedicated Spec Care
Riverside/San Bernardino	13,391	Santa Ynez	988	Podiatry	No Psychiatry
Southern IHC	2,725	Cabazon Band	7	Ultrasound	No CT/MRI
Sycuan Band	126			No PSA Overlap	No endo suites
Indian Health Council	4,691				No speech therapy
Reliable PSA Pop	20,933	At Risk PSA Pop	995		No Tertiary Care <30 min.

Total Reliable PSA Pop	63,425	Total At Risk PSA Pop	17,385
% of 2011 Users	78.5%	% of 2011 Users	21.5%
Δ to Baseline	(9,708)	Δ to Baseline	9,708
% of Baseline Served	86.7%	% of Baseline at Risk	226.5%

Indicates drive time overlap

Option 2 – Three Regional Centers Concept (3 Hour Drive Times)

Option 3 – Two Regional Centers

3 Hour Drive Time

The option in the small map featured here is an option to the concept approved by the Planning Workgroup in the January 2012 meeting at the IHS California Area Office. Populations are 2011 and assume 100% market share . Green shading indicates PSAs within travel time. Pink shading identifies PSAs outside travel time. **Concept reduces access for some PSA pops but offers new, robust regional services for the northern populations while reducing capital/operational requirements.**

Regional Center 1	58,510	Sacramento		Pros	Cons
% PSA Pop <3hr travel	62.2%	% PSA Pop >3hr travel	37.8%	Regional Services capable	Limited Tertiary Support
Chapa De	6,576	United Indian Health Svc-EUR	7,898	No PSA overlap	Greater "at risk" pop
Sonoma County - SR	5,248	Hoopa - EUR	2,850	Full Specialty	Toiyabe questionable
Feather River	4,751	Toiyabe - FRS	2,790	Reduces Capital Costs	
FRS - Central Valley	4,737	Tule River - FRS	2,576	Speech Therapy	
Redding Rancheria	3,609	Karuk	1,931	US/CT/MRI	
Consolidated - SR	2,806	Round Valley - SR	1,199	Endo Suite	
Northern Valley	2,309	Susanville Rancheria	1,073	Cover/backup for Specs	
Lake County - SR	2,090	Pit River	916	Psychiatry	
MACT	1,915	Tuolumne Me-Wuk - FRS	231		
Greenville Rancheria	1,204	Quartz Valley	211		
Shingle Springs	1,112	Modoc	190		
Chicken Ranch	28	Colusa IHCC	129		
Table Mountain - FRS	5	Warner Mountain	126		
Reliable PSA Pop	**36,390**	**At Risk PSA Pop**	**22,120**		

Regional Center 2	22,300	Temecula			
% PSA Pop <3hr travel	95.5%	% PSA Pop >3hr travel	4.5%	Out of LA Congestion	No dedicated Spec Care
Riverside/San Bernardino	13,391	Santa Ynez	988	Podiatry	No Psychiatry
Southern IHC	2,725	Cabazon Band	7	Ultrasound	No CT/MRI
Sycuan Band	126			No PSA overlap	No endo suites
Indian Health Council	4,691				No speech therapy
Tejon Tribe - FRS	372				No Tertiary Care <30 min.
Reliable PSA Pop	**21,305**	**At Risk PSA Pop**	**995**		

Total Reliable PSA Pop	57,695	Total At Risk PSA Pop	23,115
% of 2011 Users	71.4%	% of 2011 Users	28.6%
Δ to Baseline	(15,438)	Δ to Baseline	15,438
% of Baseline Served	78.9%	% of Baseline at Risk	301.1%

Indicates drive time overlap

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Option 3 – Two Regional Centers Concept (3 Hour Drive Times)

Outliers – 3 Hour Drive Times

Note: Fresno nor Redding offer viable travel time solutions for outlier Primary Service Areas clinic locations.

Secondary Care Summary

Option 3.2 – Two Regional Centers

3 Hour Drive Time

The option in the small map featured here is an additional option to the 2 RC concept approved by the Planning Workgroup in the April 2012 update video teleconference meeting at the IHS California Area Office. Populations are 2011 and assume 100% market share . Green shading indicates PSAs within travel time. Pink shading identifies PSAs outside travel time. **Concept changes regional location from Sacramento to Redding, reduces access for some PSA pops , but clearly defines which PSAs will travel north and south while increasing regional services for the Temecula location.**

Regional Center 1	48,402	Redding		Pros	Cons
% PSA Pop <3hr travel	59.9%	% PSA Pop >3hr travel	40.1%	Regional Services capable	Limited Tertiary Support
UIHS - Potawot	4,012	Sonoma County - SR	5,248	No PSA overlap	Greater "at risk" pop
Chapa De	6,576	Hoopa - EUR	2,850	Full Specialty (No Urology)	Pop south of Sacramento will likely not drive through it to Redding
Feather River	4,751	Consolidated - SR	2,806	More accessible to North	
Redding Rancheria	3,609	MACT	1,915	Speech Therapy	
Northern Valley	2,309	UIHS - Crescent City	1,675	US/CT/MRI	
Lake County - SR	2,090	Round Valley - SR	1,199	Endo Suite	
Karuk	1,931	Shingle Springs	1,112	Psychiatry	
Greenville Rancheria	1,204	UIHS - Fortuna	1,082		
Susanville Rancheria	1,073	UIHS - Klamath	554		
Pit River	916	UIHS - Howonquet	405		
Quartz Valley	211	Tuolumne Me-Wuk	231		
Modoc	190	UIHS - Weitchpec	170		
Colusa IHCC	129	Warner Mountain	126		
		Chicken Ranch	28		
Reliable PSA Pop	**29,001**	**At Risk PSA Pop**	**19,401**		

Regional Center 2	32,408	Temecula			
% PSA Pop <3hr travel	65.7%	% PSA Pop >3hr travel	34.3%	Out of LA Congestion	*No ded Cardiology, Neurology or Urology
Riverside/San Bernardino	13,391	Central Valley	4,737	Podiatry	
Indian Health Council	4,691	Toiyabe	2,790	Ultrasound, CT, Mammo	No Psychiatry
Southern IHC	2,725	Tule River	2,576	Dedicated Spec Care*	No MRI
Tejon Tribe - FRS	372	Santa Ynez	988	Speech Therapy	No endo suites
Sycuan Band	126	Cabazon Band	7		No Tertiary Care <30 min.
		Table Mountain	5		Pop near Fresno will likely not drive to Temecula
Reliable PSA Pop	**21,305**	**At Risk PSA Pop**	**11,103**		

Total Reliable PSA Pop	50,306	Total At Risk PSA Pop	30,504
% of 2011 Users	62.3%	% of 2011 Users	37.7%
Δ to Baseline	(22,827)	Δ to Baseline	22,827
% of Baseline Served	68.8%	% of Baseline at Risk	397.3%

Indicates drive time overlap

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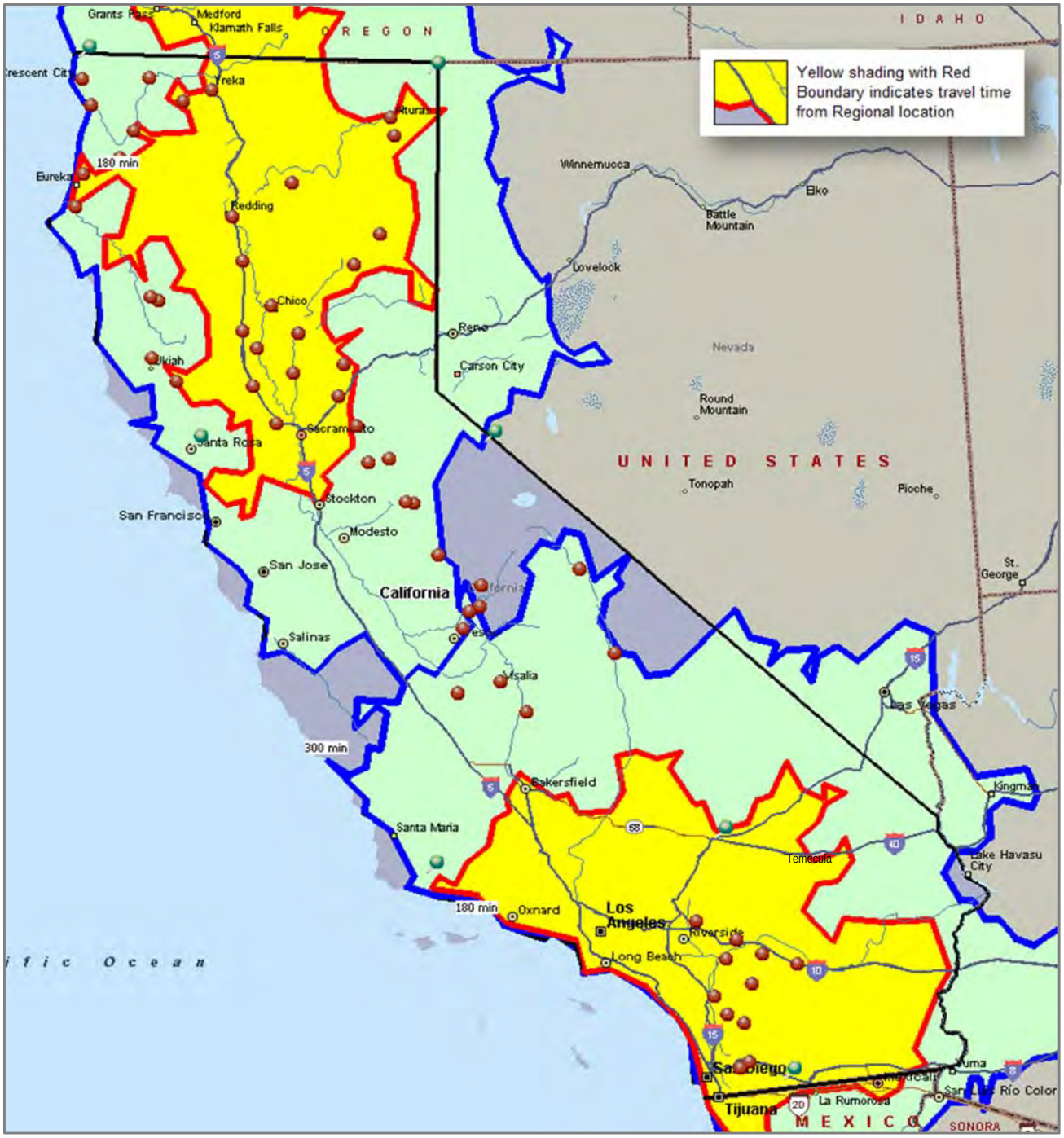
Option 3.2 – Two Regional Centers Concept (3 Hour Drive Times)

5 Hour Supplemental Travel times shown in light aqua shading to illustrate how cleanly travel perimeters touch at their extreme points.



Participants

Regional Concepts Meeting – Sacramento, California, August 14, 2012

Name	Position/Team Role	Email	Phone
Margo Kerrigan	Area Director	Margo.Kerrigan@ihs.gov	916-930-3981 x 306
Beverly Miller	Associate Director /Executive Officer	Beverly.Miller@ihs.gov	916-930-3981 x 312
Edwin Fluette	Associate Director OEHE	Edwin.Fluette@ihs.gov	916-930-3927 x 334
Christine Brennan	Public Health Analyst/Statistics	Christine.Brennan@ihs.gov	916-930-3981 x 333
Travis Coleman	Contract Specialist/Tribal Representative	Travis.Coleman@ihs.gov	916-930-3981 x 319
Steve Riggio	Health Systems Specialist/Urban Coordinator	Steve.Riggio@ihs.gov	916-930-3981 x 322
Rick Wermers	Health Facilities Engineer	Richard.Wermers@ihs.gov	916-930-3981 x 341
Vinay Behl	Financial Officer	Vinay.Behl@ihs.gov	916-930-3981 x 310
John Temple	Vice President – The Innova Group	John.Temple@TheInnovaGroup.com	520-886-8650
Anthony Laird	Senior Medical Planner – The Innova Group	Anthony.Laird@TheInnovaGroup.com	520-886-8650

Meeting Notes

Innova Consultants met with the California IHS Regional Centers Area Planning Workgroup (APW) Tuesday morning, August 14th in Sacramento. John Temple and Anthony Laird presented findings and recommendations as identified in the following attachment (PowerPoint Presentation).

Key Discussion/Decision Points are noted below:

1. There was considerable discussion around slide 8, as APW members sought to understand the relationship of the travel threshold with those users actually included in market share projections. Consultants explained that the travel threshold was utilized primarily for assigning service areas to Regional Centers for planning purposes. Market Share projection methodology was then utilized to identify the number of actual users each regional site should be sized for.
2. Slide 18 created discussion regarding whether or not the assumptions shown, regarding what percentages of CHS and MediCal Patients could be directed to regional centers for care, were appropriate. The consultant stated that those shown were from the Portland project, and the Portland workgroup did indeed feel like all CHS and MediCal patients could be directed to regional care. Accepting or changing these percentages is a required decision.
3. Slide 19 presented the opportunity for the APW to identify the difference between percentage of users going to distant regional care in a high and low market share projection. The consultant stressed that current projections were based on the low market share percentages. Discussion appeared to favor using high market share percentages instead of the low. Changing these percentages is a required decision.
4. Slide 22 shows Redding as projecting 20 IP Beds. That is incorrect; should be 11 Beds.
5. Slides 22-23 shows Redding and Temecula with visiting Psychiatry. That is incorrect; should be onsite.
6. Slides 22-24 show preliminary cost estimates that will be validated by the consultant's finance team. Estimates were provided to allow the workgroup to have a sense of scale.
7. Workgroup members would like to see the next iteration of services shown on slides 22-24 portrayed to identify how services change as population grows and the number of regional center sites shrinks. Consultant will construct a graphic to do that.
8. The APW understood the limited inpatient opportunity in Redding and the limited specialty care opportunities in Redding and Temecula. Higher market share will not change those realities. Robust regional services require a user population of approximately 30,000.
9. Slide 26 was the center of discussion regarding what could/should be changed in assumptions driving the scenarios shown. The following concerns appeared evident among the APW, though no formal consensus was reached:
    a. Changing the number of regional sites from 3 to 2 appears to be appropriate since Redding lacks population to drive true regional services, while Temecula might experience user growth because of its location in the greater LA basin and the interest the federal government is taking in resourcing urban populations

b. Using a high market share instead of a low market share seemed to be favored by most APW members
c. Directing Payer segments according to Portland assumptions received discussion but clear direction was not formulated

10. The APW recommended stepping "backward" to create 4 regional centers and resulting models to share with Tribal Leadership, allowing them to see services build in relationship to user population as 4 sites reduce to 3 and eventually to 2 (in the model). The consultant expressed that some of this preliminary work had already been done, despite being outside of the scope, because appropriate product quality demanded it. However, unpaid hours had been burned. As a result, of the additional work that needs to be engaged in to support 4 new scenarios, part has been completed, but part still remains. And the path toward calculating regional projections is complex. The Area Director indicated that additional time and expense were approvable in order to complete a product in which tribal leadership would be able to shape the ultimate answer.
11. The consultant will identify a revised path toward completion that considers additional scope requirements and decisions.

Decisions Required

A. *What percentage of Moderate Reliance Direct Care/CHS payers does the APW feel can be directed to distant regional care when presented with alternative care en route? (see slide 18 of presentation)*

Alternative Care Opportunities	Current % likely to drive past en route to Regional Care	Revised % likely to drive past en route to Regional Care
1	100%	?
2	100%	?
3	100%	?

B. *What percentage of Low Reliance Direct Care/CHS/MediCal payers does the APW feel can be directed to distant regional care when presented with alternative care en route? (see slide 18 of presentation)*

Alternative Care Opportunities	Current % likely to drive past en route to Regional Care	Revised % likely to drive past en route to Regional Care
1	100%	?
2	100%	?
3	100%	?

C. *What Market Share percentage does the APW desire to be utilized in the next phase of the project: high or low? (see slide 19)*
D. *Are there any other assumptions identified on slide 26 of the presentation that the APW would like to see changed in the Consultant's next scenario modeling?*

The APW/POC should return answers to these questions within 1 week of receipt of this document.

Path Forward

In order to complete this project, the following steps must be accomplished.

A. APW should finalize input on any changes to critical assumptions guiding future regional services modeling (see section above).
B. Consultant must assess additional requirements to scope and adjust as needed, including a contract mod.
C. Time/place for tribal leaders presentation should be selected so completion of project can be appropriately anticipated
D. Revised scope/mod must be approved
E. Revised calendar/schedule can be published
F. Project proceeds toward completion

California IHS Regional Centers Development

Project Meeting Two

Regional Centers Concepts

Sacramento, California
August 14, 2012

California Area Indian Health Service

1

Agenda

8:30 am **Welcome & Agenda**
8:45 am **Progress Review**
9:15 am **Market Share Development & Assumptions**
10:15 am Break
10:30 am **Projected Services**
11:15 am **Issues**
Assumptions Review
Remaining Concerns
11:45 am **Path Forward**
12:00 pm Adjourn

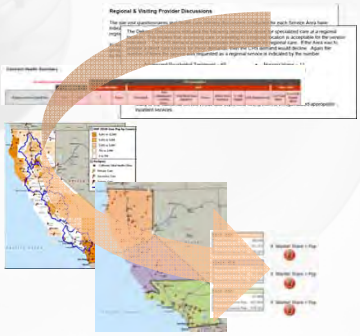
2

Project Review

3

Kick-Off Meeting — Project Review

- History and Motivation for Regional Discussions (from AHSMP)
- Impact on CHS $
  (The 2005 California Area Health Services Master Plan projected a total CHS $ demand of $299 million (compared to a current funded amount of $15 million)
- Discussed what a Regional Center is/is not (+AWMC)
- Opened Regional Services Conversation
- Identified 6 Potential Regional locations and 1 AWMC



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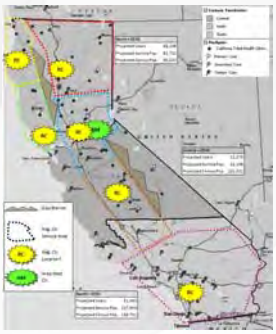
Kick-Off Meeting — Project Review

- We ended that meeting with a visual assumption of what Regional Services Delivery might look like
  - North West RC
  - North Central RC
  - North East RC
  - Central RC
  - South Central RC
  - South RC
  - Central AWMC



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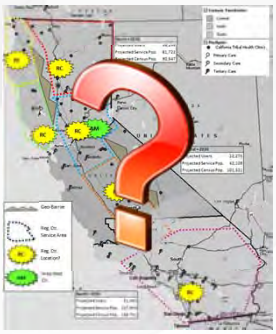
Regional Concepts Call — Project Review

- We tested that assumption by developing several population alignment scenarios to determine whether the intent for regional services could in fact be realized
- In other words… *where was there critical mass?*
  - *At all 6 regional sites?*



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Regional Concepts Call

Project Review

- Based on varying travel thresholds and Service Unit assignments to a RC/AWMC, 4 different options for regional services delivery emerged
  - 6 Centers (include AWMC)
  - 4 Centers (include AWMC)
  - 3 Centers (include AWMC)
  - 2 Centers (include AWMC)
- These were evaluated by Videoconference April 27th
- The 3 & 2 Center options were further considered
- The 3 Center option was chosen for Concept Development

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7

Market Share

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Decision

5 Scenarios Modeled

- 3 Regional Centers
  - 2 with OP & OP/IP services
  - 1 with AWMC OP/IP services

2011 HSP User Pops

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8

Market Share

Critical Questions

Market Share Projection Tool projects answers to the following critical questions:

1. *Who is truly reliant on "free", distant regional care?*
   - Source Data: Payer Profiles
2. *Who will be reliant after Reform?*
   - Source Data: Estimated AI/ANs shifting to Medicaid
3. *Who will drive to a distant Regional Center (How far is Regional Care)?*
   - Mapping Software identifying travel times to RC/AWMC from SU
4. *Who will select alternative care (How many alternative points of secondary care are en route)?*
   - State/AMA data on Secondary Care Sites by city
5. *Who can be directed (Can you direct distinct segments of your payers)?*
   - Medicaid and CHS users / Area Planning Workgroup

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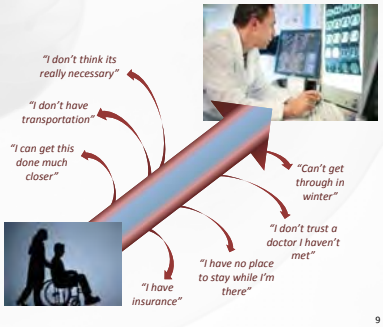
Meanwhile…

Project Review

- Project Team has been…
  - Understanding factors that will affect projected market share
  - Developing and Refining Market Share Projection Tool
  - Interacting with CA IHS staff to develop and refine Payer Profiles by Service Unit
- Why are these important?
  - Because not everyone will travel to distant regional care….
  - *…Even if its free!*



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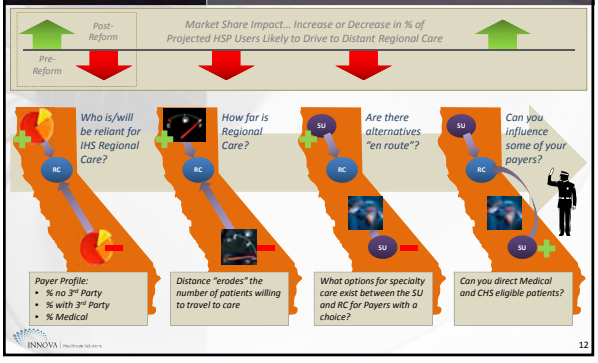
Market Share

Critical Questions



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Market Share — Why?

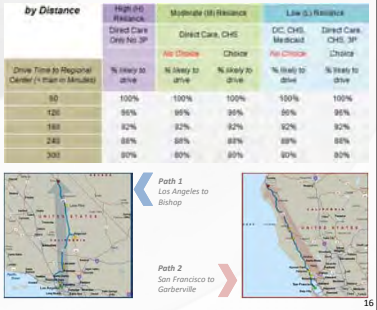
- *Why all the Fuss?*
  - Because if you build it far away…, they will not all come
  - Because increased population drives increased direct care services
  - Because decreased population diminishes direct care services
  - Because IHS doesn't historically support an operational concept that excludes primary care

User Population Drives Services

Market Share — Distance

- How Far is Regional Care?
  - Research shows patients are deterred from seeking care when distance increases (quantifying that is difficult)
  - Created 2 California "urban-to-rural" paths and studied inpatient state data and Dartmouth Atlas data
  - Blended results suggest a 4% erosion for every 60 miles of travel
  - Patient choice was treated as a separate issue

Current Working Assumptions

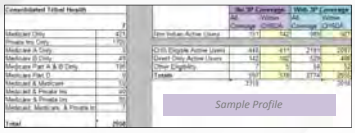


Market Share — Payer Profile

- Who Is Reliant on Regional Care?
  - Data provided by CA IHS
  - Not available for all SUs
  - Cannot filter 3rd Party table by AI/AN only
    - Medicaid numbers include Non Indian Users
  - Other Eligibility not considered

Current Working Assumptions

- Utilized Data available and applied toward all population totals (69.1% of SUs available)
- Applied a statewide AI/AN Medicaid % to identify population currently enrolled (9.4% vs. 12.2% for RSB)

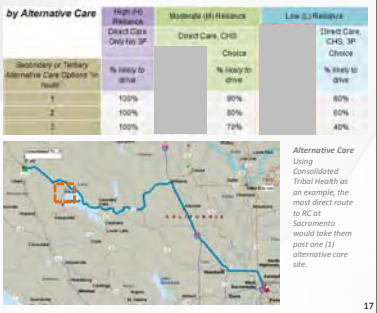


- CHS Eligible Users with 3rd Party Coverage ranged from 0% to 89% (Average is 31.5%, urban AI/ANs included)
- Direct Care Only Users with 3rd Party Coverage ranged from 0% to 62% (Average is 27.4%, urban AI/ANs included)
- 64% of AI/AN Users have a 3rd Party Payer of some kind

Market Share — Alternative Care

- Are There Alternatives "en Route"?
  - This erosion affects patients with a choice
  - Alternative secondary and tertiary sites were mapped by city/town (multiples in one city were treated as one option)
  - Most direct route from SU to RC was mapped and number of AC sites were noted
  - 3 options/choices were most allowed (maximum erosion allowed)
  - Borrowed Portland assumptions

Current Working Assumptions



Alternative Care
Using Consolidated Tribal Health as an example, the most direct route to RC at Sacramento would take them past one (1) alternative care site.

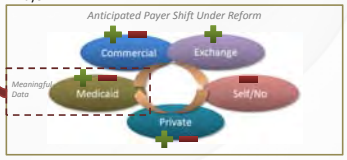
Market Share — Payer Profile Post Reform

- Who Will Be Reliant on Regional Care?
  - There will be movement across all payer segments
    - Self/No Pay will only decline
    - Exchange will only increase
    - The others are hard to discretely track

Current Working Assumptions

- Medicaid is the only payer segment shift that can be anticipated with available data
- UCLA Center for Health Policy Research Survey projects as many as 43% non-elderly California AI/ANs will become eligible for Medicaid coverage under reform
- This represents a 43% increase in projected Medicaid payers, or a 57% retention of SU users with No 3rd Party Payer

Anticipated Payer Shift Under Reform



Market Share — Directing Medi-cal/CHS

- Can You Influence Some of Your Population?
  - Potential erosion of patients could be limited through "mandatory" direction to distant RC
  - This would affect two (2) payer segments
    - Direct Care, CHS without 3rd Party Coverage
    - Direct Care, CHS with Medi-cal Coverage
  - This is something Portland felt to be a reliable assumption
  - Do you feel it is?

Current Working Assumptions

Limiting Erosion by Directing CHS Patients
Directing CHS patients without 3rd party coverage could limit a potential 30% erosion for this factor alone. Can you do this? Is this a reasonable assumption?

Limiting Erosion by Directing Medical Patients
Directing Medical patients could limit a potential 60% erosion for this factor alone. Can you do this? Is this a reasonable assumption?

Market Share — Calculated…

See Your Handout

- 8 Market Share Percentages to use in projecting Regional populations which drive Regional services
  - Redding (High Market Share = 93.5%, Low Market Share = 78.6%)
  - Temecula (High Market Share = 98.4%, Low Market Share = 91.4%)
  - Sacramento (High Market Share = 94.7%, Low Market Share = 78.2%)
  - Sacramento Area Wide Care (High Market Share = 88.7%, Low Market Share = 65.9%)

We used the Low MS

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Services — Redding

2025 RC Pop
- 23,670 Users
- 18,605 Users with Market Share Erosion

**See Handout*

Services Highlights:
- Audiology, Dental Specialties
- Telemedicine
- Visiting Med/Surgical Specialties
- Visiting Psychiatry
- Rad/US/Mammo (no CT), Radiologist
- Pain Mgmt., Case Mgmt.
- Lab, Pharmacy
- Surgery
- OT/Speech
- 20 IP Beds (Population Marginal)

Totals/Costs
- OP: 4,876 BGSM, 100 RRM FTE
  - $21.8m Const., $29.7m Proj., $10.7m Operations (est.)
- OP/IP: 6,900 BGSM, 154 RRM FTE
  - $30.8m Const., $42.0m Proj., $16.5m Operations (est.)

Remark
- Limited True Regional Services & IP requires justification

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Services

20

Services — Temecula

2025 RC Pop
- 27,204 Users
- 24,864 Users with Market Share Erosion

**See Handout*

Services Highlights:
- Audiology, Dental Specialties
- Telemedicine
- Ortho, Visiting Med/Surgical Specialties
- Visiting Psychiatry
- Rad/US/Mammo/CT (CT marginal), Radiologist
- Pain Mgmt., Case Mgmt.
- Lab, Pharmacy
- Surgery
- OT/Speech
- 23 IP Beds

Totals/Costs
- OP: 5,801 BGSM, 122 RRM FTE
  - $25.9m Const., $35.3m Proj., $13.1m Operations (est.)
- OP/IP: 8,721 BGSM, 203 RRM FTE
  - $38.9m Const., $53.1m Proj., $21.7m Operations (est.)

Remark
- Limited True Regional Services & Entry Level IP supported by HSP

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Services — Tools

- IHS has no integrated Regional Services delivery planning tool
  - Utilized the HSP with modified user populations as per appropriate market share and workload overrides where appropriate (created multiple files per site to allow market share and Telemed sensitivity)
  - Utilized the RRM with customized inputs relative to populations and staffing inputs
  - Utilized our Proprietary Health Services Planning Tool with added functionality for projecting:
    - Dental Specialty Care
    - Telemed Impact (by Line of Care)
    - Short Stay/Observation
    - Pain Management
  - All projections are to the year 2025

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Services — Sacramento

2025 RC Pop
- 51,871 Users
- 40,563 Users with Market Share Erosion

2025 AWMC Pop
- 104,580 Users
- 68,918 Users with Market Share Erosion

**See Handout*

Services Highlights:
- Audiology, Dental Specialties
- Telemedicine
- Multi-Specialties (no Urologist)
- Psychiatry
- Rad/US/Mammo/CT/MRI, Radiologist
- Pain Mgmt., Case Mgmt.
- Surgery
- OT/Speech
- 56 IP Beds

Totals/Costs
- OP/IP: 16,441 BGSM, 472 RRM FTE
  - $73.4m Const., $100.1m Proj., $50.7m Operations (est.)

Remark
- True Regional Services
- Could Also Meet Unmet Volumes from RCs
- IP Capabilities Supportable

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Issues & Path Forward

Issues — Path Forward

1. Gather Your Decisions
2. Adjust Populations/Sites/Services
3. Run Financials
4. Submit Revised Projections
   - Services
   - Space
   - Staff
   - Costs
5. Review by Teleconference
6. Final Edits
7. Publish Final Report

Issues — Assumptions Review

- *What Assumptions Can/Should Be Changed?*
  - *Number of Regional Sites?*
    - *Currently 3 – Change? …Reduce to 2? … or 1?*
  - *Populations?*
    - *User Pop – Change to Service Pop? Speculate on Urban Pop?*
  - *Market Share Assumptions?*
    - *Use High MS instead of Low MS*
    - *Current % of AI/ANs in Medicaid (9.4%)*
    - *Payor Shift to Medicaid (-43% from)*
    - *% Erosion by Distance to Regional Care (-4% every 60 miles)*
    - *% Erosion by Alternative Care Opportunity (-10-20%/AC, depending on payor)*
    - *Directing Payor Segments (100% of Medi-cal and Direct Care/CHS only)*
  - *Services Assumptions?*
    - *Telemed Impact (H=80%, M=50%, L=20%)*
    - *Meet unmet Regional Center Specialty Care need at Sacramento*

There are 10 "Dials" that can be turned…

10

"Regional Magic" starts ≈ 30,000 Users

Issues — Schedule

Existing Materials/Data Review and Discussion Guide Development

January 5, 2012 — **Kick-Off Meeting (#1)**
- *Workgroup Discussion and Identification of Guiding Assumptions and Data Requirements*

Concept Development: *Strategic Concept Development (up to 3 Regional Centers – one of which could be Area Wide Medical Center), Data Review*

August 14, 2012 — **Services Concept Meeting (#2)**
- *Review Regional Centers and Area Wide Medical Center Concepts, Services, and Guiding Assumptions*

Concept Refinement: Implement Considerations and Edits from Services Concept Meeting and Update documentation accordingly

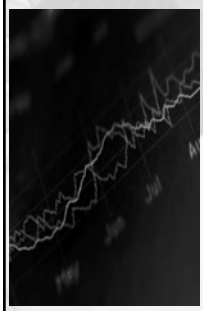
Aug/Sept ?, 2012 — **Pre-Final Concept Review Conference Call (#3)**
- *Review Updated Concepts, Services and Guiding Assumptions*

September 30, 2012 — Revise and Publish Final Documentation

Issues — Other Concerns

- *Do You Have Additional Concerns?*
- *Do You Have Additional Questions?*
- *Are We Firm on our Final Teleconference date/time?*

Thank You



For questions related to ongoing project efforts please contact us at

520-886-8650

or…

John.temple@theinnovagroup.com
Anthony.laird@theinnovagroup.com
Nate.Estrada@theinnovagroup.com
Karen.Rak@theinnovagroup.com

3 Center Scenario: 2 Regional Centers, 1 Area Wide Medical Center

Population marginal for IP — *Population marginal for CT*

		Redding			Redding			Sacramento					Temecula			Temecula		
Proj. Regional Location		Redding			Redding			Sacramento					Temecula			Temecula		
Facility Services Type		Regional Center OP			Regional Center OP/IP			Area Wide Medical Center w IP					Regional Center OP			Regional Center OP/IP		
Inpatient Services Scope		None			Regional			Area Wide					None			Regional		
2025 Proj. HSP Regional User Pop (100%)		23,670			23,670			104,580	51,871				27,204			27,204		
2025 Proj. HSP Inpatient User Pop (100%)		***Total Need*** Regional Center	0		***Total Need*** Regional Center	23,670		*Unmet Need + Sacra-mento Ttl Need (I+K)*	***Unmet Need*** *Sum 3 Regional Centers (E+K+S)*	***Total Need*** Regional Center	104,580		***Total Need*** Regional Center	0		***Total Need*** Regional Center	27,204	
Proj. User Pop Market Share (MS) Driving RC Services			***78.6%***			***78.6%***					***78.2%***			***91.4%***			***91.4%***	
Proj. User Pop Market Share (MS) Driving IP Services			***78.6%***			***78.6%***					***65.9%***			***91.4%***			***91.4%***	
2025 Proj. HSP Regional User Pop Market Share			18,605			18,605					40,563			24,864			24,864	
2025 Proj. HSP Inpatient User Pop Market Share			0			18,605					68,918			0			24,864	
2025 Proj. HSP Regional Center SCPV's			10,079			10,079					52,401			15,640			15,640	
2025 Proj. HSP Regional Center IP Beds			0			11					56			0			23	
TMI = Telemed MS Impact: H=High, M=Moderate, N=Neglible		*KC #*	*KC #*	*DGSM*	*KC #*	*KC #*	*DGSM*	*KC #*	*KC #*	*KC #*	*KC #*	*DGSM*	*KC #*	*KC #*	*DGSM*	*KC #*	*KC #*	*DGSM*
		A	B	D	E	F	H	I	J	K	L	N	O	P	R	S	T	V
		Total	*HSP Auth'd*		*Total*	*HSP Auth'd*		*Unmet + Total*	*Unmet Need*	*Total*	*HSP Auth'd*		*Total*	*HSP Auth'd*		*Total*	*HSP Auth'd*	
Ambulatory	**TMI**																	
Audiology (Audiologist)	N		1.1	81		1.1	81				2.2	165		1.4	81		1.4	81
Dental Care - Specialty Only [1] (Chairs)	N		3.9	556		3.9	557				10.6	1,517		5.2	738		5.2	738
[1] *Includes Pediatric, Endodontics, Orthodontics, Prosthodontics, Periodontics, Maxiofacial*																		
Specialty Care																		
Medical Specialties (Providers)																		
Cardiologist	H	0.7	0.0		0.7	0.0		3.1	1.5	1.6	1.6		0.8	0.0		0.8	0.0	
Dermatologist	H	0.6	0.0		0.6	0.0		2.4	1.2	1.2	1.2		0.6	0.0		0.6	0.0	
Neurologist	H	0.4	0.0		0.4	0.0		1.6	0.8	0.8	0.8		0.4	0.0		0.4	0.0	
Other Medical Specialists [2]	M	3.3	3.3		3.3	3.3		6.9	0.0	6.9	6.9		3.9	3.9		3.9	3.9	
[2] *Includes Endocrinologist, Nephrologist, Allergist, Gerontologist, Rheumatologist, Gastroenterologist*																		
Surgical Specialties (Providers)																		
General Surgeon	M	0.8	0.0	455	0.8	0.0	455	3.6	1.9	1.7	1.7	1,736	1.1	0.0	615	1.1	0.0	615
Ophthalmologist	N	1.0	0.0		1.0	0.0		4.2	2.2	2.0	2.0		1.2	0.0		1.2	0.0	
Orthopedist	H	1.2	0.0		1.2	0.0		3.7	1.2	2.5	2.5		1.3	1.3		1.3	1.3	
Otolaryngologist	H	0.6	0.0		0.6	0.0		2.4	1.2	1.2	1.2		0.6	0.0		0.6	0.0	
Urologist	N	0.4	0.0		0.4	0.0		2.5	1.7	0.8	0.0		0.5	0.0		0.5	0.0	
Other Surgical Specialists [3]	M	0.7	0.7		0.7	0.7		1.5	0.0	1.5	1.5		0.8	0.8		0.8	0.8	
[3] *Includes Throacic, Plastic, Vascular, etc.*								31.9	11.7	20.2								
Preventive																		
Regional Support/Epi-Center	N																	
Ancillary																		
Outpatient Endoscopy (Suites)	N		0.0			0.0					1.0			0.0			0.0	
Outpatient Surgery Cases (OP ORs)	N		2.0	637		3.0	863				4.0	863		2.0	637		3.0	863
Short Stay / Observation (Beds)	N		1.0			1.0					1.0			1.0			1.0	
Laboratory (FTE)	N		2.0	80		3.0	183				11.0	330		2.0	80		3.2	218
Diagnostic Imaging																		
Radiography (Rooms)	N	1.2	2.0		1.3	2.0		3.3	0.0	3.3	3.0		1.6	2.0		1.7	2.0	
Fluoroscopy (Rooms)		0.3	0.0		0.3	0.0		1.2	0.3	0.8	1.0		0.4	1.0		0.4	1.0	
Ultrasound (Rooms)	N	0.5	1.0	356	0.5	1.0	393	1.4	0.0	1.4	1.0	944	0.6	1.0	514	0.7	1.0	563
Mammography (Rooms)	N	0.6	1.0		0.6	1.0		1.0	0.0	1.0	2.0		0.8	1.0		0.8	1.0	
CT (Rooms)	N	0.3	0.0		0.3	0.0		0.9	0.3	0.6	1.0		0.4	1.0		0.4	1.0	
MRI (Rooms)	N	0.2	0.0		0.2	0.0		0.8	0.4	0.4	1.0		0.2	0.0		0.2	0.0	
Radiologist	H	1.5	1.2		1.6	1.3		3.4	0.0	3.4	3.4		1.8	1.7		1.8	1.7	
Pharmacy (Pharmacists)	N		2.1	167		3.1	167				11.7	425		3.2	167		4.2	167
Inpatient Care																		
Pediatric (Beds)	N		0.0		2.0	0.0					5.0			0.0			2.0	
Adult Medical (Beds)	N		0.0	0	11.0	11.0	743				31.0	2,230		0.0	0		13.0	1,042
Adult Surgical (Beds)	N		0.0		5.0	0.0					13.0			0.0			5.0	
ICU (Beds)	N		0.0	0	2.0	0.0	162				7.0	567		0.0	0		3.0	324
Physical Rehab Services																		
Occupational Therapist	N		1.5	64		1.5	64				3.1	134		1.9	81		1.9	81
Speech Pathologist	N		0.4			0.4					0.7			0.4			0.4	
Behavioral Health (FTE's)																		
Psychiatry (Psychiatrists)	H		1.2	63		1.2	63				2.6	97		1.4	63		1.4	63
Administration																		
Administration (FTE's)	N		8.0	211		11.0	267				33.0	563		8.0	172		11.0	267
Information Management (FTE's)	N		3.0	79		4.0	79				10.0	173		3.0	79		4.0	90
Business Office (FTE's)	N		5.0	81		5.0	81				21.0	207		8.0	123		7.0	98
Health Information Management (FTE's)	N		10.0	248		12.0	263				41.0	610		14.0	298		16.0	320
Security (FTE's)	N		1.0	16		2.0	16				4.0	25		1.0	16		2.0	16
Facility Support																		
Clinical Engineering (FTE's)	N		1.0	14		2.6	42				4.0	84		1.0	42		2.0	42
Facility Management (FTE's)	N		6.0	61		10.0	99				22.0	176		7.0	99		11.0	99
Support Services																		
Central Sterile/Medical Supply (FTE's)	N		1.0	30		1.7	122				2.0	122		1.0	30		1.0	122
Property & Supply (FTE's)	N		1.0	165		1.0	165				5.0	607		1.0	165		1.7	331
Housekeeping & Linen (FTE's)	N		7.0	74		13.0	78				26.0	253		8.0	87		14.0	119
Other Programs																		
Case Management (FTE's)	H		7.3	129		7.3	129				15.4	271		8.5	150		8.5	150
Pain Management (Specialists)	L		0.4	62		0.4	62				0.9	135		0.5	80		0.5	80
Research	N																	
Transportation (Patients to/from RHC)	N																	
Summary																		
DGSM			**3,628**			**5,134**					**12,233**			**4,316**			**6,489**	
Total RRM FTE's			**100**			**154**					**472**			**122**			**203**	
BGSM			**4,876**			**6,900**					**16,441**			**5,801**			**8,721**	

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Payor Profile Summary Table

Service Unit	% CHS Eligible Users - NO 3rd Party Coverage	% CHS Eligible Users - WITH 3rd Party Coverage	% Direct Care Only Users - NO 3rd Party Coverage	% Direct Care Only Users - WITH 3rd Party Coverage	% Medicaid Payers to AI/AN Users	Non-Native Users	AI/AN Users
Riverside/San Bernardino County Indian Health	7.4%	20.4%	37.1%	35.1%	12.2%	0	24,916
San Diego American Indian Health Center	0.0%	0.0%	5.0%	95.0%	31.4%	3,079	3,517
Southern Indian Health Council	5.1%	33.9%	19.9%	41.1%	3.1%	8,530	5,981
Shingle Springs Tribal Health	1.3%	7.9%	28.3%	62.5%	36.5%	14,003	2,717
Santa Ynez	14.1%	33.1%	28.8%	24.0%	67.5%	9,140	2,488
Toiyabe Indian Health Project	2.2%	58.8%	9.5%	29.4%	17.9%	4,414	6,227
Karuk Tribe	20.1%	60.8%	8.2%	10.9%	47.6%	7,707	4,744
Modoc Indian Health	13.1%	86.9%	0.0%	0.0%	21.9%	8	360
Tuolumne Me-Wuk Indian Health	1.8%	43.3%	19.9%	35.0%	83.3%	11,141	1,445
Table Mountain Rancheria							
Sycuan Medical Dental Center	1.0%	2.3%	44.7%	52.1%	13.5%	3,055	526
Sherwood Valley							
American Indian Health & Services - SB	0.2%	0.2%	48.4%	51.2%	261.1%	7,454	1,019
Indian Health Center of Santa Clara Valley	0.2%	0.0%	99.6%	0.1%	0.0%	9	810
Round Valley Indian Health Center	29.5%	59.0%	5.1%	6.4%	34.2%	2,903	2,512
Quartz Valley	8.4%	46.2%	10.6%	34.8%	16.2%	1,191	463
Pit River Health Service	3.6%	43.4%	28.5%	24.5%	37.4%	406	2,072
Northern Valley	3.0%	30.7%	24.3%	42.1%	134.6%	24,957	5,619
Native American Health Center, Oakland	0.1%	0.0%	97.6%	2.3%	0.0%	152	2,538
Sacramento Native American Health Center	0.0%	0.2%	22.4%	77.5%	49.0%	12,481	3,938
Native Directions							
United American Indian Involvement	0.1%	0.0%	78.8%	21.1%	3.3%	443	5,837
Lassen Indian Health Center	6.0%	65.2%	15.5%	13.4%	23.8%	2,061	2,365
Lake County Tribal Health	5.0%	56.1%	18.6%	20.3%	31.8%	5,377	4,283
Indian Health Council	21.5%	38.7%	20.6%	19.2%	13.8%	531	10,191
Hopland	87.2%	12.8%	0.0%	0.0%	4.7%	1	86
K'ima:w Medical Center	11.5%	71.2%	5.8%	11.5%	34.7%	2,834	6,893
Guidiville Indian Rancheria	0.0%	0.0%	100.0%	0.0%	0.0%	0	27
Greenville Rancheria Tribal Health	10.1%	33.7%	22.3%	33.9%	217.2%	6,216	2,050
Friendship House							
Fresno Indian Health	0.0%	0.2%	84.9%	14.9%	3.1%	2	1,272
Feather River Tribal Health	1.1%	43.1%	12.6%	43.3%	16.8%	6,479	9,623
Coyote Valley							
Consolidated Tribal Health	13.6%	67.8%	3.9%	14.8%	6.7%	2,209	6,326
Cold Springs							
Chapa De	9.7%	14.2%	33.8%	42.3%	28.6%	2,063	15,605
Central Valley Health Clinic	23.9%	47.5%	12.6%	16.1%	8.0%	4,134	15,312
Bakersfield	58.2%	30.2%	8.0%	3.6%	3.1%	18	2,338
Average % Medicaid, inclusive of Non-Native Users					39.5%		
Average % Medicaid, among those serving few/no Non-Natvies					6.4%		

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California Health Program Payor Profile - Sample Health Program

Table 1 - Source

Medicaid Only	1,363
Private Ins Only	1,017
Medicare A Only	4
Medicare B Only	0
Medicare Part A & B Only	60
Medicare Part D	69
Medicaid & Medicare	150
Medicaid & Private Ins	144
Medicare & Private Ins	79
Medicaid, Medicare, & Private Ins	13
Total	**2,899**

Table 2 - Source

	No 3P Coverage		With 3P Coverage	
	All Coverage	Within CHSDA	All Coverage	Within CHSDA
Non Indian Active Users	553	494	2,294	2,036
CHS Eligible Active Users	118	97	1,322	1,080
Direct Only Active Users	464	333	509	360
Other Eligibility	0	0	0	0
Totals	582	430	1,831	1,440

Table 3 - Calculations

3.1 - All AI/AN Users	2,413	**3.5 - CHSDA AI/AN Users**	1,870
3.2 - All AI/AN Highly Reliant Users	464	**3.6 - Highly Reliant CHSDA AI/AN Users**	333
3.3 - % All AI/AN Highly Reliant Users	19.2%	**3.7 - % Highly Reliant CHSDA AI/AN Users**	17.8%
3.4 - % Composite Highly Reliant Users	18.5%		

Table 4 - Calculations

4.1 - Table 1 - % Medicaid All Coverage Payors	56.5%	**4.3 - Table 1 - % Medicaid CHSDA Payors**	72.9%
4.2 - Table 1 - % Medicaid All Coverage Payors	19.3%		

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CATAC and Health Program Director's Meeting

November 14, 2012,

Participant Contact Information

Name	Position/Team Role	Email	Phone
Stacy Dixon			
Peter Masten Jr.			
Michael Thom			
Robert Marquez			
Silver Galleto			
Crista Ray			
Chris Devers			
Johnny Hernandez			
Teresa Sanchez			
John Temple	Vice President – The Innova Group	John.Temple@TheInnovaGroup.com	**520-886-8650**
Anthony Laird	Senior Medical Planner – The Innova Group	Anthony. Laird@TheInnovaGroup.com	**520-886-8650**

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California IHS Regional Centers Development

CATAC and Health Program Directors Meeting

Regional Centers Concepts

Sacramento, California
November 14, 2012

California Area Indian Health Service

1

Agenda

8:00 am	**Welcome & Firm Introduction**
8:15 am	**Project Review/Need**
8:30 am	**Regional Care – How? What? Who? Where?**
9:15 am	**Market Share – Rationale & Assumptions**
10:00 am	Break
10:15 am	**Projected Scenarios & Services**
11:00 am	**Path Forward – Questions & Next Steps**
12:00 pm	Adjourn
	or if needed…
	Lunch
1:00 pm	*Additional Questions/Discussion Optional*
2:00 pm	*Adjourn*

2

Introductions

3

Locations The Innova Group

Expansive Problem Solving Focused on the Future

4

Services The Innova Group

Planning

Strategy Visioning

- **Population Assessment**
  - Demographic Change Profile
  - Growth Assessment
  - Real Estate Absorption Analysis
- **Service Area Definition/Validation**
  - Workload Overview
  - Patient Profile
  - Competitor Profile
  - Population Distribution Overview
  - Service Area Decision Facilitation
- **Market Opportunity Assessment**
  - Product Line Definitions
  - Inpatient Opportunity
  - Outpatient Opportunity
  - Physician Needs Assessment
  - New Competitor Market Carve-in Modeling
- **Operational Assessment**
  - Product Line Financial Analysis
  - Physician Financial Profile Analysis
- **Capacity Analysis**
  - Key Characteristic Productivity Benchmarking
  - Bed Utilization & Peaking Evaluation
  - IP, OP, Ancillaries Key Characteristic Forecasting
- **Direction Development**
  - Executive Team and Board Facilitation

Facility Planning

- **Master Planning**
  - Functional Assessment
  - Site and Building Analysis
  - Financial Capacity Assessment
  - Concept Options and Decision
  - Phasing
  - Total Project Cost
- **Medical Equipment Planning**
  - Existing Equipment Assessment
  - Capital Budget Development
  - Room by Room Equipment List & Budget
  - Procurement Services
- **Capital Project Scope Definition**
  - RFP Development
  - Space Programming
  - Functional Programming
- **System Standards Development**
  - Space Planning Criteria
  - Room by Room Equipment & Building Criteria
  - Capital Project Cost Modeling
- **System Network Planning**
  - Multiple Facility Workload and Resource Modeling
  - System Priority Criteria Facilitation
  - System Capital Program Management

Project Management

- **Owner Management**
  - User Coordination
  - Leadership & Hospital Project Communication
  - Owner-Provided Building System Coordination
  - Owner-Provided Building System Procurement
  - Budget Management & Maintenance
  - Schedule Management & Maintenance
  - Transition & Occupancy Services
  - Get Ready Project Management
- **Design Team Management**
  - AE Selection
  - AE Negotiation & Contract Coordination
  - Vendor Design Coordination & Management
  - Design Process & Schedule Management
  - City, State & Code Review Oversight
  - Construction Cost Management
  - AE Contract Management
- **Contractor Management**
  - Contractor Selection
  - Contractor Negotiation & Contract Coordination
  - Vendor Installation Coordination and Management
  - Construction Process & Schedule Management
  - City, State & Code Inspection Oversight
  - Construction Cost & Change Management
  - Contractor Contract Management

Implementation

5

Experience The Innova Group

Diversity of Expertise; Depth of Knowledge

For-Profit Hospitals
Not For-Profit Hospitals
Academic Medical Centers
Department of Defense
Indian Health Service
Veterans Affairs
International Clients

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Experience

The Innova Group

IHS/Tribal/Urban

- Health Services Master Plans
- Facility Master Plans
- Joint Ventures
- PJD/PORs
- National Urban Needs Assessment
- New Tribes Supportable Services
- Strategy for Healthcare Delivery
- Regional Planning

Lake County Health Clinic
Lakeport, California
- Workload Forecasting
- Staff Forecasting
- Space Forecasting
- Master Planning

9 IHS Area Health Services Master Plans
331 Primary Service Area Plans - Quantified Need for…
- 1,152,520 Users
- 12.9 million square feet (sf)
- 1.3 billion new construction dollars
- 33.5 thousand needed staff
- 1.4 billion contract health dollars

Kayenta Health Center
Kayenta, Arizona
- Program Review
- Site Master Planning
- Facility Master Planning
- Schematic Design
- Equipment Planning

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Project

Review of Critical Path

Existing Materials/Data Review and Discussion Guide Development

January 5, 2012 — **Kick-Off Meeting**
- *Discussion and Identification of Guiding Assumptions and Data Requirements*

Concept Development: Strategic Concept Development (Regional Centers – one of which could be Area Wide Medical Center), Data Review

August 14, 2012 — **Services Concept Meeting**
- *Review Regional Centers and Area Wide Medical Center Concepts, Services, and Guiding Assumptions*

November 14, 2012 — **CATAC and Health Program Directors Meeting**

Concept Refinement: Implement Considerations and Edits from Meetings and Update documentation accordingly

November 2012 — **Pre-Final Concept Review Conference Call**
- *Review Updated Concepts, Services and Guiding Assumptions*

December 2012 — **Revise and Publish Final Documentation**

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Experience

The Innova Group

Regional Planning

Portland Area

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8

Why?

The Need for Regional Care

- What is the motivation for a Regional Center?
- What services would most stretch Contract Health dollars if implemented at appropriate regional locations?

- Colonoscopy suite
- Women's Ob/Gyn outpatient type surgeries
- Orthoscopic surgeries, (knee)
- Oral Surgery
- Pediatric dentistry
- Endodontic
- preventive care,
- chronic conditions

- Regional Analysis was not part of the California Area Health Services Master Plan.
- The 2005 California Area Health Services Master Plan projected a total CHS $ demand of $299 million (vs. current funded $15 million)

$299m – $15m = -$284m

- From the local service areas' perspective, which services are most desired at a regional location?

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Project Review

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9

How does Regional Care happen?

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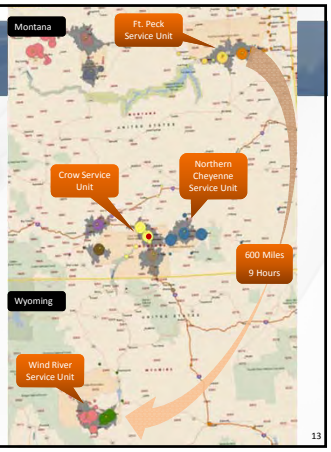
12

Concept

- Regional Services are based on discrete population assignment
  - ***One*** Primary Service Area (PSA)
  - ***One or more*** Extended Service Areas (ESA)
  - ***One*** Facility
- This example: Crow/Northern Cheyenne Hospital, Billings Area

Like Chico to San Diego, with Regional Care in Bakersfield…



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13

Concept

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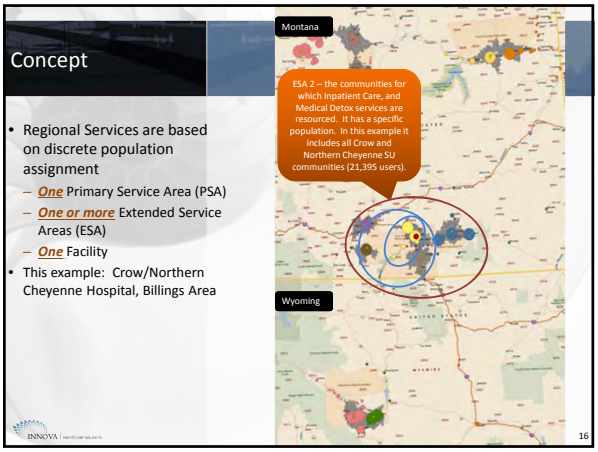

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Concept

- Regional Services are based on discrete population assignment
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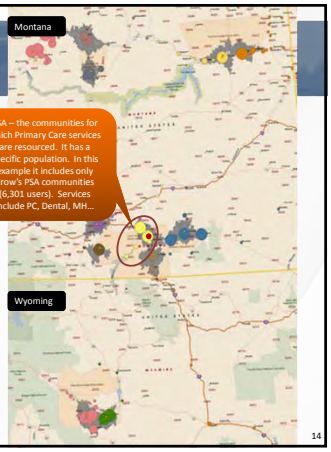

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14

Concept

- Regional Services are based on discrete population assignment
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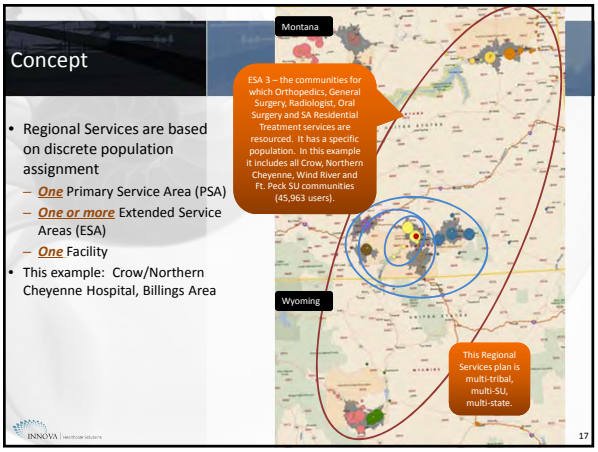

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Concept

- Regional Services are based on discrete population assignment
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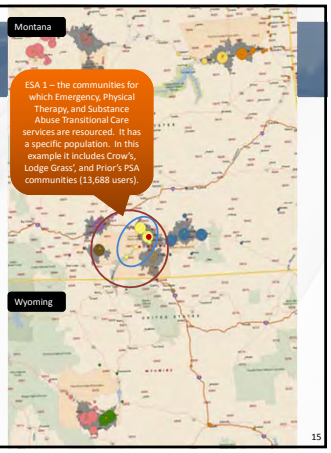

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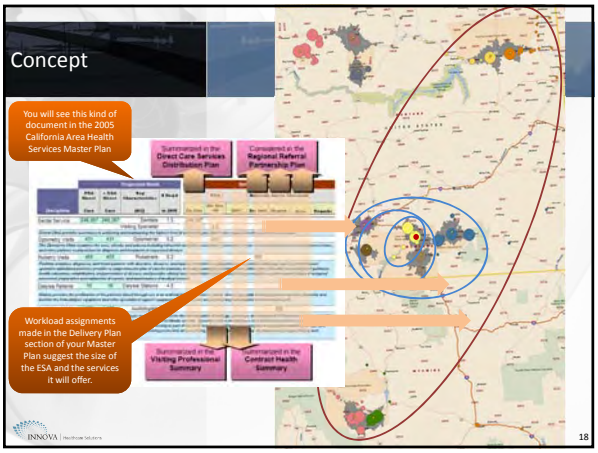
Concept



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Remember this…

Guiding Principle

- *Building Users Increases Supportable Services.*
- *So the more people that can be grouped together for Regional Care, the more services they will be able to access at their designated point of care!*

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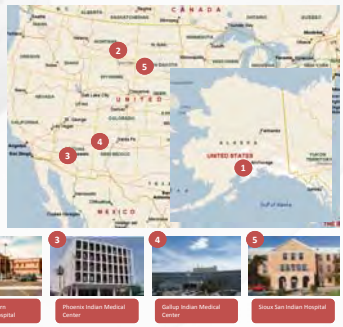
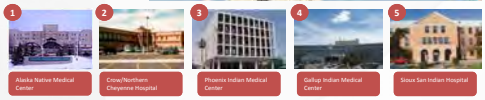
What?

Differs from Existing IHS Regional Care

Existing Regional Care

- Based on Primary Care
- Reservation Based
- Governance
- Effectiveness





Alaska Native Medical Center | Crow/Northern Cheyenne Hospital | Phoenix Indian Medical Center | Gallup Indian Medical Center | Sioux San Indian Hospital

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Critical Questions

- **What?**
- **Who?**
- **Where?**

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Who?

Who should Regional Care planned for?

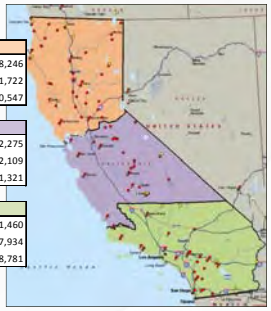
Populations

- Options: User, Service, Census
- Significant variance between the options
- Users were selected because they provide the most reliable, non-speculative planning base
- A projection year of 2030 was originally considered, but 2025 was agreed upon

North – 2030	
Projected Users	58,246
Projected Service Pop.	81,722
Projected Census Pop.	90,547

Central – 2030	
Projected Users	22,275
Projected Service Pop.	42,109
Projected Census Pop.	101,321

South – 2030	
Projected Users	31,460
Projected Service Pop.	107,934
Projected Census Pop.	158,781



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What?

Workgroup Defined a Regional Center

What It Is Not…

- No Primary Care
- No Emergency Care
- No Deliveries
- Not a "Walk In" Center for Local AI/ANs

What It Is…

- Specialty Care
- Ambulatory Surgery
- Tele-Medicine
- Overnight Stays
- Acute Care/Inpatient
- Short Stay
- Referrals Only

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Where?

Location Factors

Factors in Consideration

- Comments from 2005 HSMP regarding locations and willingness to travel
- User Population distribution
- Accessibility
- Geographic Realities
- Availability of Tertiary Care Support
- Population Centers
- Travel tolerances

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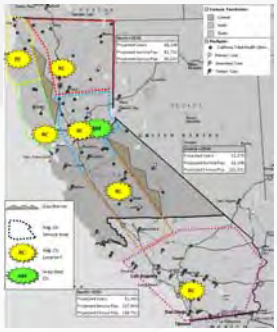
Where? We Conceptualized 6 Locations

Conceptual Locations

- We ended the first meeting with a visual assumption of what Regional Services Delivery might look like
  - North West RC
  - North Central RC
  - North East RC
  - Central RC
  - South Central RC
  - South RC
  - Central AWMC



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BUT… Who + Where = Market Share

Not everyone will travel to distant regional care… even if its free!

"Regional Magic" starts ≈ 30,000 Users

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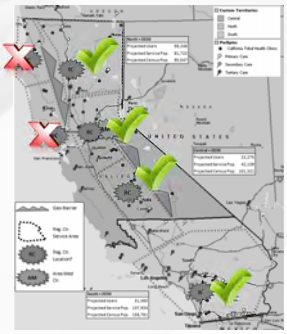
Where? Then We Tested the Concept

Testing & Reduction

- Developed population alignment scenarios to test validity of 6 regional sites
- Revealed critical mass not present at all 6 regional sites
- Revised 6 sites to 4 sites
- Developed 3 regional services scenarios
  - 4 Centers (include AWMC)
  - 3 Centers (include AWMC)
  - 2 Centers (include AWMC)



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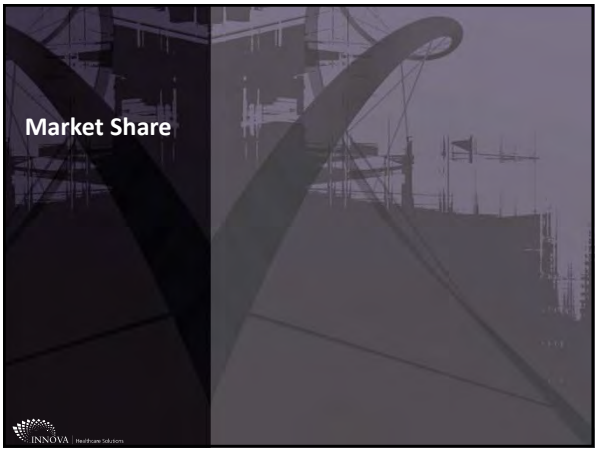
Market Share



Where? 3 Scenarios of Regional Care at 4, 3, or 2 Locations

See Handout

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Market Share Critical Questions

Market Share Projection Tool projects answers to the following critical questions:

1. *Who is truly reliant on "free", distant regional care?*
   - Source Data: Payer Profiles
2. *Who will be reliant after Reform?*
   - Source Data: Estimated AI/ANs shifting to Medicaid
3. *Who will drive to a distant Regional Center (How far is Regional Care)?*
   - Mapping Software identifying travel times to RC/AWMC from SU
4. *Who will select alternative care (How many alternative points of secondary care are en route)?*
   - State/AMA data on Secondary Care Sites by city
5. *Who can be directed (Can you direct distinct segments of your payers)?*
   - Medicaid and CHS users / Area Planning Workgroup

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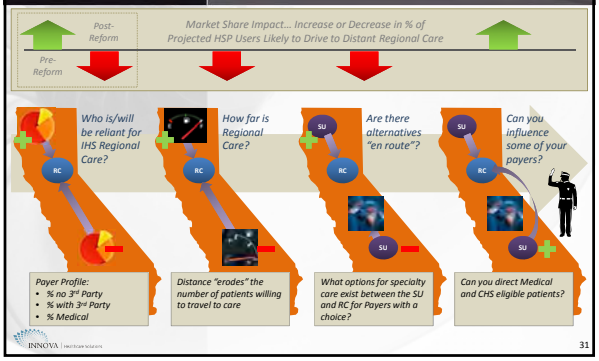
Market Share — Critical Questions



Market Share — Assumptions Review

- *Assumptions Review*
  - *Market Share Assumptions*
    - *High MS was utilized*
    - *9.4% of AI/ANs in Medicaid*
    - *Reform will reduce Medicaid Payors -43%*
    - *User Pop will erode -4% every 60 miles*
    - *User Pop will erode -10-20% per Alternative Care Opportunity, depending on payor*
    - *100% of Medi-cal and Direct Care/CHS only patients can be directed to Regional Care*
  - *Services Assumptions*
    - *High Telemed Impact for Appropriate Specialty Care (80% of typically eroded volumes are "returned")*

The Assumptions "Dials" are currently set at…

Market Share — Remember?

Why Consider Market Share?

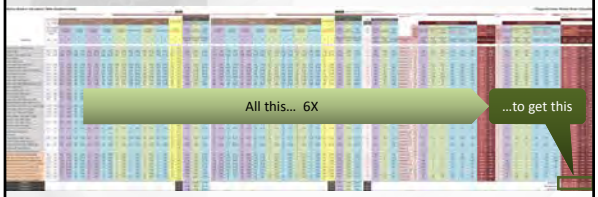
- Because if you build it far away…, they will not all come
- Because increased population drives increased direct care services
- Because decreased population diminishes direct care services
- Because IHS doesn't historically support an operational concept that excludes primary care

"Regional Magic" starts ≈ 30,000 Users

Regional Centers Scenarios & Services

Market Share — Calculated…

36 Discrete Market Shares were calculated to support 6 different Regional Scenarios scenarios



Example: the "3 Center OP with AWMC" Scenario required creating 8 Market Share Percentages to consider in projecting Regional populations which drive Regional services

- Redding (High Market Share = 93.5%, Low Market Share = 78.6%)
- Temecula (High Market Share = 98.4%, Low Market Share = 91.4%)
- Sacramento (High Market Share = 94.7%, Low Market Share = 78.2%)
- Sacramento Area Wide Care (High Market Share = 88.7%, Low Market Share = 65.9%)

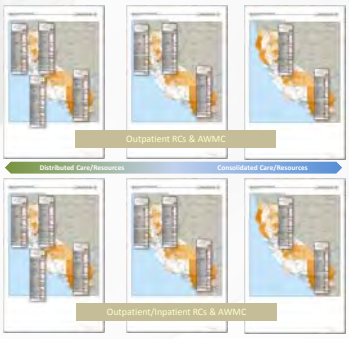
The High MS was utilized

Services — Tools

- IHS has no integrated Regional Services delivery planning tool
  - Utilized the HSP with modified user populations as per appropriate market share and workload overrides where appropriate (created multiple files per site to allow market share and Telemed sensitivity)
  - Utilized the RRM with customized inputs relative to populations and staffing
  - Utilized Innova Proprietary Health Services Planning Tool with added functionality for projecting:
    - Dental Specialty Care
    - Telemed Impact (by Line of Care)
    - Short Stay/Observation
    - Pain Management
  - All projections are to the year 2025

Services — Six Scenarios

- There are six maps around the room, each detailing the services and resources for regional care by scenario by location
- These maps will be available for your viewing throughout the day and after
- In order to understand the benefits of one over another, let's consider a one page summary



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Scenarios — What is the right answer?

- OP4
  - Four Outpatient facilities (one of which is an Area Wide Medical Center) are the least expensive to build and operate. But they do not provide robust specialty care.
- IP4
  - Four Inpatient facilities create the most resources. But they are the most expensive to build and operate, and do not use resources efficiently.
- OP2
  - Two Outpatient facilities (one of which is an Area Wide Medical Center) balances efficient use of space with efficient delivery of care. However, users must drive further to such centers.

… Let's look at the problem from the aspect of total demand met and the potential to reduce the CHS burden for local service areas

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Services — Key Characteristics by Scenario

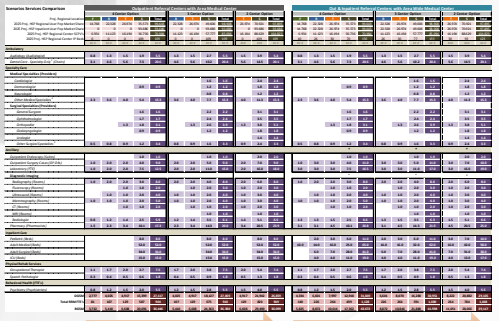
Please consult the hard copy provided

3 OP scenarios are shown (with 1 Medical Center)

3 IP scenarios are shown

Gaps in services (white space) disappear as populations grow and number of centers shrink

See Handout



Growing Population = Fewer Gaps in Services

Growing Population = Fewer Gaps in Services

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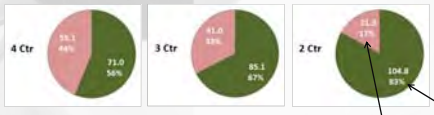
Scenarios — Specialty Care Demand Addressed by Scenario

- Unmet total California Specialty Care Demand *increases dramatically* as resources are distributed

Scenario	Met Specialty Visits (in Thousands)	Met Specialty Visits (% Total)	Unmet Specialty Visits (in Thousands)	Unmet Specialty Visits (% Total)	Total (in Thousands)
4 Center	71.0	56%	55.1	44%	126.1
3 Center	85.1	67%	41.0	33%	126.1
2 Center	104.8	83%	21.3	17%	126.1



- With 2 locations 83% of demand is satisfied "on-site". With 4 locations only 56% of demand is satisfied "on-site". When unmet need is converted to CHS $$ the story is slightly worse…

Pie shade represents unserved demand. Visits in thousands, % is of total demand

Pie shade represents served demand. Visits in thousands, % is of total demand

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Criteria — What is the right answer?

That depends on your primary aim!

		OP Scenarios with AWMC			OP/IP Scenarios		
		OP4	OP3	OP2	IP4	IP3	IP2
Resources	1 Number of Beds	109	109	109	137	134	123
	2 Number of Staff	904	910	949	1,128	1,083	1,048
	3 Number of Specialty Care Provider Vists	70,984	85,094	104,823	70,984	85,094	104,823
	4 Building Gross Sqaure Meters	36,446	36,380	36,099	42,672	41,613	36,117
Costs	5 Construction Cost (millions)	$162.69	$166.48	$173.12	$222.32	$214.24	$199.65
	6 Project Cost (millions)	$208.10	$214.19	$222.97	$281.02	$272.63	$255.38
	7 Operational Cost (millions)	$119.82	$121.70	$127.92	$137.14	$135.08	$135.10
	8 Annual Cost (Millions)	$131.73	$134.07	$140.81	$152.94	$150.56	$149.72
Metrics	9 Specialty Care Provider Vists per OP User Pop	0.69	0.83	1.02	0.69	0.83	1.02
	10 IP Pop per Bed	860	860	860	733	727	756
	11 Construction Cost per Bed (millions)	$1.49	$1.53	$1.59	$1.62	$1.60	$1.62
	12 Project Cost per Bed (millions)	$1.91	$1.97	$2.05	$2.05	$2.03	$2.08
	13 Annual Cost per Bed (millions)	$1.21	$1.23	$1.29	$1.12	$1.12	$1.22
	14 Annual Cost per Specialty Care Provider Visit	$1,856	$1,576	$1,343	$2,155	$1,769	$1,428
	15 Proj. Cost per Specialty Care Provider Visit	$2,932	$2,517	$2,127	$3,959	$3,204	$2,436

Yellow highlighting identifies highest answer per criteria per scenario, blue identifies lowest

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Scenarios — Specialty Care Costs Addressed by Scenario

- The burden of CHS dollars on local Service Areas also *increases dramatically* as resources are distributed

Scenario	CHS Value of Met Specialty Visits (in Millions)	CHS Value of Met Specialty Visits (% Total)	CHS Value of Unmet Specialty Visits (in Millions)	CHS Value of Unmet Specialty Visits (% Total)	Total (in Millions)
4 Center	$ 12.5	52%	$ 11.4	48%	23.9
3 Center	$ 15.4	65%	$ 8.5	35%	23.9
2 Center	$ 19.6	82%	$ 4.3	18%	23.9

- With 2 locations 82% of potential CHS costs to local service areas are avoided. With 4 locations only 52% of potential CHS costs are avoided.
- The difference is about -$7.1m annually.

CHS Costs calculated by volumes x per encounter costs from national data set

Pie shade represents unserved demand. $$ in millions, % is of total demand

Pie shade represents served demand. $$ in millions, % is of total demand

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Scenarios

Acute Care Demand Addressed by Scenario

- Unmet total California Acute Care Demand *decreases slightly* as resources are distributed

- With 4 locations 86% of demand is satisfied "on-site". With 2 locations 84% of demand is satisfied "on-site". With 1 AWMC 81% of demand is satisfied "on-site". BUT…

Pie shade represents unserved demand. Bed Days in thousands, % is of total demand

Pie shade represents served demand. Bed Days in thousands, % is of total demand

Scenarios

Distribution vs. Consolidation Proximity vs. Services

Dispersing Specialty Care may cost -$7.1m annually…

Dispersing Acute Care may save +$2.7m annually

-$4.4m

The net annual CHS impact for dispersing care to 4 locations (just considering Specialty and Acute Care)

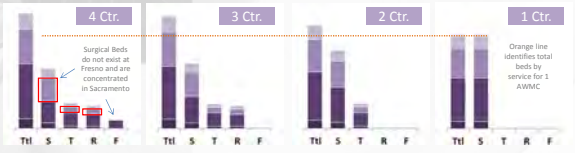
It's a balancing act. What's more important?

Scenarios

Acute Care Demand Addressed by Scenario

- Sacramento always has a disproportionate share of beds, especially surgical, ICU and pediatric
- While Fresno, has only medical beds

Ttl = Total
S = Sacramento
T = Temecula
R = Redding
F = Fresno



- So although the 4 center scenario provides the most total beds, the higher acuity beds are concentrated in Sacramento
- High acuity patients (especially surgical) will likely need to drive to Sacramento regardless of the selected scenario

ICU
Surg
Med
Peds

Scenarios

Distribution vs. Consolidation Proximity vs. Services

*You can **disperse** services toward remote populations, creating the demand for more space that may cost less…*

But…

*…the quality of services you deliver is **diminished** and fails to substantively address demand or remove the CHS burden from local service areas*

*You can **consolidate** services away from remote populations, creating the demand for less space that may cost more…*

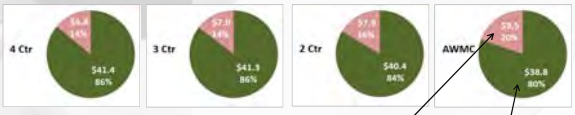
But…

*…the quality of services you deliver is **enhanced** and more successfully addresses demand, thereby removing the CHS burden from local service areas.*

Scenarios

Acute Care Costs Addressed by Scenario

- The burden of CHS dollars on local Service Areas from California Acute Care Demand also *decreases slightly* as resources are distributed



- With 1 location 80% of potential CHS costs to local service areas are avoided. With 2 locations 84%… With 4 locations 86% of CHS costs are avoided.
- The difference is about +$2.7m annually.

Pie shade represents unserved demand. $$ in millions, % is of total demand

Pie shade represents served demand. $$ in millions, % is of total demand

CHS Costs calculated by volumes x per encounter costs from national data set

Path Forward

Path Forward — Scenario Questions

- Which scenario provides *the services* that California Natives need most?
- Which scenario *best addresses the total demand* of the services that California Natives need most?
- Which scenario offers the *greatest likelihood of implementation* (IHS approval, Tribal approval, IHS funding, etc.)?
- Which scenario offers the *best first step* to serve the needs of all California Natives should the second step be delayed or never funded?
- Are there *other considerations* that should drive selection of the best scenario?

Path Forward — Schedule

Existing Materials/Data Review and Discussion Guide Development

January 5, 2012 — **Kick-Off Meeting**
- *Discussion and Identification of Guiding Assumptions and Data Requirements*

Concept Development: Strategic Concept Development (Regional Centers – one of which could be Area Wide Medical Center), Data Review

August 14, 2012 — **Services Concept Meeting**
- *Review Regional Centers and Area Wide Medical Center Concepts, Services, and Guiding Assumptions*

November 14, 2012 — **CATAC and Health Program Directors Meeting**

Concept Refinement: Implement Considerations and Edits from Meetings and Update documentation accordingly

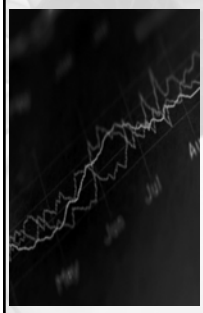
November 2012 — **Pre-Final Concept Review Conference Call**
- *Review Updated Concepts, Services and Guiding Assumptions*

December 2012 — **Revise and Publish Final Documentation**

Path Forward — Project Questions

- *What questions do you have about the process?*
- *What questions do you have about the scenarios?*
- *Which scenario represents the best planning solution for California at this time?*
- *Is anything missing from the analysis that you feel would increase the success of this effort?*

Thank You



For questions related to ongoing project efforts please contact us at

520-886-8650

or…

John.temple@theinnovagroup.com
Anthony.laird@theinnovagroup.com

Path Forward — Next Steps

1. Gather Feedback
2. Discuss with Area Leadership
3. Edit Plan
4. Pre-Final Report
5. Final Edits
6. Final Report

Supplemental Slides

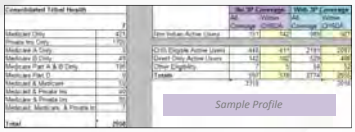
Market Share — Payer Profile

- Who Is Reliant on Regional Care?
  - Data provided by CA IHS
  - Not available for all SUs
  - Cannot filter 3rd Party table by AI/AN only
    - Medicaid numbers include Non Indian Users
  - Other Eligibility not considered

☑ Yes!

Assumptions

- Utilized Data available and applied toward all population totals (69.1% of SUs available)
- Applied a statewide AI/AN Medicaid % to identify population currently enrolled (9.4% vs. 12.2% for RSB)



- CHS Eligible Users with 3rd Party Coverage ranged from 0% to 89% (Average is 31.5%, urban AI/ANs included)
- Direct Care Only Users with 3rd Party Coverage ranged from 0% to 62% (Average is 27.4%, urban AI/ANs included)
- 64% of AI/AN Users have a 3rd Party Payer of some kind

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Market Share — Alternative Care

- Are There Alternatives "en Route"?
  - This erosion affects patients with a choice
  - Alternative secondary and tertiary sites were mapped by city/town (multiples in one city were treated as one option)
  - Most direct route from SU to RC was mapped and number of AC sites were noted
  - 3 options/choices were most allowed (maximum erosion allowed)

☑ Yes!

Assumptions

Alternative Care
Using Consolidated Tribal Health as an example, the most direct route to RC at Sacramento would take them past one (1) alternative care site.

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Market Share — Payer Profile Post Reform

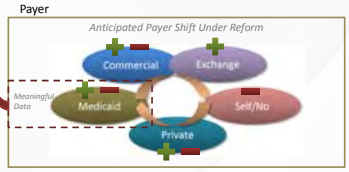
- Who Will Be Reliant on Regional Care?
  - There will be movement across all payer segments
    - Self/No Pay will only decline
    - Exchange will only increase
    - The others are hard to discretely track

☑ Yes!

Assumptions

- Medicaid is the only payer segment shift that can be anticipated with available data
- UCLA Center for Health Policy Research Survey projects as many as 43% non-elderly California AI/ANs will become eligible for Medicaid coverage under reform
- This represents a 43% increase in projected Medicaid payers, or a 57% retention of SU users with No 3rd Party Payer

Anticipated Payer Shift Under Reform



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Market Share — Directing Medi-cal/CHS

- Can You Influence Some of Your Population?
  - Potential erosion of patients could be limited through "mandatory" direction to distant RC
  - This would affect two (2) payer segments
    - Direct Care, CHS without 3rd Party Coverage
    - Direct Care, CHS with Medi-cal Coverage
  - This is something Portland felt to be a reliable assumption

☑ Yes!

Assumptions

Limiting Erosion by Directing CHS Patients
Directing CHS patients without 3rd party coverage could limit a potential 30% erosion for this factor alone. Can you do this? Is this a reasonable assumption?

Limiting Erosion by Directing Medical Patients
Directing Medical patients could limit a potential 60% erosion for this factor alone. Can you do this? Is this a reasonable assumption?

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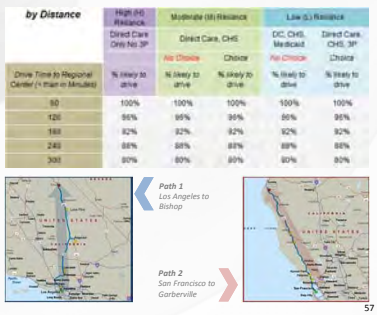
Market Share — Distance

- How Far is Regional Care?
  - Research shows patients are deterred from seeking care when distance increases (quantifying that is difficult)
  - Created 2 California "urban-to-rural" paths and studied inpatient state data and Dartmouth Atlas data
  - Blended results suggest a 4% erosion for every 60 miles of travel
  - Patient choice was treated as a separate issue

☑ Yes!

Assumptions



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Four Regional Centers

Extended Drive Time (3 Hours +)

User Populations are HSP 2011 and assume 100% market share . Green shading indicates PSAs within travel time. Pink shading identifies PSAs outside travel time. Gray shading identifies Urban Programs. **Concept distributes regional care to most PSAs but scope of services is diminished for many PSA populations.**

Regional Center 1	**20,008**	**Redding**			
Greenville Rancheria	1,204	Hoopa	2,850		
Modoc	190	Karuk	1,931		
Pit River	916	United Indian Health Svc	7,898		
Quartz Valley	211	Warner Mountain	126		
Redding Rancheria	3,609				
Susanville Rancheria	1,073				
PSA Pop w/in Travel Time	**7,203**	**PSA Pop o/s Travel Time**	**12,805**	**Urban HSP User Pop**	**0**

Regional Center 2	**31,865**	**Sacramento**			
Chapa De	6,576	Round Valley	1,199	Sacramento Native American HC	1,341
Chicken Ranch	28			Native American HC (Oakland)	1,484
Colusa IHCC	129			Indian HC of San. Clara Valley (San Jose)	642
Consolidated	2,806			Fresno American Indian Health Proj.	4
Feather River	4,751				
Lake County	2,090				
MACT	1,915				
Northern Valley	2,309				
Shingle Springs	1,112				
Sonoma County	5,248				
Tuolumne Me-Wuk	231				
PSA Pop w/in Travel Time	**27,195**	**PSA Pop o/s Travel Time**	**1,199**	**Urban HSP User Pop**	**3,471**

Regional Center 3	**10,480**	**Fresno**			
Central Valley	4,737	Toiyabe	2,790		
Table Mountain	5				
Tejon Tribe	372				
Tule River	2,576				
PSA Pop w/in Travel Time	**7,690**	**PSA Pop o/s Travel Time**	**2,790**	**Urban HSP User Pop**	**0**

Regional Center 4	**24,813**	**Temecula**			
Cabazon Band	7	Santa Ynez	988	American Indian HSC (Santa Barbara)	313
Indian Health Council	4,691			San Diego American Indian HC	1,843
Riverside/San Bernardino	13,391			Bakersfield American Indian Health Proj.	280
Southern IHC	2,725			United American Indian Involvement (LA)	338
Sycuan Band	126			American Indian Free Clinic (Los Angeles)	111
PSA Pop w/in Travel Time	**20,940**	**PSA Pop o/s Travel Time**	**988**	**Urban HSP User Pop**	**2,885**

Total PSA Pop w/in TT	**63,028**	**Total PSA Pop o/s TT**	**17,782**	**Total Urban HSP User Pop**	**6,356**
% of 2011 Users	**72.3%**	**% of 2011 Users**	**20.4%**	**% of 2011 Users**	**7.3%**

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Three Regional Centers

Extended Drive Time (3 Hours +)

User Populations are HSP 2011 and assume 100% market share . Green shading indicates PSAs within travel time. Pink shading identifies PSAs outside travel time. Gray shading identifies Urban Programs. **Concept moderates distribution of Regional Care to PSAs while providing true specialty care in Sacramento.**

Regional Center 1	**20,008**	**Redding**			
Greenville Rancheria	1,204	Hoopa	2,850		
Modoc	190	Karuk	1,931		
Pit River	916	United Indian Health Svc	7,898		
Quartz Valley	211	Warner Mountain	126		
Redding Rancheria	3,609				
Susanville Rancheria	1,073				
PSA Pop w/in Travel Time	**7,203**	**PSA Pop o/s Travel Time**	**12,805**	**Urban HSP User Pop**	**0**

Regional Center 2	**41,973**	**Sacramento**			
Central Valley	4,737	Round Valley	1,199	Sacramento Native American HC	1,341
Chapa De	6,576	Toiyabe	2,790	Native American HC (Oakland)	1,484
Chicken Ranch	28	Tule River	2,576	Indian HC of San. Clara Valley (San Jose)	642
Colusa IHCC	129			Fresno American Indian Health Proj.	4
Consolidated	2,806				
Feather River	4,751				
Lake County	2,090				
MACT	1,915				
Northern Valley	2,309				
Shingle Springs	1,112				
Sonoma County	5,248				
Table Mountain	5				
Tuolumne Me-Wuk	231				
PSA Pop w/in Travel Time	**31,937**	**PSA Pop o/s Travel Time**	**6,565**	**Urban HSP User Pop**	**3,471**

Regional Center 3	**25,185**	**Temecula**			
Cabazon Band	7	Santa Ynez	988	American Indian HSC (Santa Barbara)	313
Indian Health Council	4,691			San Diego American Indian Health Center	1,843
Riverside/San Bernardino	13,391			Bakersfield American Indian Health Proj.	280
Southern IHC	2,725			United American Indian Involvement (LA)	338
Sycuan Band	126			American Indian Free Clinic (Los Angeles)	111
Tejon Tribe	372				
PSA Pop w/in Travel Time	**21,312**	**PSA Pop o/s Travel Time**	**988**	**Urban HSP User Pop**	**2,885**

Total PSA Pop w/in TT	**60,452**	**Total PSA Pop o/s TT**	**20,358**	**Total Urban HSP User Pop**	**6,356**
% of 2011 Users	**69.4%**	**% of 2011 Users**	**23.4%**	**% of 2011 Users**	**7.3%**

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Two Regional Centers

Extended Drive Time (3 Hours +)

User Populations are HSP 2011 and assume 100% market share . Green shading indicates PSAs within travel time. Pink shading identifies PSAs outside travel time. Gray shading identifies Urban Programs.
Concept reduces access for some PSA pops but offers the most regional services for populations.

Regional Center 1	**61,981**	**Sacramento**			
Central Valley	4,737	Hoopa	2,850	Sacramento Native American HC	1,341
Chapa De	6,576	Karuk	1,931	Native American HC (Oakland)	1,484
Chicken Ranch	28	Round Valley	1,199	Indian HC of San. Clara Valley (San Jose)	642
Colusa IHCC	129	Toiyabe	2,790	Fresno American Indian Health Proj.	4
Consolidated	2,806	Tule River	2,576		
Feather River	4,751	United Indian Health Svc	7,898		
Lake County	2,090	Warner Mountain	126		
MACT	1,915	Greenville Rancheria	1,204		
Northern Valley	2,309	Modoc	190		
Redding Rancheria	3,609	Pit River	916		
Shingle Springs	1,112	Quartz Valley	211		
Sonoma County	5,248	Susanville Rancheria	1,073		
Table Mountain	5				
Tuolumne Me-Wuk	231				
PSA Pop w/in Travel Time	**35,546**	**PSA Pop o/s Travel Time**	**22,964**	**Urban HSP User Pop**	**3,471**

Regional Center 2	**25,185**	**Temecula**			
Cabazon Band	7	Santa Ynez	988	American Indian HSC (Santa Barbara)	313
Indian Health Council	4,691			San Diego American Indian HC	1,843
Riverside/San Bernardino	13,391			Bakersfield American Indian Health Proj.	280
Southern IHC	2,725			United American Indian Involvement (LA)	338
Sycuan Band	126			American Indian Free Clinic (Los Angeles)	111
Tejon Tribe	372				
PSA Pop w/in Travel Time	**21,312**	**PSA Pop o/s Travel Time**	**988**	**Urban HSP User Pop**	**2,885**

Total PSA Pop w/in TT	**56,858**	**Total PSA Pop o/s TT**	**23,952**	**Total Urban HSP User Pop**	**6,356**
% of 2011 Users	**65.2%**	**% of 2011 Users**	**27.5%**	**% of 2011 Users**	**7.3%**

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F Fresno R Redding T Temecula S Sacramento

Scenarios Services Comparison

	Outpatient Referral Centers with Area Medical Center												Out & Inpatient Referral Centers with Area Wide Medical Center											
	4 Center Option					3 Center Option				2 Center Option			4 Center Option					3 Center Option				2 Center Option		
Proj. Regional Location	F	R	T	S	Total	R	T	S	Total	T	S	Total	F	R	T	S	Total	R	T	S	Total	T	S	Total
2025 Proj. HSP Regional User Pop Market Share	14,768	22,328	26,974	35,573	99,643	22,328	26,974	49,606	98,908	26,974	70,921	97,895	14,768	22,328	26,974	35,573	99,643	22,328	26,974	49,606	98,908	26,974	70,921	97,895
2025 Proj. HSP Inpatient User Pop Market Share	0	0	0	93,686	93,686	0	0	93,686	93,686	0	93,686	93,686	14,768	22,328	26,974	35,573	99,643	22,328	26,974	49,606	98,908	26,974	70,921	97,895
2025 Proj. HSP Regional Center SCPV's	6,931	11,123	16,194	36,736	70,984	11,123	16,194	57,777	85,094	16,194	88,629	104,823	6,931	11,123	16,194	36,736	70,984	11,123	16,194	57,777	85,094	16,194	88,629	104,823
2025 Proj. HSP Regional Center IP Beds	0	0	0	109	109	0	0	109	109	0	109	109	10	26	30	70	136	26	30	77	133	30	93	123
	KC #	KC #	KC #	KC #	KC #	KC #	KC #	KC #	KC #	KC#	KC#	KC #	KC #	KC #	KC #	KC #	KC #	KC #	KC #	KC #	KC #	KC#	KC#	KC #
Ambulatory																								
Audiology (Audiologist)	0.8	1.3	1.5	1.9	5.5	1.3	1.5	2.7	5.5	1.5	3.9	5.4	0.8	1.3	1.5	1.9	5.5	1.3	1.5	2.7	5.5	1.5	3.9	5.4
Dental Care - Specialty Only [1] (Chairs)	3.1	4.6	5.6	7.3	20.6	4.6	5.6	10.2	20.4	5.6	14.5	20.1	3.1	4.6	5.6	7.3	20.6	4.6	5.6	10.2	20.4	5.6	14.5	20.1
Specialty Care																								
Medical Specialties (Providers)																								
Cardiologist								1.6	1.6		2.4	2.4								1.6	1.6		2.4	2.4
Dermatologist				0.9	0.9			1.2	1.2		1.8	1.8				0.9	0.9			1.2	1.2		1.8	1.8
Neurologist								0.8	0.8		1.2	1.2								0.8	0.8		1.2	1.2
Other Medical Specialists [2]	2.3	3.6	4.0	5.4	15.3	3.6	4.0	7.7	15.3	4.0	11.3	15.3	2.3	3.6	4.0	5.4	15.3	3.6	4.0	7.7	15.3	4.0	11.3	15.3
Surgical Specialties (Providers)																								
General Surgeon				1.6	1.6			2.2	2.2		3.1	3.1				1.6	1.6			2.2	2.2		3.1	3.1
Ophthalmologist				1.7	1.7			2.4	2.4		3.5	3.5				1.7	1.7			2.4	2.4		3.5	3.5
Orthopedist			1.3	1.8	3.1		1.3	2.6	3.9	1.3	3.8	5.1			1.3	1.8	3.1		1.3	2.6	3.9	1.3	3.8	5.1
Otolaryngologist				0.9	0.9			1.2	1.2		1.8	1.8				0.9	0.9			1.2	1.2		1.8	1.8
Urologist											1.4	1.4											1.4	1.4
Other Surgical Specialists [3]	0.5	0.8	0.9	1.2	3.4	0.8	0.9	1.6	3.3	0.9	2.4	3.3	0.5	0.8	0.9	1.2	3.4	0.8	0.9	1.6	3.3	0.9	2.4	3.3
Ancillary																*				*			*	
Outpatient Endoscopy (Suites)				1.0	1.0			1.0	1.0		2.0	2.0				1.0	1.0			1.0	1.0		2.0	2.0
Outpatient Surgery Cases (OP ORs)	1.0	2.0	2.0	4.0	9.0	2.0	2.0	5.0	9.0	2.0	7.0	9.0	1.0	3.0	3.0	4.0	11.0	3.0	3.0	5.0	11.0	3.0	7.0	10.0
Laboratory (FTE)	1.0	2.0	2.0	7.5	12.5	2.0	2.0	11.0	15.0	2.0	16.0	18.0	3.0	3.0	3.0	7.5	16.5	3.0	3.0	11.0	17.0	3.0	16.0	19.0
Diagnostic Imaging																*				*			*	
Radiography (Rooms)	1.0	2.0	2.0	3.0	8.0	2.0	2.0	4.0	8.0	2.0	6.0	8.0	1.0	2.0	2.0	3.0	8.0	2.0	2.0	4.0	8.0	2.0	6.0	8.0
Fluoroscopy (Rooms)			1.0	1.0	2.0		1.0	2.0	3.0	1.0	2.0	3.0			1.0	1.0	2.0		1.0	2.0	3.0	1.0	2.0	3.0
Ultrasound (Rooms)		1.0	1.0	2.0	4.0	1.0	1.0	2.0	4.0	1.0	3.0	4.0		1.0	1.0	2.0	4.0	1.0	1.0	2.0	4.0	1.0	3.0	4.0
Mammography (Rooms)	1.0	1.0	1.0	2.0	5.0	1.0	1.0	2.0	4.0	1.0	3.0	4.0	1.0	1.0	1.0	2.0	5.0	1.0	1.0	2.0	4.0	1.0	3.0	4.0
CT (Rooms)			1.0	1.0	2.0		1.0	1.0	2.0	1.0	2.0	3.0			1.0	1.0	2.0		1.0	1.0	2.0	1.0	2.0	3.0
MRI (Rooms)								1.0	1.0		1.0	1.0								1.0	1.0		1.0	1.0
Radiologist	0.8	1.2	1.4	2.5	5.9	1.2	1.4	3.5	6.1	1.4	5.1	6.5	1.3	1.3	1.5	2.5	6.6	1.3	1.5	3.5	6.3	1.5	5.1	6.6
Pharmacy (Pharmacists)	1.5	2.3	3.4	10.1	17.3	2.3	3.4	14.3	20.0	3.4	20.5	23.9	3.1	3.1	4.5	10.1	20.8	3.1	4.5	14.3	21.9	4.5	20.5	25.0
Inpatient Care																								
Pediatric (Beds)				8.0	8.0			8.0	8.0		8.0	8.0		2.0	3.0	6.0	11.0	2.0	3.0	6.0	11.0	3.0	7.0	10.0
Adult Medical (Beds)				52.0	52.0			52.0	52.0		52.0	52.0	10.0	14.0	16.0	25.0	65.0	14.0	16.0	32.0	62.0	16.0	42.0	58.0
Adult Surgical (Beds)				34.0	34.0			34.0	34.0		34.0	34.0		6.0	7.0	28.0	41.0	6.0	7.0	28.0	41.0	7.0	31.0	38.0
ICU (Beds)				15.0	15.0			15.0	15.0		15.0	15.0		4.0	4.0	11.0	19.0	4.0	4.0	11.0	19.0	4.0	13.0	17.0
Physical Rehab Services																								
Occupational Therapist	1.1	1.7	2.0	2.7	7.5	1.7	2.0	3.8	7.5	2.0	5.4	7.4	1.1	1.7	2.0	2.7	7.5	1.7	2.0	3.8	7.5	2.0	5.4	7.4
Speech Pathologist	0.3	0.4	0.5	0.6	1.8	0.4	0.5	0.9	1.8	0.5	1.3	1.8	0.3	0.4	0.5	0.6	1.8	0.4	0.5	0.9	1.8	0.5	1.3	1.8
Behavioral Health (FTE's)																								
Psychiatry (Psychiatrists)	0.8	1.2	1.5	2.0	5.5	1.2	1.5	2.8	5.5	1.5	4.0	5.5	0.8	1.2	1.5	2.0	5.5	1.2	1.5	2.8	5.5	1.5	4.0	5.5
Department Gross Square Meters (DGSM)	2,777	4,025	4,917	15,399	27,117	4,025	4,917	18,127	27,069	4,917	21,942	26,859	4,334	6,601	7,997	12,918	31,849	6,601	8,070	16,280	30,951	8,222	20,882	29,105
Total RRM FTE's	81	107	129	587	904	107	129	675	910	129	820	949	140	226	264	499	1,128	226	264	591	1,080	264	784	1,048
Building Gross Square Meters (BGSM)	3,732	5,410	6,608	20,696	36,446	5,410	6,608	24,363	36,380	6,608	29,490	36,099	5,825	8,872	10,614	17,362	42,672	8,872	10,846	21,880	41,598	11,051	28,066	39,117

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Draft Tribal Leaders Presentation

February 27, 2013,

Participant Contact Information

Name	Position/Team Role	Email	Phone
John Green			
Peter Masten Jr.			
Michael Thom			
Robert Marquez			
Silver Galleto			
Chris Devers			
Johnny Hernandez			
Teresa Sanchez			
John Temple	Vice President – The Innova Group	John.Temple@TheInnovaGroup.com	**520-886-8650**
Anthony Laird	Senior Medical Planner – The Innova Group	Anthony. Laird@TheInnovaGroup.com	**520-886-8650**

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California IHS Regional Centers Development

Draft Tribal Leaders Presentation

CATAC Meeting

Sacramento, California

February 27, 2013

California Area Indian Health Service

1

Project

Review of Critical Path

Schedule		Work Effort To Date
January 2012	Kick-Off Meeting	• Workgroup Input • Concept Definition • Data Acquisition • Population Alignment • Concept Development • Payer Analysis • Reform Impact • Travel/Access Patterns • payer Direction Conversation • Market Share Analysis • HSP Workload Projection • RRM Staffing Projection • Services Projections • Resource Requirements Definition • Scenarios Development • Scenarios Refinement • CHS Impact/Direct Care Analysis • Presentation/Report Update
August 2012	Services Concept Meeting	
November 2012	CATAC and Health Program Directors Meeting	
February 27, 2013	**Draft Tribal Leader Presentation**	
March 2013	Tribal Leader Presentation	

4

One Hour…

Agenda

9:30 am	Welcome & Firm Introduction
9:35 am	Project Review/Critical Path
9:40 am	Regional Care
	Why consider?
	What is it?
	How does it work?
	Where should it be located?
	Who should it be sized for?
	What concepts have been modeled?
	Which scenario is best?
10:30 am	Path Forward – Questions & Next Steps
11:15 am	Adjourn

2

There are many logical reasons

Why Consider Regional Care?

1) To provide California Natives secondary services currently not accessible
2) To provide California Natives secondary services free of charge
3) To stretch limited future CHS Dollars for California Health Programs
4) To close the gap between projected California CHS funding and projected demand
5) To respond to the requests of California Tribes regarding interest in Regional Care
6) To complete the continuum of care and eliminate current gaps in services for California Natives

But the most compelling reason is…..

5

Experience

The Innova Group

Clients

- For-Profit Hospitals
- Not For-Profit Hospitals
- Academic Medical Centers
- Department of Defense
- Veterans Affairs
- International Clients
- Indian Health Service
- Tribes – Nation Wide

- Health Services Master Plans
- Facility Master Plans
- Joint Ventures
- PJD/PORs
- National Urban Needs Assessment
- New Tribes Supportable Services
- Strategy for Healthcare Delivery
- Regional Planning

3

To provide something Important

An Appropriate Place

Imagine a healing place designed for California Natives…

- Culturally Appropriate
- Patient Sensitive
- Clinically Excellent
- Requested Services
- Advanced Care

Raising the health of California Natives to the highest level!

- Instead of referrals resulting in no care, Natives receive the highest level of care in an inspiring, healing, setting free of charge

TCC Lobby · Kevin Smith Photographer, Bettisworth North, Prime Consultant and Project Manager / NBBJ, Design Architect

6

Area Workgroup defined Regional Care as …

What is Regional Care?

What It Is…
- Specialty Care
- Ambulatory Surgery
- Tele-Medicine
- Overnight Stays
- Acute Care/Inpatient
- Short Stay
- Referrals Only

What It Is Not…
- No Primary Care
- No Emergency Care
- No Deliveries
- Not a "Walk In" Center for Local AI/ANs

This is different than typical IHS/Tribal healthcare delivery
- *ANMC*
- *PIMC*
- *GIMC*
- *etc.*

In locations that balance population and access

Where Should Regional Care be Located?

- Locations capable of being accessed by significant user populations (willing partners)
- Locations supported by infrastructure and tertiary care
- Locations balanced geographically relative to user populations
- The area workgroup originally considered 6 sites but reduced the # to 4

Willing partners, willing to travel, willing to share…

How Does Regional Care Work?

Willing Partners
- Experiencing shared needs
- Unable to deliver Referred Care
- Isolated from reasonable access
- Dissatisfied with cultural insensitivity

Traveling to
- An IHS owned/operated facility,
- Culturally appropriate,
- Offering advanced diagnostic, specialty, acute services desired by tribes,
- Based on grouping projected populations to justify services,
- That are supportable in terms of staffing, recruitment, tertiary support, operations and revenue.

Why not everyone?

Who Should Regional Care be Sized for?

100% Projected Total Users

These reasons

Not all users will go to free, culturally appropriate Regional Care
- Urgency
- Commercial Payer
- Closer Alternate
- Poor Transportation
- No Time Off Work
- Prefer Traditional Medicine
- Distance
- Absence of Lodging
- Bad Weather
- More

Appropriate % of Users

This is called "Market Share"

Grouping of increased population supports increased services

How Does Regional Care Work?

- Building User Population Increases Supportable Services.
- The more users that can be grouped together for Regional Care, the more services they will be able to access at their designated point of care!
- Fewer users could perhaps justify a facility nearer to your tribe but it might not offer the services you need

A high and low market share was calculated for each concept modeled

Who Should Regional Care be Sized for?

Calculation Based on Answers to 5 Critical Questions	Data Used to Answer Each Question	Answers that Drove Market Share Calculation for Each Concept Modeled
Who is truly reliant on "free", distant Regional Care	Health Program payer profiles	High MS was utilized (ranged from 65.9% to 98.4%)
Who will be reliant after reform?	Estimated AI/ANs shifting to Medicaid	Reform will reduce uninsured payers by -43% (likely to Medicaid)
Who will drive to a distant Regional Center (how far is Regional Care)?	State/AMA data on Secondary Care utilization by city	User Pop will erode by -4% every 60 miles
Who will select alternative care en route?	Travel times to Regional Care from Health Program	User Pop will erode from -10% to -20% per alternative care opportunity en route, depending on payer
Who can be directed to Regional Care?	Medicaid and CHS users/Area Planning Workgroup	100% of Medi-cal and Direct Care/CHS only patients will be directed to Regional Care

Six Scenarios have been developed

What Concepts of Regional Care Have Been Modeled?

Models…

- 2 sets of Regional Care Scenarios have been modeled
  - 1 Inpatient Facility (Area Wide Medical Center) anchoring 1-3 additional Outpatient facilities
  - 2-4 Inpatient Facilities
- At 4 possible locations
  - Northern California
  - North Central California
  - South Central California
  - Southern California
- Utilizing HSP, RRM, National data

	One Inpatient Facility Anchoring Additional Outpatient Facilities			Multiple Inpatient Facilities		
	IP + OP			ALL IP		
Scenario	1	2	3	4	5	6
Redding	OP	OP		IP	IP	
Sacramento	IP	IP	IP	IP	IP	IP
Fresno	OP			IP		
Temecula	OP	OP	OP	IP	IP	IP
# of Centers	4	3	2	4	3	2
OP or IP	3 OP/1 IP	2 OP/1 IP	1 OP/1 IP	4 IP	3 IP	2 IP

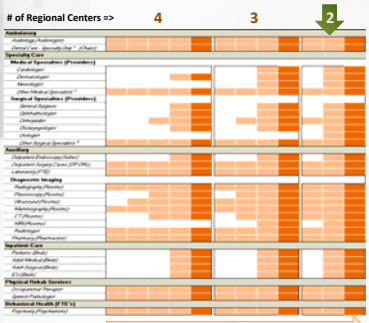
OP = Regional Outpatient Center ; IP = Regional Inpatient Center

1. Which one best completes the continuum of care?

Which Scenario Produces the Best Regional Care for California?

More Color = More Care…

- Light shaded cells = supportable services at each regional location
- Dark shaded cells = total supportable services for each scenario
- White cells = absence of supportable services
- Fewer centers is better…
  - The fewer the centers, the greater the supportable services, because of larger populations being served
  - Typically…
    - Distribution of care = reduced services
    - Consolidation of care = increased services



2. Which one delivers specialty care most effectively?

Which Scenario Produces the Best Regional Care for California?

Most Effective…

- Defined by Scenario as
  - Most Specialty Care volumes
  - Most Specialty Care visits per user annually
  - Lowest total annual operating cost per Specialty Care visit
  - Lowest total project cost per Specialty Care visit

	IP + OP			ALL IP		
Scenario	1	2	3	4	5	6
Redding	OP	OP		IP	IP	
Sacramento	IP	IP	IP	IP	IP	IP
Fresno	OP			IP		
Temecula	OP	OP	OP	IP	IP	IP
# of Centers	4	3	2	4	3	2
Annual # of SCPV	70,984	85,094	104,823	70,984	85,094	104,823
Annual SCPV/User	0.69	0.83	1.02	0.69	0.83	1.02
Total Annual Cost/SCPV	$1,856	$1,576	$1,343	$2,155	$1,769	$1,428
Total Project Cost/SCPV	$2,932	$2,517	$2,127	$3,959	$3,204	$2,436

3

3. Which one meets most of the total projected California specialty care demand?

Which Scenario Produces the Best Regional Care for California?

Specialty Demand…

- Understood as total Specialty Care Provider Visits (volumes)
- Calculated by facility per scenario to totaled
- Scenario totals…
  - Related to projected total Area Specialty Care Demand
  - And shown as a percentage of total demand

	IP + OP			ALL IP		
Scenario	1	2	3	4	5	6
Redding	OP	OP		IP	IP	
Sacramento	IP	IP	IP	IP	IP	IP
Fresno	OP			IP		
Temecula	OP	OP	OP	IP	IP	IP
# of Centers	4	3	2	4	3	2
% of Specialty Care Demand Met	59.4%	71.2%	87.8%	59.4%	71.2%	87.8%

3 6

4. Which one meets most of the total projected California acute care demand?

Which Scenario Produces the Best Required Care for California?

Remember…

- Acute Care beds have various functions, accessibility, and justifications
- Whereas all IP centers would have beds, not all would have a full Acute Care continuum:
  - Medical
  - Surgical
  - Pediatrics
  - ICU

	IP + OP			ALL IP		
Scenario	1	2	3	4	5	6
Redding	OP	OP		IP	IP	
Sacramento	IP	IP	IP	IP	IP	IP
Fresno	OP			IP		
Temecula	OP	OP	OP	IP	IP	IP
# of Centers	4	3	2	4	3	2
% of Acute Care Demand Met	85.0%	85.0%	85.0%	90.6%	90.3%	88.4%

4

5. Which one best reduces the CHS burden on health programs?

Which Scenario Produces the Best Required Care for California?

CHS costs…

- Based on National Cost Referral Data (327,000+ referrals)
- Adjusted by OP/IP location
- Following not quantifiable:
  - Dental Specialty
  - Speech/OT
  - IP Surgery
  - Case Mgmt.
  - Pain Mgmt.

	IP + OP			ALL IP		
Scenario	1	2	3	4	5	6
Redding	OP	OP		IP	IP	
Sacramento	IP	IP	IP	IP	IP	IP
Fresno	OP			IP		
Temecula	OP	OP	OP	IP	IP	IP
# of Centers	4	3	2	4	3	2
% CHS Impact	58.2%	61.8%	76.5%	59.8%	65.0%	73.8%

3

Total $ Value of referred care by scenario ÷ Total $ Value of all secondary service workloads for the state = % CHS IMPACT

6. Which one provides the greatest revenue potential?

Which Scenario Produces the Best Required Care for California?

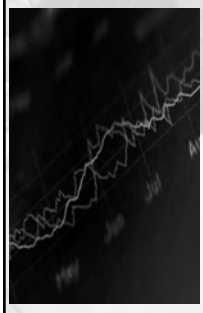
Amounts…

- Represent the total projected value of referred care served by scenario
- In Millions of $
- In today's $ (not inflation adjusted)
- Do not include
  - Dental Specialty
  - Speech/OT
  - IP Surgery
  - Case Mgmt.
  - Pain Mgmt.

	IP + OP			ALL IP		
Scenario	1	2	3	4	5	6
Redding	OP	OP		IP	IP	
Sacramento	IP	IP	IP	IP	IP	IP
Fresno	OP			IP		
Temecula	OP	OP	OP	IP	IP	IP
# of Centers	4	3	2	4	3	2
Total Referred Care Value	$139.3	$148.1	$183.2	$143.3	$155.7	$176.7

3

Thank You



For questions related to ongoing project efforts please contact us at

520-886-8650

or…

John.temple@theinnovagroup.com
Anthony.laird@theinnovagroup.com
Kevin.breen@theinnovagroup.com

7. Which one best considers other important questions that cannot be quantified?

Which Scenario Produces the Best Required Care for California?

- *Which scenario offers the greatest likelihood of IHS approval?*
- *Which scenario offers the greatest likelihood of Tribal approval?*
- *Which scenario offers the greatest likelihood of IHS funding?*
- *Which scenario offers the best first step should the second step be delayed or never funded?*
- *Are there other considerations that should drive selection of the best scenario?*

	IP + OP			ALL IP		
Scenario	1	2	3	4	5	6
Redding	OP	OP		IP	IP	
Sacramento	IP	IP	IP	IP	IP	IP
Fresno	OP			IP		
Temecula	OP	OP	OP	IP	IP	IP
# of Centers	4	3	2	4	3	2
Score	-	-	5	1	-	2

3

Scenario 3 (1 IP & 1 OP) delivers the most care most efficiently, by the criteria used for this analysis.

Path Forward

What Questions do You Have?

- *What questions do you have about the process?*
- *What questions do you have about the scenarios?*
- *Should other/additional criteria be used to evaluate scenario success?*
- *Which scenario represents the best planning solution for California at this time?*
- *Is anything missing from the analysis that you feel would increase the success of this effort?*
  - *Do you want to push for indigenous data to validate the CHS burden impact and potential revenue analysis?*
  - *Do you want to push for indigenous data to inform this project regarding existing travel/access patterns for referred care?*

Tribal Consultation Presentation

March 13, 2013,

Pala, California

Participant Contact Information

Name	Position/Team Role	Email	Phone

Presentation made to large group in Pala, CA.
No Sign-in sheet record available.

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California IHS Regional Centers Development

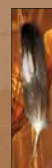
Feasibility Study for Regional Ambulatory Surgical and Specialty Health Care

2013 Tribal Consultation

Pala, California

March 13, 2013

California Area Indian Health Service



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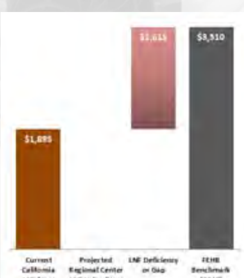
- Department of Defense
- Veterans Affairs
- International Clients
- Indian Health Service
- Tribes – Nation Wide

- Health Services Master Plans
- Facility Master Plans
- Joint Ventures
- PJD/PORs
- National Urban Needs Assessment
- New Tribes Supportable Services
- Strategy for Healthcare Delivery
- Regional Planning

One Hour… Agenda



A Vision…
to think about!

A Long Term Strategy…
to increase funding for California
and improve care

Project Review of Critical Path

Schedule

Date	Milestone
January 2012	Kick-Off Meeting
August 2012	Services Concept Meeting
November 2012	CATAC and Health Program Directors Meeting
February 27, 2013	Draft Tribal Leader Presentation
March 13, 2013	**Tribal Leader Presentation**

Work Effort To Date*
- Workgroup Input
- Concept Definition
- Data Acquisition
- Population Alignment
- Concept Development
- Payer Analysis
- Reform Impact
- Travel/Access Patterns
- payer Direction Conversation
- Market Share Analysis
- HSP Workload Projection
- RRM Staffing Projection
- Services Projections
- Resource Requirements Definition
- Scenarios Development
- Scenarios Refinement
- CHS Impact/Direct Care Analysis
- Presentation/Report Update

*Effort builds on the Area Health Service Master Plan from 2005 (3 separate on site Health Services Planning Consultations for each health program)

There are many logical reasons Why Consider Regional Care?

1) To provide California Natives secondary services currently not accessible
2) To provide California Natives secondary services free of charge
3) To stretch limited future CHS Dollars for California Health Programs
4) To close the gap between projected California CHS funding and projected demand
5) To respond to the requests of California Tribes regarding interest in Regional Care
6) To complete the continuum of care and eliminate current gaps in services for California Natives

But the most compelling reason is…..

To provide something Important An Appropriate Place

Imagine a healing place designed for California Natives…
- Culturally Appropriate
- Patient Sensitive
- Clinically Excellent
- Requested Services
- Advanced Care

Raising the health of California Natives to the highest level!
- Instead of referrals resulting in no care, Natives receive the highest level of care in an inspiring, healing, setting free of charge

Also…

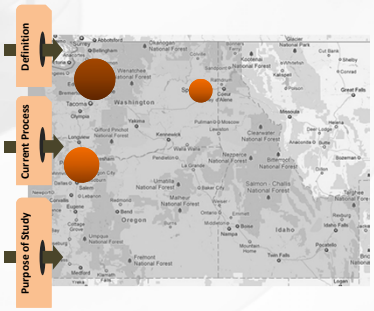
TCC Lobby - Kevin Smith Photographer, Bettisworth North, Prime Consultant and Project Manager / NBBJ, Design Architect

California is not the first IHS Area to invest in the development of this idea

Others Are Considering It

Portland

- Similar interest…
- Similar motivation…
- Considered 3 Regional Referral Center locations
- Scope focused not only on quantifying the demand/opportunity, but also proposing a change to the Facilities Priority Funding Criteria
- Ultimately focused on 1 location – Seattle
- Proposed a Demonstration Project



7

Grouping of increased population supports increased services

How Does Regional Care Work?

- Building User Population Increases Supportable Services.
- The more users that can be grouped together for Regional Care, the more services they will be able to access at their designated point of care!
- Fewer users could perhaps justify a facility nearer to your tribe but it might not offer the services you need.

~140 IP Beds Medical Center	120,000 users	Still No… NICU, Open Heart, Neurosurgery, Psych Nursing • ANMC (140,000 – 152 beds) GIMC (110,000 – 78 beds), PIMC (110,000 – 127 beds)
~65 IP Beds Acute Care Facility	60,000 users	Plus… Cardiology, Neurology, Urology, MRI, Speech Therapy • Still No Invasive Cardiology
~30 IP Beds Full Ambulatory Surgical Ctr.	30,000 users	Plus… General Surgery, Orthopedics, Ophthalmology, Otolaryngology, Dermatology, Ob/Gyn, CT, Labor & Delivery Ped/Med/Surg & ICU Beds — True Regional Services start to happen here
~10 IP Beds Basic Ambulatory Surgical Ctr.	15,000 users	Plus… Specialized Primary Care, Mammo, Ultrasound, Occupational Therapy, Ambulatory Procedures, Medical Short Stay Beds,
	7,500 users	Plus… Lab, Radiography, Physical Therapy, Podiatry, Audiology, & Psychiatry
	3,750 users	Full-time Services… Primary Care, Dental, Optometry, Pharmacy, PHN, Mental Health & Substance Abuse

10

Area Workgroup defined Regional Care as …

What is Regional Care?

What It Is…

- Specialty Care
- Ambulatory Surgery
- Tele-Medicine
- Overnight Stays
- Acute Care/Inpatient
- Short Stay
- Referrals Only

What It Is Not…

- No Primary Care
- No Emergency Care
- No Deliveries
- Not a "Walk In" Center for Local AI/ANs

This is different than typical IHS/Tribal healthcare delivery

- *ANMC*
- *PIMC*
- *GIMC*
- *etc.*

8

In locations that balance population and access

Where Should Regional Care be Located?

- Locations capable of being accessed by significant user populations (willing partners)
- Locations supported by infrastructure and tertiary care
- Locations balanced geographically relative to user populations

- *The area workgroup originally considered 6 sites but reduced the # to 4*

11

Willing partners, willing to travel, willing to share…

How Does Regional Care Work?

Willing Partners

- Experiencing shared needs
- Unable to deliver Referred Care
- Isolated from reasonable access
- Dissatisfied with cultural insensitivity

Traveling to

- An IHS owned/operated facility…
- Culturally appropriate…
- Offering advanced diagnostic, specialty, acute services desired by tribes…
- Based on grouping projected populations to justify services…
- That are supportable in terms of staffing, recruitment, tertiary support, operations and revenue.

9

Why not everyone?

Who Should Regional Care be Sized for?

100% Projected Total Users

These reasons

Not all users will go to free, culturally appropriate Regional Care

- Urgency
- Commercial Payer
- Closer Alternate
- Poor Transportation
- No Time Off Work
- Prefer Traditional Medicine
- Distance
- Absence of Lodging
- Bad Weather
- More

Appropriate % of Users

This is called "Market Share"

12

A high and low market share was calculated for each concept modeled

Who Should Regional Care be Sized for?

Calculation Based on Answers to 5 Critical Questions	Data Used to Answer Each Question	Answers that Drove Market Share Calculation for Each Concept Modeled
Who is truly reliant on "free", distant Regional Care	Health Program payer profiles	An average of 22.7% is considered "highly reliant"
Who will be reliant after reform?	Estimated AI/ANs shifting to Medicaid	Reform will reduce uninsured payers by -43% (likely to Medicaid)
Who will drive to a distant Regional Center (how far is Regional Care)?	State/AMA data on Secondary Care utilization by city	Market Share will erode by -4% every 60 miles
Who will select alternative care en route?	Travel times to Regional Care from Health Program	Market Share will erode from -10% to -20% per alternative care opportunity en route, depending on payer
Who can be directed to Regional Care?	Medicaid and CHS users/Area Planning Workgroup	100% of Medi-cal and Direct Care/CHS only patients will be directed to Regional Care

High Market Share was utilized *(ranged from 88.7% - 98.4%)*

Facility Market Share varied (ranged from 65.9% -98.4%)

13

Six Scenarios have been developed

What Concepts of Regional Care Have Been Modeled?

Models…

- 2 sets of Regional Care Scenarios have been modeled
  - 1 Inpatient Facility (Area Wide Medical Center) anchoring 1-3 additional Outpatient facilities
  - 2-4 Inpatient Facilities
- At 4 possible locations
- Utilizing HSP, RRM, National data

	One Inpatient Facility Anchoring Additional Outpatient Facilities			Multiple Inpatient Facilities		
	IP + OP			ALL IP		
Scenario	1	2	3	4	5	6
Redding	OP	OP		IP	IP	
Sacramento	IP	IP	IP	IP	IP	IP
Fresno	OP			IP		
Temecula	OP	OP	OP	IP	IP	IP
# of Centers	4	3	2	4	3	2
OP or IP	3 OP/1 IP	2 OP/1 IP	1 OP/1 IP	4 IP	3 IP	2 IP

OP = Regional Outpatient Center ; IP = Regional Inpatient Center

14

1. Which one best completes the continuum of care?

Which Scenario Produces the Best Regional Care for California?

More Color = More Care…

- Shaded cells = sustainable services at each regional location
- White cells = absence of sustainable services
- Fewer centers is better…
  - The fewer the centers, the greater the sustainable services, because of larger populations being served
  - Typically…
    - Distribution of care = reduced services
    - Consolidation of care = increased services

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2. Which one delivers specialty care most effectively?

Which Scenario Produces the Best Regional Care for California?

Most Effective…

- Defined by Scenario as
  - Most Specialty Care volumes
  - Most Specialty Care visits per user annually
  - Lowest total annual operating cost per Specialty Care visit

	IP + OP			ALL IP		
Scenario	1	2	3	4	5	6
Redding	OP	OP		IP	IP	
Sacramento	IP	IP	IP	IP	IP	IP
Fresno	OP			IP		
Temecula	OP	OP	OP	IP	IP	IP
# of Centers	4	3	2	4	3	2
Annual # of SCPV	70,984	85,094	104,823	70,984	85,094	104,823
Annual SCPV/User	0.69	0.83	1.02	0.69	0.83	1.02
Total Annual Cost/SCPV	$1,856	$1,576	$1,343	$2,155	$1,769	$1,428
Rank	5	3	1	6	4	2

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3. Which one meets most of the total projected California specialty care demand?

Which Scenario Produces the Best Regional Care for California?

Specialty Demand…

- Understood as total Specialty Care Provider Visits (volumes) calculated by facility
- Totaled by Scenario…
  - And related to projected total Area Specialty Care Demand
  - And shown as a percentage of total demand

	IP + OP			ALL IP		
Scenario	1	2	3	4	5	6
Redding	OP	OP		IP	IP	
Sacramento	IP	IP	IP	IP	IP	IP
Fresno	OP			IP		
Temecula	OP	OP	OP	IP	IP	IP
# of Centers	4	3	2	4	3	2
% of Specialty Care Demand Met	59.4%	71.2%	87.8%	59.4%	71.2%	87.8%
Rank	3	2	1	3	2	1

17

4. Which one meets most of the total projected California acute care demand?

Which Scenario Produces the Best Required Care for California?

Remember…

- Acute Care beds have various functions and justifications
- Whereas all IP centers would have beds, not all would have a full Acute Care continuum:
  - Medical
  - Surgical
  - Pediatrics
  - ICU

	IP + OP			ALL IP		
Scenario	1	2	3	4	5	6
Redding	OP	OP		IP	IP	
Sacramento	IP	IP	IP	IP	IP	IP
Fresno	OP			IP		
Temecula	OP	OP	OP	IP	IP	IP
# of Centers	4	3	2	4	3	2
% of Acute Care Demand Met	85.0%	85.0%	85.0%	90.6%	90.3%	88.4%
Rank	4	4	4	1	2	3

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5. Which one best reduces the CHS burden on health programs?

Which Scenario Produces the Best Required Care for California?

CHS costs…

- Based on National Cost Referral Data (327,000+ referrals)
- Adjusted by Regional Center location
- Not all service line costs can be quantified

	IP + OP			ALL IP		
Scenario	1	2	3	4	5	6
Redding	OP	OP		IP	IP	
Sacramento	IP	IP	IP	IP	IP	IP
Fresno	OP			IP		
Temecula	OP	OP	OP	IP	IP	IP
# of Centers	4	3	2	4	3	2
% CHS Impact	59.1%	62.6%	66.2%	63.3%	66.1%	67.8%
Rank	6	5	2	4	3	1

Total $ Value of referred care by scenario ÷ Total $ Value of all secondary service workloads for the state = % CHS IMPACT

What is the remaining gap?

What is the Potential Impact of Regional Care on Level of Need?

The impact to Level of Need Funding would be an approximate increase of…

39.7% per user

or

$1,394 per user

- *This is potentially a significant increase in resources for California Natives*
- *Quantified impact is approximate, using the average of annual costs (staffing & amortization) for all scenarios*
- *Impact is stated in today's dollars*

6. Which one provides the greatest revenue potential?

Which Scenario Produces the Best Required Care for California?

Amounts…

- Represent the total projected value of referred care served by scenario
- In millions of $
- In today's $

	IP + OP			ALL IP		
Scenario	1	2	3	4	5	6
Redding	OP	OP		IP	IP	
Sacramento	IP	IP	IP	IP	IP	IP
Fresno	OP			IP		
Temecula	OP	OP	OP	IP	IP	IP
# of Centers	4	3	2	4	3	2
Total Referred Care Value	$141.6	$150.0	$158.5	$151.5	$158.3	$162.5
Rank	6	5	2	4	3	1

Path Forward

What Questions do You Have?

- *What questions do you have about the process?*
- *What questions do you have about the scenarios?*
- *Should other/additional criteria be used to evaluate scenario success?*
- *Which scenario represents the best planning solution for California at this time?*
- *Is anything missing from the analysis that would increase the success of this effort?*

7. Which one best considers other important questions that cannot be quantified?

Which Scenario Produces the Best Required Care for California?

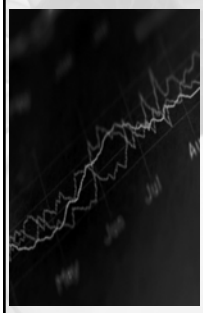
- *Which scenario offers the greatest likelihood of Tribal approval?*
- *Which scenario offers the greatest likelihood of IHS approval/funding?*
- *Which scenario offers the best first step should the second step be delayed or never funded?*
- *Are there other considerations that should drive selection of the best scenario?*

	IP + OP			ALL IP		
Scenario	1	2	3	4	5	6
Redding	OP	OP		IP	IP	
Sacramento	IP	IP	IP	IP	IP	IP
Fresno	OP			IP		
Temecula	OP	OP	OP	IP	IP	IP
# of Centers	4	3	2	4	3	2
Average Score	4.8	3.8	2	3.6	2.8	1.6
Rank	6	5	2	4	3	1

Scenarios 6 (2 IP) and 3 (1 OP & 1 IP) score first and second, respectively, in delivering the most care most efficiently, by the criteria used for this analysis.*

**The sensitivity of workload/costing issues could easily switch these two scenarios' scoring under current criteria.*

Thank You



For questions related to ongoing project efforts please contact us at

520-886-8650

or…

John.temple@theinnovagroup.com
Anthony.laird@theinnovagroup.com
Kevin.breen@theinnovagroup.com

HSP Planning Methodology

The Health Systems Planning (HSP) and Required Resources Management (RRM) tools are used to forecast regional demand for this effort. Given that the HSP was not created to accommodate facility planning without the presence of primary care, or substantial user population sizes (i.e., 30,000+), several hurdles were encountered. For each hurdle, a unique solution was created to meet the needs of this project. Below is a high level list detailing each process:

- **Primary Care Focus** – The HSP is built around a primary care physician (PCP) model. The Regional Study focuses on pooled specialty care physicians (SPC) as the key workload drivers with supplemental volumes originating from local PCP's (i.e., diagnostic imaging referrals from PCP's). A four-step process was used to overcome this hurdle:
  - A project was created in the HSP/RRM using the appropriate user populations. PCP workload received an override of 6,450 annual visits, which is the minimum volume needed to create reliable "dependent volumes."
  - Specialty Care "dependent volumes" were recorded in full and examined to determine which would produce "approved" services given preset thresholds.
  - The sum of "approved" SPC volumes became the new PCP workload override (previously 6,450) to ensure all new volumes were generated from Specialty Care totals.
  - Each Specialty Care service line received a workload override of its respective full "dependent" value to maintain the integrity of HSP/RRM projected workloads, despite the PCP override.

- **Diagnostic Imaging from PCP's** – The Regional Study pools specialty care visits from large service areas to increase diagnostic imaging modality approval. Given the increased service offerings, it is predicted that the Regional Centers would receive PCP referrals for diagnostic imaging. In order to capture these volumes, a separate calculation using Primary Care visits was performed for each scenario.
  - Additional PCP-driven general radiology, fluoroscopy, and ultrasound workloads were calculated and added to the HSP/RRM specialty care volumes.
  - Total SPC/PCP diagnostic imaging volumes overrode HSP workloads and produced modality space and staff that accommodated regional populations from the two referral streams.

- **Acute Care** – The HSP and RRM possess interdependencies that make it ineffective at planning inpatient beds, inpatient surgery, and intensive care units (ICU) without the presence of Labor & Delivery (L&D) and an Emergency Department (ED). The Regional Study specifically excludes L&D and ED from its scope of requested services.
  - Each inpatient planning scenario includes acute care, surgery, and ICU, which produce variable staffing and space. As a comparative benchmark, an additional HSP/RRM project was created for each inpatient scenario that represents maximum staff and space that might be required.
  - All original criteria, like Service Area user population and workload overrides, were utilized with the addition of L&D and an ED. This file is referenced as "Maximum Acute" scenario.

- **Out of Template** – In the aforementioned Acute Care planning challenge as well as most large Service Areas, one or more services usually exceed the HSP/RRM preset planning thresholds. Constant vigilance is required to identify any deviation from expected approved services. Workloads, space, and staff can behave unexpectedly when volumes exceed template parameters. In each case, a special solution was developed of which some are highlighted below:
  - Workload Override: In the event that the service workload did not produce a key characteristic, workload overrides were used to lower volumes and force the creation of maximum staff and space, from which a planning ratio could be created and utilized *(Example: L&D, where its presence allow IP Beds, IP surgeries, and ICU to be planned, but actual L&D workload volumes are irrelevant).*
  - Alternative Space Calculation: In the event that workloads/staff calculate appropriately yet space fails to generate, space per key characteristic metrics are created. HSP Notes to the Planner and industry research are used to form each metric, although Special Studies should be pursued in future planning efforts to confirm all Out of Template calculations.

- **Telemedicine** – For each scenario, the impact of telemedicine is addressed for specialty care visits, psychiatry services, radiologists, case management, and pain management. The methodology assumes that 80% of the eroded visits lost due to distance and other factors (i.e., (100% user pop visits – eroded user pop visits)*.80) are recaptured via telemedicine. Each scenario requires a HSP/RRM file to be produced with 100% market share of user populations.
  - Workloads and space from 100% market share are used in conjunction with the eroded market share volumes and space to produce increased total workloads that were either used as overrides in the HSP/RRM or as values in alternative calculations.

- **Blended Volumes** – Given the "Maximum Acute" solution required above, it is often necessary to define a middle ground between the inpatient scenario and its "maximum" counterpart. On a case by case basis, each metric is examined to determine the most reasonable volume within the confines of the HSP, RRM, project-specific metrics, etc. Two examples are given below:
  - Space: The inpatient scenario usually has a smaller, approved, space template than the "Maximum Acute" output. For instance, in order to get "maximum" ICU, inpatient surgery, and Acute Care volumes, L&D and ED service areas had to be included. The Regional Study needs to factor out the L&D and ED workloads while keeping the others. To account for this overage, a space template is manually selected that falls between the inpatient and "maximum" scenarios, which is occasionally true for Laboratory.
  - Staffing: As noted above, the L&D and ED inflates workload, which, in turn, increases staffing. Pharmacy is an example where staffing is averaged between the inpatient and "maximum" scenario staffing numbers to produce a reasonable numbers of employees.

Total Number of Unique HSP Files Required to Complete Regional Study

		# of HSP Files at Noted Market Share Required for Regional Study					
		100% Mkt Share	Eroded Mkt Share	Eroded Mkt Share	Eroded Mkt Share	Eroded Mkt Share	
		1	2	3	4	5	
		Telemedicine Recapture	*PCP Override = 6,450 visits to get SPC-V*	*SPC-V Overrides in Place to get DI Overrides*	*Diagnostic Imaging & SPC-V Overrides*	*"Maximum Acute" file with L&D and ED*	**# of HSP Files**
Redding	**OP**	●	●	●	●		**4**
	OP/IP	●	●	●	●	●	**5**
Temecula	**OP**	●	●	●	●		**4**
	OP/IP	●	●	●	●	●	**5**
Fresno	**OP**	●	●	●	●		**4**
	OP/IP	●	●	●	●	●	**5**
Sacramento	**OP/IP – 2 center**	●	●	●	●	●	**5**
	OP/IP – 3 center	●	●	●	●	●	**5**
	OP/IP – 4 center	●	●	●	●	●	**5**
						Total # of HSP Files:	**42**

Summary Report Construction

OUTPATIENT

All Outpatient scenarios require four (4) unique HSP files. Files #2 and #3 serve as intermediary steps necessary for reaching Specialty Care and Diagnostic Imaging workloads required for override values. Files #1 and #4 are utilized for report preparation.

Populations, workloads, and space are utilized from File #1's 100% market share output. User populations are recorded in Summary tables to illustrate populations lost due to distance as compared to the eroded market share user population. Workloads and space are factored into Telemedicine with 80% of the difference from eroded workloads and space being recaptured.

File #4 is the heart of data recorded in the Outpatient Summary tables. User population, workloads, staff, and space, whether they are generated from the HSP/RRM or manual overrides, are entered into each applicable Summary table.

OUPATIENT/INPATIENT

All Outpatient/Inpatient scenarios require five (5) unique HSP files. Files #1, #2, and #3 serve identical roles as mentioned above for the Outpatient scenarios. File #4 also remains the heart of the Summary report. However, File #4 works in conjunction with File #5 to overcome HSP/RRM interdependencies and threshold limitations.

As previously discussed, File #4 possesses great variability in regard to metrics associated with inpatient beds, inpatient surgery, and intensive care units (ICU) due to the absence of Labor & Delivery (L&D) and an Emergency Department (ED). File #5 includes the missing L&D and ED, which provides a ceiling for workloads, space, and staff. Summary tables receive blended metrics between Files #4 and #5, which are more reasonable than either file alone. Both files are also utilized to identify services that exceed preset threshold, so that Out of Template solutions can be applied.

Note: Special studies should be pursued to validate blended values as well as any metrics that exceeded HSP/RRM thresholds and were, thus, Out of Template.

Requested Service Line Projections & New Metrics Development

As part of the analytical effort for California Regional Care, the planning workgroup requested quantification of services that are out of template for IHS and HSP parameters. These desired services were selected for their potential to reduce need for CHS dollars and close gaps in care for AI/AN populations across the state. The services include:

- Dental Specialty Care
- Short Stay/Observation
- Pain Management
- Telemedicine

Considerable time was invested in creating planning metrics to allow space and staff demand quantification. These projections should be considered a starting point and will likely require additional justification efforts for IHS should planning proceed. An overview of current and future efforts is provided below with particular focus on the metrics utilized in this project's projection of space and staff.

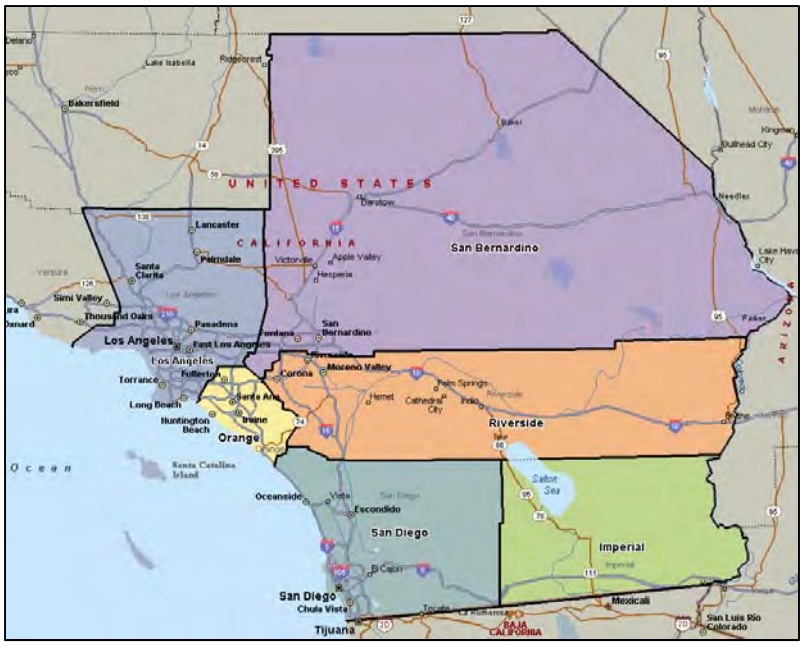
Dental Specialties

Dental Specialty Care was desired by the planning workgroup to support the extension of basic Dental care, which is not unusual across IHS Areas. However, it has been difficult to consistently quantify because neither IHS nor the HSP have templates developed to support Specialty Dental Care.

Dental Specialty Care, for the purposes of this project, is defined as follows:

- **Pediatric Dentistry** – A pediatric dentist works with the oral health care of children, from infancy through the teenage years. In guiding children and teens through their dental growth and development, pediatric dentists often work closely with pediatricians, family physicians, and other dental specialists in providing comprehensive medical and dental care.
- **Endodontic Care** – Also called pulp specialists, Endodontists have undergone specialized training in performing root canal therapy. This particular branch of dentistry is concerned with the morphology, physiology, and pathology of the human dental pulp (the soft tissue area between the tooth's outer enamel and the dentin) and periradicular tissues, including the prevention and treatment of diseases and injuries of the pulp and associated periradicular conditions.
- **Oral and Maxillofacial Care** – Oral and Maxillofacial surgeons are actually orthopedic facial surgeons responsible for treating a wide variety of dental problems, including the removal of impacted teeth and reconstructive facial surgery. This dental specialty also includes the diagnosis and treatment of diseases, injuries, and defects involving both functional and esthetic aspects of the hard and soft tissues of the oral and maxillofacial region. Many oral surgery training programs offer both an oral surgery certificate and a medical degree in the 6-7 year dual training program.

- **Orthodontics** – Orthodontists are specially trained dentists who specialize in the development, prevention, and correction of irregularities of the teeth, bite, and jaws. Orthodontists also have specialized training in facial abnormalities and disorders of the jaw. A patient often consults an orthodontist after receiving a referral from his/her general dentist.
- **Periodontics** – Periodontists are responsible for the care and prevention of gum-related diseases, guided bone regeneration, and dental implants. It is the specialty of dentistry that includes the prevention, diagnosis, and treatment of diseases of the supporting and surrounding tissues of the teeth or their substitutes, and the maintenance of the health, function, and esthetics of these structures and tissues.
- **Prosthodontics** – Prosthodontists are dental specialists who have undergone additional training and certification in the restoration and replacement of broken teeth with crowns, bridges, removable prosthetics (dentures), or implants. It is the branch of dentistry that also specializes in understanding the dynamics of the smile, preserving a healthy mouth, and creating tooth replacements. Prosthodontists often work closely with other members of the oral health care team in restoring natural teeth, replacing missing teeth, and/or developing artificial substitutes for damaged oral and maxillofacial tissues. In addition, Prosthodontists may also have specialized training in the following:
    - Post oral cancer reconstruction
    - Jaw joint problems (i.e., temporomandibular joint disorder)
    - Traumatic injuries of the mouth
    - Snoring and sleeping disorders
- Studies have shown that approximately one-third of the adult population is predisposed to periodontitis (Samuel B. Low, 2011). So if the average dental practice has 1,800 patients, then 600 patients possible have periodontitis (Samuel B. Low, 2011).



Demand for these Specialists was developed with an understanding of the market relationship between basic Dental Care (Dentists) and the associated downstream Specialty Dental Care (Specialists). A dense, geographically-defined market can provide equilibrium for development of market level assumptions. For example, the southern quarter of California is an established geographic market where Dentists supply enough referrals to Specialists for equilibrium to exist.

In other words, an Orange County Specialist likely remains in business because most of his/her workload originates from one of the surrounding counties:

- Los Angeles
- Orange
- San Diego
- Riverside
- San Bernardino
- Imperial

The Specialist is likely not in business because of significant workload from a distant county like Sacramento County.

The providers for southern California counties are identified below as well as the relationship that was created between primary Dental Care (Dentists) and their referral partners, Dental Specialists.

County=>	Los Ang.	Orange	San Diego	Riverside	San Bern.	Imperial	6 County
Population=>	9,519,338	2,846,289	2,813,833	1,545,387	1,709,434	142,361	18,576,642
Total Dentists:	**5,724**	**2,162**	**1,764**	**751**	**811**	**36**	11,248
General Dentists:	4,675	1,729	1,399	577	635	28	9,043
Oral Surgeons:	169	78	66	25	31	1	370
Pediatric Dentists:	127	49	32	20	19	1	248
Endodontists:	106	62	48	21	16	1	254
Orthodontists:	361	157	147	67	65	3	800
Prosthodontists:	108	34	25	15	24	0	206
Periodontists:	178	53	47	26	21	2	327
Pop Per Dentist							
General Dentists:	2,036	1,646	2,011	2,678	2,692	5,084	2,054
Oral Surgeons:	56,327	36,491	42,634	61,815	55,143	142,361	50,207
Pediatric Dentists:	74,955	58,088	87,932	77,269	89,970	142,361	74,906
Endodontists:	89,805	45,908	58,622	73,590	106,840	142,361	73,136
Orthodontists:	26,369	18,129	19,142	23,065	26,299	47,454	23,221
Prosthodontists:	88,142	83,714	112,553	103,026	71,226		90,178
Periodontists:	53,479	53,704	59,869	59,438	81,402	71,181	56,809
Specialists per Dentist							
General Dentists:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Oral Surgeons:	0.0361	0.0451	0.0472	0.0433	0.0488	0.0357	0.0409
Pediatric Dentists:	0.0272	0.0283	0.0229	0.0347	0.0299	0.0357	0.0274
Endodontists:	0.0227	0.0359	0.0343	0.0364	0.0252	0.0357	0.0281
Orthodontists:	0.0772	0.0908	0.1051	0.1161	0.1024	0.1071	0.0885
Prosthodontists:	0.0231	0.0197	0.0179	0.0260	0.0378		0.0228
Periodontists:	0.0381	0.0307	0.0336	0.0451	0.0331	0.0714	0.0362

HSP IHS Pop	Revision
1,016	1,016
% Underserved	24,832
49%	37,047
	36,172
	11,485
	44,600
	28,097
Sp/Dentist	Sp/Dentist
1.0	1.0
24.4	24.4
36.5	36.5
35.6	35.6
11.3	11.3
43.9	43.9
27.7	27.7

1 2 3 4

Table Highlights:

1. A population of 18.5 million people was served by over 11 thousand Dentists and Dental Specialists, which allows for the creation of reliable market level assumptions.

   Assumptions:

   - Provider data gained from AFTCO Dental Transition Resources are reliable.
   - Populations served by Dentist/Specialist are therefore reliable.

- Specialists receive most of their workload from the Dentists identified in this data set.
- HSP states 1 Dentist is expected to serve 1,016 users.

2. According to HSP standards, the southern California market is underserved relative to basic dental care by 49% (i.e., One Market Dentist serves 2,054 people).

Assumptions:

- Specialty Dental Care is likewise underserved by 49%.
- Therefore, when planning for IHS Dental Specialty Care, a population 49% of the market's population per Dental Specialty should be considered as appropriate.

3. Population-Based Relationship: The relationship of Dental Specialists to Dentists experienced in the market can be applied to an IHS appropriate 'population-served-per-specialist' metric.

- Therefore, 1 Dentist should be planned for every 1,016 users per HSP standards.
- One (1) Oral Surgeon should be planned for every 24,832 users and so forth for the remaining Dental Specialists.

4. Dentist-Based Relationship: The relationship of Dental Specialists to Dentists experienced in the market can also be applied to an IHS appropriate 'specialists-per-dentist' metric.

- One (1) Oral Surgeon should be planned for every 24.4 Dentists and so forth for the rest of the Dental Specialist as shown in the table on the previous page.

Additional assumptions were made relative to space and staff:

- HSP total space requirements were studied to arrive at 60.46 DGSM per Chair or Operatory
  - A mid-sized Primary Dental Care clinic requires 481 DSM for a 7 Dentist/14 Chair department.
  - Dental Specialists have similar requirements as Dentists in office, operatory, and support space size.
  - Specialty-specific spaces were added based upon criteria from the Veterans Administration (VA) and Department of Defense (DoD) projecting an additional 83 SM for a 7 Dentist/14 Chair clinic size.
  - Calculations suggested 846 DGSMs for this "typical" clinic resulting in a planning metric of 60.46 DGSM/chair or operatory.
  - Operatories per Specialist were drawn from VA/DoD assumptions and are specific to each specialty.
- HSP/RRM total staff requirements were studied to arrive at 3.67 FTE/Specialist.
  - Assumption was made that support staff requirements for a Dentist were similar to those of a Specialist.
  - Metrics for HSP Dental clinic modules of all sizes were studied and an average of 3.67 Support FTE/Dentist was identified.

The data, assumptions, and metrics above are utilized in the projection of Dental Specialty Care for California Regional Care. However, the results are not HSP or RRM authorized.

Short Stay / Observation Beds

Short Stay or Observation Beds represent a line of care that is both greatly misunderstood and implemented with significant variance across the country and leading health organizations. The bullets below highlight some of the complexity and variances:

- Hospital executives are missing throughput and financial opportunities by having a misconception of observation room use. (Advisory Board, 2012)
- Observation Unit Inclusion/Exclusion Criteria needs to be better understood by clinicians and administration to optimize bed management.
    - The Advisory Board gives clear inclusion/exclusion criteria examples for the following conditions: Chest Pain, Asthma/COPD, Hypoglycemia, Dehydration, Syncope, Congestive Heart Failure, and Pneumonia. (Board, 2009)
- For inpatient observation, two metrics were found:
    - Plan 1 chest pain observation bed per 63 hospital beds. (Advisory Board)
    - Devote 2.3 Observation Beds to every 100 inpatient beds. (Advisory Board)
- Observation care is a well-defined set of specific, clinically appropriate services that include ongoing short-term treatment, assessment, and reassessment, that are provided before a decision can be made regarding whether a patient will require further treatment as an inpatient, or may be safely discharged. Observation status is commonly assigned to patients with unexpectedly prolonged recovery after outpatient surgery, and to patients who present to the emergency department and who then require a significant period of treatment or monitoring before a clinical decision is made concerning their next placement. (Department of Health & Human Services, 2008)
- Medicare generally will not pay for observation services lasting more than 48 hours. (Department of Health & Human Services, 2008)
- Patients admitted to outpatient observation may be treated in a variety of bed arrangements such as a freestanding clinical decision unit, an observation bed that is part of the emergency department and under the emergency department's control, or in virtual observation (in any acute care bed, but billed as outpatient observation), with all of them being billed the same way. Observation status is a level of care determination, not a geographic location in the hospital.
- There must be medical necessity for observation beyond the usual recovery period, as hours of the usual recovery time associated with the procedure are already reimbursed with the procedure.
- Certain diagnoses and procedures generally do not support an inpatient admission and fall within the definitions of outpatient observation. Specific medical necessity, though, is always determined on a case-by-case basis.
    - Example of procedures:
        - Rule out myocardial infarction
        - Asthma or chronic obstructive pulmonary disease (COPD)
        - Congestive heart failure

    - Syncope and decreased responsiveness
    - Cardiac catheterizations, coronary stents, pacemakers, defibrillators, and electrophysiological mapping
    - Renal colic
    - Dialysis
- A minimum of eight medically necessary observation hours is required to qualify for an observation payment for the facility to the physician. (Hale, CCS, 2008)
- Observation Care services are outpatient services. (Physicians, 2012)
- For Facilities currently in planning/construction…
    - One northeast facility is planning 26 ED spaces supported by 10 ED observation beds.
    - Another western facility is planning a 12 Bay ED supported by 24 ED observation beds.
- Neither DoD nor VA have developed metrics to anticipate observation bed demand, only space criteria.
- HCUP (Healthcare Cost and Utilization Project) Report #2002-3 identified inconsistency in both the status and implementation of observation care across the country.
    - The percent of inpatient discharges with observation status ranged from 0.5 to 6.2 percent per year.
    - The percent of outpatient patients with observation status ranged from 0.4 to 8.0 percent per year.

Observation Status is a classification of patients seen in hospital emergency rooms or outpatient clinics who have unstable or uncertain conditions potentially serious enough to warrant close observation, but usually not so serious to warrant admission to the hospital. These patients may be placed in beds usually for less than 24 hours without formal admission to the hospital. The American College of Emergency Physicians defines three types of observation services in their guidelines:

1. ED/Observation treatment units
2. Holding units or designated areas in the outpatient setting that may or may not be under the control of the ED
3. Observation status beds in the inpatient area of the hospital

This projection is primarily concerned with #2 above as a function of outpatient procedures or surgeries delivered at a Regional Center. The Area-Wide Medical Center is not anticipated to have an ED, neither is the Regional Center.

The National Health Statistics Report (revised September 4, 2009) provides the following numbers related to Ambulatory Surgery in the United States in 2006:

- In 2006, there were 34.7 million ambulatory surgery visits:
    - 19.9 million occurred in Hospitals
    - 14.9 million occurred in ASCs
- Average time for inpatient procedures was 146.6 minutes vs. outpatient at 97.7 minutes
- 287,000 ambulatory surgery visits were admitted to the hospital as inpatients

  - Of these, 93.8% were visits to hospitals and 6.2% were visits to freestanding centers
- Of the 34.7 million ambulatory surgery visits…
  - 32,356,000 were routine
  - **401,000 were observation status (1.15% of total)**
  - 287,000 were inpatient admission
  - 79,000 were cancelled
  - 944,000 were not stated

This data suggests that 1.15% of all ambulatory surgery cases require observation space and staff support.

Using statistics from a 500+ bed community teaching hospital in New York associated with a freestanding Ambulatory Surgery Center (ASC), the following can be identified

- 10 operating rooms at their ASC
- 11,000 procedures performed in those rooms in 2011, which result in:
  - 42.3 procedures per day
  - 4.23 procedures per OR
- Using the observation percent above, a demand is suggested of 0.5 beds for observation status would be needed to support this workload (42.3 x 1.15%).

This projection assumes observation bed space requirements are satisfied by a quiet recovery space in the HSP with 12 square meters. Observation beds are calculated as 1.15% of the daily outpatient procedures, rounded up to whole number beds. Thus, this 10 OR ASC would require 1 observation bed with 12 square meters of space planned.

The projection utilized in this project assumes observation status nursing support would parallel PACU requirements. Using the PACU staffing requirement from the State of California, 1 Nurse is required for every 2 PACU beds. So, the requirement for the ASC above would be 0.50 Nurses (1.0 Bed x 0.5 Nurses/Bed).

Pain Management

Pain Management is defined as a clinic focused on the diagnosis and treatment of persistent and recurrent types of pain. A significant number of the patients seen in a pain clinic have had accidents or surgery and are still in pain after the normal healing period has elapsed. Examples of problems treated by a pain clinic may include: back, neck, arm, and leg pain, headaches, arthritis, herniations, Reflex Sympathetic Dystrophy, nerve damage, complex neurological problems, neuropathies, muscle disorders, muscular strains, and pain resulting from cancer and injuries. Treatment often includes the management of pain-associated problems, such as sleep disorders, anxiety, depression and frustration. Key developments include:

- Pain Management is growing as an inpatient and outpatient focal point

- Spine pain is most common
- Physician outreach = steady referral streams
- Profit not guaranteed

Research suggests that nearly one-third of the U.S. population experience some type of pain. Weighted mean prevalence of chronic pain in the general population has been estimated at 35.5%, or 105 million in the United States (Harstall, 2003).

Pain care is available in many settings:

- Self-Management – including exercise, muscle relaxation techniques, distraction, sleep aids, education about pain and negative emotions, and cooperation with clinicians and employers
- Primary Care – such providers are responsible for the majority of pain medicine prescriptions, and are an early step in the pain care journey (52% of chronic pain patients in the United States are treated at this step)
- Specialist Care – although most people with pain do not need a pain specialist's care, the potential demand for these services far outstrips the supply (while 100+ million American adults have common chronic pain conditions, only 3,488 physicians were board certified between 2000 and 2009 – meaning there are more than 28,500 people with chronic pain for every specialist)
- Pain Center – ideally, a truly interdisciplinary-coordinated team of health professionals that perform a comprehensive assessment of the pain problem and its impact on the patient and family using several therapeutic modalities (most pain physicians come from anesthesiology or physical and rehabilitation medicine)

Reliable Pain Management utilization data is difficult to gather. However, some assumptions were made for this project based upon the research available.

- Population served by a single pain management provide varies:
    - The research suggests there are 28,500 people with chronic pain per provider, meaning 3,509 providers are available.
    - When applied to the entire US population, this would mean that 1 provider serves a population of 89,366 people (whether they are in chronic pain or not).
    - Research suggests demand far outstrips physician supply.
    - Since an estimated 52% of chronic care patients are treated by PC providers, this would suggest 48% of the 28,500 should be considered in the Specialist demand calculations. Therefore, the revised number would be 13,680 people with chronic pain per provider would be more accurate.
    - There is no clear way to identify to what extent demand outstrips the supply of specialists, but if we assume Pain Management specialists should be in greater supply than Neurosurgeons, the following may help:

- There are currently 446 Neurosurgeons serving the population of California (37,362,000), meaning 1 Neurosurgeon serves 83,771 people, a number lower than the current national population to Pain Management specialist ratio.
- If the average number of "next tier, less acuity" specialists are used (ENT/Pulmonary), it would suggest 779 specialists serve the population of California, resulting in a ratio of 1 to 47,961. This is likely a more comparable relationship in determining demand and is the metric utilized in this study.

Space requirements were based on VA criteria and grossed up to a departmental level using the HSP grossing factor for specialty care.

- A 1 provider Pain Management specialty clinic would require 152.9 DGSM, which includes Physical Therapy space in the absence of Physical Therapy at a Regional Center.

Staff requirements are virtually non-existent. Consequently, a simple specialty care staffing model was utilized with basic nurse, clerical, and Physical Therapy tech support, resulting in 5 Support FTE per Pain Management Specialist.

Telemedicine

Economically, self-sustaining delivery models have been the exception rather than the rule in the field of Telemedicine. Conditions are changing since future legislation will likely facilitate broader reimbursement for Telemedicine services. Recent changes to a CMS rule have significantly simplified the licensing and credentialing requirements for Telemedicine services. A new study in the New England Journal of Medicine demonstrates the potential power of telemedicine to enable the delivery of top-quality specialty care to remote patient populations using Primary Care Providers. Regardless, clinicians and researchers have successfully used Telemedicine in a myriad of ways to address the challenges of distance medicine. In several clinical domains, Telemedicine is widely practiced and becoming accepted as a standard of care. (Advisory Board)

In a typical case, a physician or specialist at a hospital remotely examines a patient via videoconferencing over a T1 network. Administrators aim to have one registered nurse or licensed practical nurse physically present in the patient's room to assist the physician during consultation. When an RN or LPN is unavailable, a dedicated Telemedicine coordinator or other staff member provides assistance. In many instances, the emphasis is on follow-up care. Physicians do not diagnose patients via Telemedicine in order to reduce the malpractice liability.

The delivery of Telemedicine care places most of the burden of space and staffing on the remote location. In other words, space/staff requirements for the Regional Center as defined in this project are negligible – an appropriate high definition monitor and support telecom equipment in the provider's office or in a dedicated telemedicine physician space. The real demand is at the Telemedicine visit location – Telemedicine space, staff, and supporting camera, etc.

Consequently, this project does not anticipate space/staff requirements at the Regional or Area Medical Center.

Measuring the impact of Telemedicine will instead by handled through the recovery of workload from lost market share. In other words, Telemedicine impact is measure by...

- Identifying specific service lines it impacts most
- Identifying the difference between workloads representing 100% of the regional market and workload representing the appropriate eroded market
- Applying a "workload recovery percentage" to the difference between the two workloads
    - For example: assuming 100% market share for the population served by Psychiatry would result in 10,000 annual visits
    - And the eroded market share would result in 70% of that, or 7,000 annual visits
    - If the Telemedicine impact was high, 80% of those lost market share visits would be recovered workload (10,000 – 7,000 = 3,000 x 80% = 2,400 (recovered workload) + 7,000 = 9,400 (on-site workload plus Telemedicine workload)

Published literature identifies the following lines of care as suited for the delivery of some aspects of care through Telemedicine (lines appropriate to regional care as defined by this project):

- Cardiology
- Dermatology
- Neurology
- Oncology
- Orthopedics
- ENT
- Psychiatry
- Pulmonology
- Radiology
- Pediatrics

Initial assumptions will project simple planning metrics for this Telemedicine Impact (TMI) on workload:

Impact	Abbreviation	TMI*
High	H	80%
Moderate	M	50%
Low	L	20%
Negligible	N	0%

** % of workload lost through market erosion will be "recovered"*

These TMI percentages have been agreed upon in consultation with the planning workgroup.

Market Erosion by Distance

The erosion of the market relative because of distance to Regional care is a fundamental problem in projecting services. How many users, accessing care at their local health program, will travel two or more hours to free specialty or acute care in a culturally appropriate setting?

Typically, full market share (100%) is utilized in planning for local primary care clinics. But when primary care is not present, what market share is appropriate? There is no accessible, established methodology for projecting erosion as a factor of distance.

Consequently, this study employs a proprietary projection methodology to accomplish such. It is based on

- The body of literature stating erosion by distance does indeed occur
- Available data elements that can be utilized to quantify such erosion

Research on Market Erosion by Distance

Research suggests market share erodes relative to distance travelled for care. Various articles were considered as part of this study. The following are offered as examples.

The effects of geography and spatial behavior on health care utilization among the residents of a rural region (Health Services Research, Feb 1, 2005)

The goal of this analysis is to determine the importance of geographic and spatial behavior factors in the health care utilization of the residents of rural communities. These geographic factors are part of a general conceptual framework. A conceptual framework is used in research to outline possible courses of action or to present a preferred approach to a system analysis project. The health and health care of rural Americans is complex. Rural Americans are disadvantaged compared with their urban counterparts in several important ways that affect their health: they are disproportionately disproportionate

Distance and health care utilization among the rural elderly (Soc Sci Med. 2000 May; 50(9):1197-208)

This paper explores the relationship between distance and the utilization of health care by a group of elderly residents in rural Vermont. By drawing on recent work on the geography of health we frame the decision to visit a primary care physician in the context of the experience of place. The paper devises a test of this broader reading of the role of distance for utilization, and operationalizes this test using a custom designed survey. Using a randomized mail survey of elderly residents of Vermont's North East Kingdom we explore how grocery shopping, travel to work, home location relative to local services, access to private transportation, and living arrangements are associated with the number of doctor visits made to primary health care providers. Although the results confirm the idea that increased distance from provider does reduce utilization, they strongly suggest that distance to provider is a surrogate for location in a richer web of relations between residents and their local communities. We conclude by calling for further research that establishes links between place and the use of health facilities.

Access to transportation and health care utilization in a rural region (J Rural Health. 2005 Winter; 21(1):31-8.)

Transportation is a vital issue for access to health care, especially in rural areas where travel distances are great and access to alternative modes such as transit is less prevalent. This study estimates the impacts of transportation and geography on utilization of health care services for older adults in rural and small urban areas. Using data collected from a survey, a model was developed based on the Health Behavior Model that considered transportation and distance as factors that could enable or impede health care utilization. A random sample of individuals aged 60 or older living in the rural Upper Great Plains states of North Dakota, South Dakota, Montana, and Wyoming was surveyed by mail. Distance and transportation variables were not found to significantly influence the total number of routine or chronic care trips made overall, while emergency care visits were impacted by transportation options. However, additional results showed that those who cannot drive make more trips if someone else in the household can drive; distance and access to transportation impact the likelihood that someone will miss or delay a trip; and difficulty reported in making trips is significantly affected by distance and transportation options.

Analyzing Geographical Access to Health Care, (University of Illinois)

- Dimensions of Access
  - Availability
  - Accessibility
  - Accommodation
  - Affordability
  - Acceptability
- Geographic Factors
  - Distance
  - Travel time
  - Travel cost
  - Familiarity
  - Distance most important – very steep decay for women covered by Medicaid and African-American Women

The following statements from these articles summarize the erosion by distance problem.

- *A distance decay effect in consumer travel behavior is often found… The degree of distance decay varies by type of illness or illness severity, level in service hierarchy and various population characteristics.*
- *Several of the enabling geographic or spatial behaviors had a significant relationship to the number of health care visits. Those with a driver's license had significantly greater number of regular check-up visits. Those who had a family member who used a provided ride, and who had used public transportation had a significantly greater number of chronic care visits.*

- *Distinct to regular care was significantly associated with the number of regular check-up care visits, and those with a 1 km larger distance to regular care had 95 percent the number of regular check-up care visits, as did residents with a shorter distance to care. Those with a driver's license had an estimated 1.58 times more regular care visits and 2.3 times more chronic care visits, than those with no driver's license; having a drivers' license was not significantly associated with having more acute care visits.*
- *This study found that geographic variables were associated with regular check-up and chronic care visits, but not for acute health care. As proposed in the HBM, geographic and spatial variables as predisposing and enabling factors are related to regular and chronic care visits, which are discretionary, rather than to acute care visits, which are not discretionary.*
- *Transportation is a vital issue for access to health care, especially in rural areas where travel distances are great and access to alternative modes such as transit is less prevalent.*
- *Distance and transportation variables were not found to significantly influence the total number of routine or chronic care trips made overall, while emergency care visits were impacted by transportation options. However, additional results showed that those who cannot drive make more trips if someone else in the household can drive; distance and access to transportation impact the likelihood that someone will miss or delay a trip; and difficulty reported in making trips is significantly affected by distance and transportation options.*

Assessing access to and utilization of care can produce a diverse web of interrelated results, especially in rural areas. A myriad of variables can be studied to quantify what does and does not contribute to the healthcare utilization many of which are outlined in the article, "The effects of geography and spatial behavior on health care utilization among the residents of a rural region." The article outlines an intensive survey of 1,059 residents of rural Appalachia. A summary of the primary, survey variables are found in Table 1.

Table 1: Multivariate Break-Out

Predisposing	Enabling	Need
Distance Decay • Greater distances result in decreased utilization	**Transportation** • Access to personal or public transportation	**Check-ups/Routine Care** • Most Discretionary and preventative in nature
Mobility • Span of daily routine travel and relation of healthcare within or beyond that area	**Income** • Lower income is associated with less healthcare utilization	**Acute Care** • Least discretionary
Culture • Behaviors and beliefs within a community	**Insurance Coverage** • Insurance decreases healthcare costs and decreases barrier to care	**Chronic Care** • Moderately discretionary
Other • Gender, family structure, ethnicity, religiosity, etc.	**Other** • Education, employment, driver's license, etc.	**Other** • Mental and physical health status, no. of chronic conditions, etc.

Source: (Arcury, Gester, Preisser, Sherman, Spencer, & Perin, 2005)

Analysis of participant responses paired with GPS relational maps of personal routine and healthcare providers revealed distinct relationships between each type of need with patterns in contributing predisposing, enabling, and spatial factors.

Table 2: Frequency of Visits in Relation to Select Variables

		Check-up/Routine Care *Most Discretionary*	Chronic Care *Moderately Discretionary*	Acute Care *Least Discretionary*
Predisposing	Gender	Female ↑	Female ↑	Female --
	Age	Increasing Age ↑	Increasing Age ↑	Increasing Age ↓
Enabling	Driver's License	Patient Possesses ↑	Patient Possesses ↑	Patient Possesses --
	Employment	Employed ↑	Employed ↓	Employed --
Spatial	Distance to Care	Greater Distances ↓	Greater Distances ↓	Greater Distances --

-- No Significant Difference in Visits

Source: (Arcury, Gester, Preisser, Sherman, Spencer, & Perin, 2005)

The major takeaways of the article are seen in the progression of discretionary to non-discretionary care episodes. When acute care becomes necessary, it is not easily deterred by spatial, predisposing, or enabling factors. The actual need for care decreases with age, but is likely due with the decreased participation in risky behaviors. Conversely, the very discretionary, preventative check-up visits are greatly affected by most barriers to care and should be addressed when planning for rural care.

Works Cited

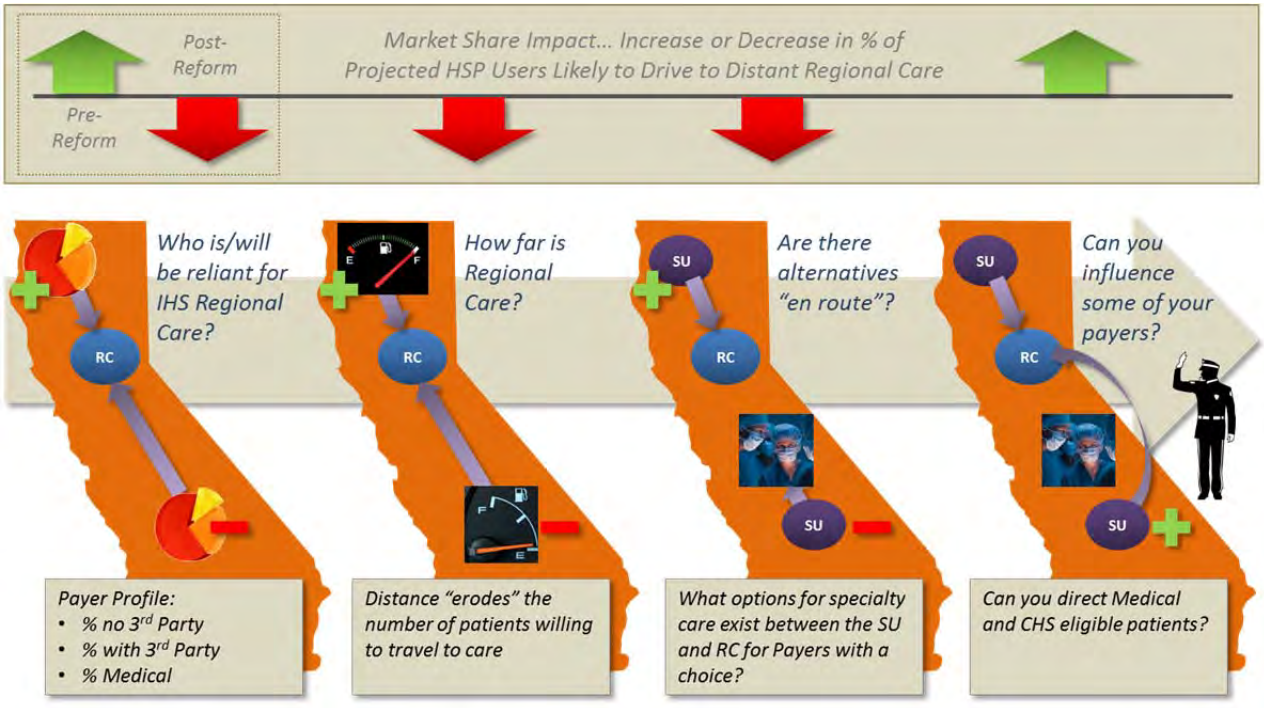
Arcury, T. A., Gester, W. M., Preisser, J. S., Sherman, J., Spencer, J., & Perin, J. (2005). The effects of geography and spatial behavior on health care utilication among the residents of a rural region. *Health Services Research*(0017-9124).

Available Data Elements for Quantifying Erosion

This study utilized available data to create a market share methodology capable of anticipating how market share would erode in response to reasons that include, but are not limited to:

- Urgency
- Commercial Payer
- Closer Alternate
- Poor Transportation
- No Time Off Work
- Prefer Traditional Medicine
- Distance
- Absence of Lodging
- Bad Weather

It considers that the above elements, working in concert, offer a dashboard by which to understand erosion. These elements can be captured and quantified through certain specific erosion factors identified earlier in this report. The graphic below illustrates the impact of these data elements or erosion factors on market share. Some push erosion down while others push it up.



These erosion factors were drawn from available data and implemented as explained below.

Distance Sensitive Patient Populations – The Payer Profiles of Health Program Patients provided by the California IHS identify those patients most likely impacted by travel and distance when it comes to accessing distant Regional care. These are patients without an alternative or choice: those with no 3rd party coverage, or limited payer coverage such as CHS or Medicaid.

A sample profile is shown below.

	7
Medicaid Only	421
Private Ins Only	1705
Medicare A Only	5
Medicare B Only	49
Medicare Part A & B Only	196
Medicare Part D	0
Medicaid & Medicare	50
Medicaid & Private Ins	40
Medicare & Private Ins	85
Medicaid, Medicare, & Private In	7
Total	2558

	No 3P Coverage		With 3P Coverage	
	All Coverage	Within CHSDA	All Coverage	Within CHSDA
Non Indian Active Users	151	142	989	927
CHS Eligible Active Users	448	411	2191	2097
Direct Only Active Users	142	102	529	406
Other Eligibility	7	5	54	52
Totals	597	518	2774	2555
	3310			3016

Sample Profile

- Payer Profiles were available for 69% of the existing Health Programs
- Since Medicaid numbers included Native and Non-Native patients, the calculated rates were unreliable. Consequently, a statewide rate was researched and applied universally: 9.4%. This rate compared favorably with the only significant data set available considering only Natives: 12.2% from Riverside San Bernardino.
- An average of 64% of AI/AN users have some kind of 3rd party coverage (rates range from 0% to 62%)
    - An average of 31.5% of CHS eligible users have 3rd party coverage
    - An average of 27.4% of Direct Care Only users have 3rd party coverage
- An average of 36% of AI/AN users are without 3rd party coverage. This percentage of the population deemed "Reliant" for the purposes of this study. In other words, these are the users who will be most reliant on distant regional care because of their limited or non-existent choice.

The table below shows how the payer profile tables were utilized to calculate important percentages that were imported into the market share calculation tables. The yellow shaded cells represent calculations of variant reliance user populations.

- Cell 3.1 sums All Users while 3.5 sums Users within the CHSDA\
- Cell 3.2 identifies All Highly Reliant Users (Direct Only Patients) while 3.6 identifies CHSDA Highly Reliant Users (464 or 19.2% for the former; 333 or 17.8% for the latter)
- Cell 3.4 calculates a composite or average percentage to use in the market share tables for this Health Program, 18.5% (an average of All and CHSDA user pop reliance)

Table 1 - Source

Medicaid Only	1,363
Private Ins Only	1,017
Medicare A Only	4
Medicare B Only	0
Medicare Part A & B Only	60
Medicare Part D	69
Medicaid & Medicare	150
Medicaid & Private Ins	144
Medicare & Private Ins	79
Medicaid, Medicare, & Private Ins	13
Total	**2,899**

Table 2 - Source

	No 3P Coverage		With 3P Coverage	
	All Coverage	Within CHSDA	All Coverage	Within CHSDA
Non Indian Active Users	553	494	2,294	2,036
CHS Eligible Active Users	118	97	1,322	1,080
Direct Only Active Users	464	333	509	360
Other Eligibility	0	0	0	0
Totals	582	430	1,831	1,440

Table 3 - Calculations

3.1 - All AI/AN Users	2,413	**3.5 - CHSDA AI/AN Users**	1,870
3.2 - All AI/AN Highly Reliant Users	464	**3.6 - Highly Reliant CHSDA AI/AN Users**	333
3.3 - % All AI/AN Highly Reliant Users	19.2%	**3.7 - % Highly Reliant CHSDA AI/AN Users**	17.8%
3.4 - % Composite Highly Reliant Users	18.5%		

Table 4 - Calculations

4.1 - Table 1 - % Medicaid All Coverage Payors	56.5%	**4.3 - Table 1 - % Medicaid CHSDA Payors**	72.9%
4.2 - Table 1 - % Medicaid All Coverage Payors	19.3%		

Reliance was stratified as follows:

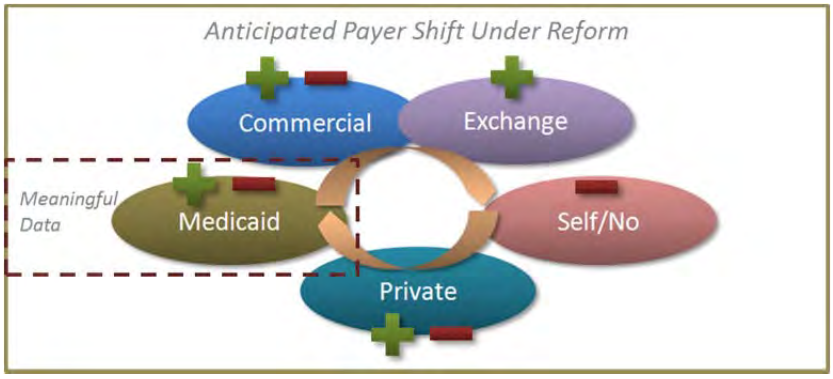
- High = Direct Care only No 3rd Party Payer (in this case, the 18.5% identified above)
- Moderate = Direct Care CHS eligible only (in this case, 5.0%)
- Low = Direct Care CHS eligible with 3rd Party Payer (in this case, 76.4%)

18.5% of this Health Program's current users are classified as Highly Reliant on Regional Care.

Future Distance Sensitive Payer Populations - Shifting Payer Segments as driven by the impact of Reform will change the level of sensitivity to distance among the populations referenced above. In other words, considering the example above, while 18.5% of that Health Program's current users are Highly Reliant on Regional Care, that will change after Health Reform is fully implemented. The critical question is "how much?"

The graphic below illustrates the unknowns of shifting payer segments anticipated from Reform. There are only two reliable conclusions to make:

- First, the Exchange Payers will go up. This is true simply because this segment is currently non-existent. Once exchanges are set up, some commercial, self, and Medicaid payers will likely migrate there.
- Second, Self/No Pay Payers will go down. This is what Reform is all about; lowering the number of uninsured. The question here is "where will they migrate to?"



The only meaningful data available to use in predicting impact on Market Share is research from the UCLA Center for Health Policy which projects approximately 43% of non-elderly California Natives will become eligible for Medicaid under Reform. Since the elderly are covered under Medicare, the study assumes

- the current number of uninsured for each Health Program will be cut by 43%
- the current number of Medicaid payers for each Health Program will be increased by number shifting out of the uninsured segment

In the example from the previous page, as a result of Reform, the 18.5% deemed Highly Reliant presently will be reduced to 10.6% post Reform as a result of shifting payers.

Undoubtedly, other movement will occur between the segments, but reliable data on how that movement will happen is simply unavailable.

Additional detail on shifting payer segments is provided on the following two pages.

Factor 1 - Medicaid Coverage (Pre-Reform)

American Indians and Alaska Natives (AI/AN) insured under Medicaid (Medi-Cal) in California play an integral role in the Market Share analysis. A reliable baseline population was established in the first market share calculation step in order to apply the subsequent Erosion factors as outlined in the table below.

Erosion Factor	1	2	3	4	5
Erosion Question	Who is truly reliant on Regional Care?	Who will be reliant on Regional Care after Reform?	Will distance to Regional care affect market share?	How will alternative care affect market share?	Can Medi-Cal and CHS eligible payers be directed?
Erosion Decision Strategy and Resulting Assumption	Define high reliance by number & percentage of present AI/AN users with no 3rd party payer	Shift AI/AN uninsured users to Medicaid consistent with UCLA Health Policy projections	Study Medicare utilization relative to urban-to-rural access patterns and determine % erosion per travel time.	Reduce number of users by a percentage per alternate care opportunity en route	Assume both segments of each Health Program population can be directed to care

California Indian Health Services (IHS) provided Health Program enrollee data by payer where available (21 of 33 Health Programs had such payer data). Unfortunately, the Medicaid data proved unreliable as those identified patient enrollees included both native (AI/AN) and non-native users. This inflated the Medicaid enrollee population percentage for most Health Programs. Only one, Riverside/San Bernardino County Indian Health, had a significant native population (24,916) and did not serve non-native users. Their Medicaid coverage percent is 12.2%.

An alternate approach was developed to establish a Medicaid coverage assumption for all tribes. In February of 2012, the California Department of Health Care Services released a report stating that 34,786 AI/AN's were covered by Medi-Cal in January of 2011. To establish the total California 2011 AI/AN population, the 2010 Census AI/AN Alone population was grown by a straight-line factor gained from California's Department of Finance "CA County Race Forecasts by Decade," which gave a population of 371,675.

This current Medi-Cal payer count divided by current AI/AN population produced a California AI/AN Medicaid coverage percent of 9.4% (34,786/371,675). When compared to the Riverside/San Bernardino County Indian Health Medicaid coverage of 12.2%, the result was appropriate and conservative.
Because of the larger data set and the involvement of state level demographers in the quantification effort, the alternative method was selected, and all tribes were assigned a blanket Medicaid coverage rate of 9.4%.

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Factor 2 - Medicaid Coverage (Post Reform)

Nationally, the expansion of Medicaid will make 185,000 to 380,000 uninsured AI/ANs who receive care from IHS providers eligible for Medicaid coverage. Additionally, the ACA places a new emphasis on Medicaid enrollment assistance and will require that all applicants be able to apply by mail, in person, online, and by phone. (Implications of Health Reform for American Indians and Alaska Native Populations, Robert Wood Johnson Foundation)

Erosion Factor	1	2	3	4	5
Erosion Question	Who is truly reliant on Regional Care?	Who will be reliant on Regional Care after Reform?	Will distance to Regional care affect market share?	How will alternative care affect market share?	Can Medi-Cal and CHS eligible payers be directed?
Erosion Decision Strategy and Resulting Assumption	Define high reliance by number & percentage of present AI/AN users with no 3rd party payer	Shift AI/AN uninsured users to Medicaid consistent with UCLA Health Policy projections	Study Medicare utilization relative to urban-to-rural access patterns and determine % erosion per travel time.	Reduce number of users by a percentage per alternate care opportunity en route	Assume both segments of each Health Program population can be directed to care

The UCLA Center for Health Policy Research projects the following:

> The ACA will likely have the greatest impact on the estimated 152,000 AI/ANs in California who are currently uninsured (27% of those age 19-64).
>
> Of California AI/AN adults who are currently uninsured, about 29% (an estimated 44,000) may qualify for coverage under the MCE (Medicaid Expansion) program and another 14% (an estimated 21,000) may qualify for coverage under the HCCI (Health Care Cost Institute) program.

This suggests that of those currently uninsured AI/ANs in the state of California, Reform could shift at least 43% into insured status through Medicaid. This would mean that 57% of current uninsured would remain uninsured for a variety of reasons. The shift from uninsured to insured was accomplished by applying 43% to the uninsured AI/AN population, which was then subtracted from the uninsured group and added to the Medicaid payer group. (i.e., Of the 44,000 uninsured AI/AN population above, 43% or 18,920 would be shifted to the Medicaid payer group.)

While Reform will shift payers across all payer segments, this single percentage is the most reliable indicator to use in modeling.

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Resulting Market Share Erosion by Distance – –As cited in published research, distance will erode the number of those willing to travel to Regional care. The question of course is "how much?" To quantify this impact Urban-to-Rural Utilization Patterns were examined using Dartmouth Atlas of Healthcare and California Inpatient State data.

by Distance	High (H) Reliance	Moderate (M) Reliance		Low (L) Reliance	
	Direct Care Only No 3P	Direct Care, CHS		DC, CHS, Medicaid	Direct Care, CHS, 3P
		No Choice	Choice	*No Choice*	Choice
Drive Time to Regional Center (< than in Minutes)	*% likely to drive*	*% likely to drive*	*% likely to drive*	% likely to drive	% likely to drive
60	100%	100%	100%	100%	100%
120	96%	96%	96%	96%	96%
180	92%	92%	92%	92%	92%
240	88%	88%	88%	88%	88%
300	80%	80%	80%	80%	80%

Path 1
Los Angeles to Bishop

Path 2
San Francisco to Garberville

Two unique paths were studied relative to utilization and population density. Each of these represented Urban-to-Rural paths by which to analyze utilization of a payer segment typically not concerned with payment: Medicare. Such users are assumed to be comparable to the idea of a Native Payer segment that would have access to Regional care and not be expected to pay upon receiving such care. The question is would they still come? Utilization suggests "no, not all of them."

- Utilization patterns from Los Angeles (urban) to Bishop (rural) show rather dramatic erosion as a function of distance
- Utilization patterns from San Francisco (urban) to Garberville (rural) show minimal erosion as a function of distance.

Considered together, they suggest an erosion rate of 4.0% per 60 miles of travel time. This assumption was utilized in the market share calculation table. Addition detail on the data is shown on the following four pages

Factor 3 - Market Share Erosion by Population by Distance/Density

Published studies indicate that healthcare access and utilization erodes with distance from access points. The effort below includes a specific dataset we utilized for Medicare procedures and discharges by two different city sets. The cities represent a Urban-to-Rural orientation for the purposes of this analysis.

Urban to Rural Path

		Dartmouth							
		Source: Dartmouth Atlas of HC - Selected Procedures and Medical Discharges							
Location	Distance from Most Urban (miles)	All Surgical Discharges per 1K Medicare Enrollees	Coronary Angiography	Percutaneous Coronary Intervention	Bacterial Pneumonia Discharges	Congestive Heart Failure Discharges	Hospitalization for Hip Fracture	COPD Discharge	% Erosion
Erosion Path 1: Los Angeles to Bishop									
More Urban		Use Rates per 1,000							
Los Angeles	0.0	92.0	15.5	7.7	14.1	19.5	6.0	8.3	100.0%
Burbank	11.2	95.4	12.4	6.9	12.0	21.2	6.3	8.4	94.3%
Lancaster	69.1	96.9	14.4	8.1	19.5	22.2	6.8	17.9	125.0%
Ridgecrest	154.4	108.2	15.2	9.3	15.8	17.4	5.8	6.1	97.8%
Lone Pine	209.1	90.4	-	-	-	-	-	-	-
Bishop	266.4	92.4	9.7	4.7	15.8	10.0	-	5.3	69.7%
More Rural									
Erosion Path 2: San Francisco to Fortuna									
More Urban		Use Rates per 1,000							
San Francisco	0.0	66.5	10.9	6.2	13.9	13.8	5.4	4.4	100.0%
Novato	28.6	93.1	13.2	7.1	11.4	17.3	6.1	-	109.9%
Petaluma	38.9	87.7	8.4	5.1	11.6	18.0	7.0	7.0	104.9%
Ukiah	115.2	98.6	13.2	7.7	12.2	16.5	7.6	4.1	112.4%
Willits	137.1	93.3	10.4	-	11.3	17.5	-	-	101.8%
Fortuna	257.4	81.6	11.3	6.2	14.8	14.3	8.1	4.8	109.2%
More Rural									

Conclusion

The data analysis suggests an erosion rate of -4.5% for each 60 minutes of travel time to a distant regional point of care. When combined with state inpatient data analysis a composite erosion rate of -4.0% is suggested. This is the rate utilized in the final market share calculations for erosion by distance from care.

Erosion Rate / 60 miles of travel from Regional Care =	-4.5%
Composite Erosion Rate Utilized for Market Share Calculations =	-4.0%

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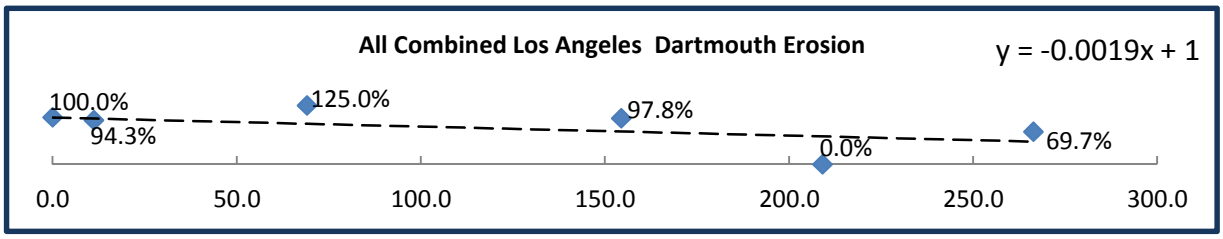
Factor 3 - Market Share Erosion by Population by Distance/Density

Erosion Path 1: Los Angeles to Bishop

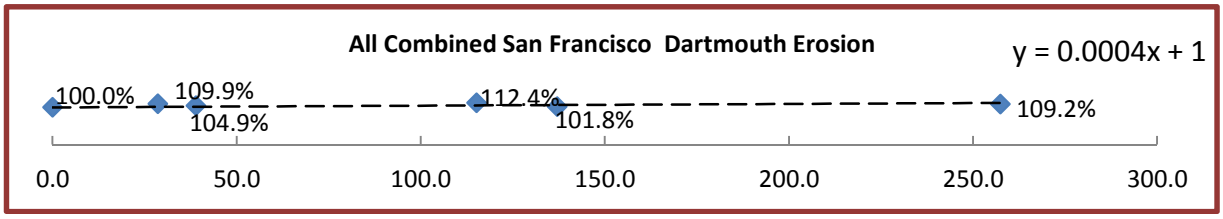


Notes:

The data for Los Angeles to Bishop shows identifiable care erosion, while San Francisco to Fortuna does not.

The data for Lone Pine, despite the presence of a Critical Access Hospital, was not available for the selected utilization of Outpatient Procedures and Medical Discharges.

Erosion Path 2: San Francisco to Fortuna



Notes:

Based solely on the data set and factors chosen, access to care does not appear to erode when leaving San Francisco along the selected path.

The final destination of Erosion Path 2 in Fortuna has unknown effects on care access due to the presence of advanced care available in Eureka.

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Factor 3 - Market Share Erosion by Population by Distance/Density

Published studies indicate that healthcare access and utilization erodes with distance from access points. The effort below includes a specific dataset we utilized for Medicare discharges by two different city sets. The cities represent a Urban-to-Rural orientation for the purposes of this analysis.

Urban to Rural Path

State of California

Source: California Inpatient State Data (Medicare CY09 65+ Data)

Location	Distance from Most Urban (miles)	Simple pneumonia & pleurisy w/CC	Heart failure & shock w/MCC	Esophagitis, gastroent & misc. digest disord. w/o MCC	Cellulitis w/o MCC	Nutritional & misc. metabolic disord. w/o MCC	Kidney & urinary tract infections	Trans-urethral prostatec-tomy w/o CC/MCC	Rehabilitation w/o CC/MCC	% Erosion
Erosion Path 1: Los Angeles to Bishop										
More Urban		Use Rates per 1,000								
Los Angeles	0.0	3.5	6.1	4.9	2.6	4.3	4.9	0.6	1.1	100.0%
Burbank	11.2	2.9	6.8	4.8	2.5	3.3	4.3	0.7	1.4	95.1%
Lancaster	69.1	3.7	4.4	4.0	1.9	3.8	3.8	0.6	1.1	82.9%
Ridgecrest	154.4	7.4	2.8	5.2	3.3	3.3	3.7	1.7	1.1	101.1%
Lone Pine	209.1	2.5	-	-	2.5	2.5	2.5	-	-	65.2%
Bishop	266.4	1.9	1.2	2.7	1.2	1.9	1.5	0.4	0.4	39.9%
More Rural	2007 Medicare Data									

Erosion Path 2: San Francisco to Arcata

More Urban		Use Rates per 1,000								
San Francisco	0.0	4.0	4.3	3.0	1.8	2.7	3.4	0.7	3.1	100.0%
Novato	28.6	3.3	3.2	3.5	1.8	2.4	3.9	0.9	0.5	84.1%
Petaluma	38.9	5.7	3.6	4.7	2.7	2.7	4.9	0.4	0.3	108.6%
Ukiah	115.2	3.4	8.0	2.1	1.8	3.2	3.5	0.9	0.5	101.6%
Willits	137.1	4.7	3.1	4.7	1.0	3.1	5.7	1.0		117.0%
Fortuna	257.4	7.3	1.7	3.0	0.9	3.9	3.9		3.9	110.1%
More Rural	2007 Medicare Data									

Conclusion

The data analysis suggests an erosion rate of -3.6% for each 60 minutes of travel time to a distant regional point of care. When combined with state inpatient data analysis a composite erosion rate of -4.0% is suggested. This is the rate utilized in the final market share calculations for erosion by distance from care.

Erosion Rate / 60 miles of travel from Regional Care =	-3.6%
Composite Erosion Rate Utilized for Market Share Calculations =	-4.0%

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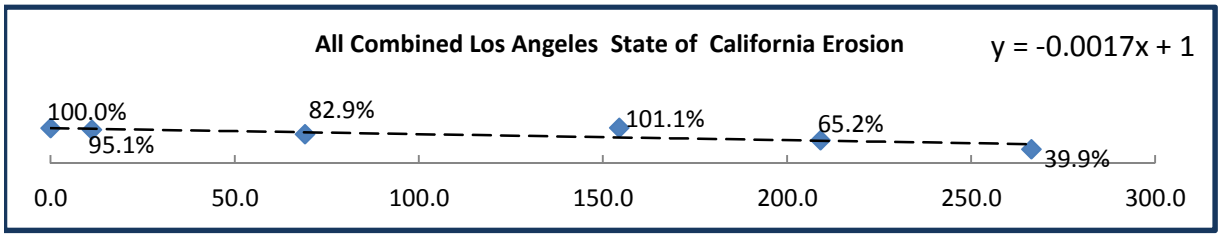
Factor 3 - Market Share Erosion by Population by Distance/Density

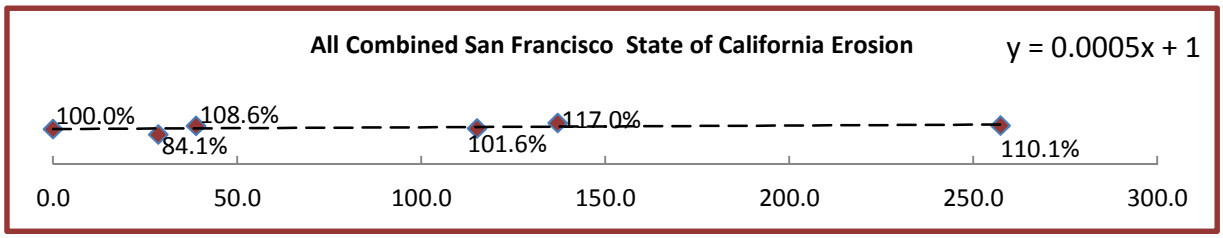
Erosion Path 1: Los Angeles to Bishop



Notes:

The data for Los Angeles to Bishop shows identifiable care erosion, while San Francisco to Fortuna does not.

Erosion Path 2: San Francisco to Fortuna



Notes:

Based solely on the data set and factors chosen, access to care does not appear to erode when leaving San Francisco along the selected path.

The final destination of Erosion Path 2 in Fortuna has unknown effects on care access due to the presence of advanced care available in Eureka.

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Erosion by Alternative Care – In addition to erosion by distance as a factor of multiple reasons related to payer status, there is an additional factor of alternative care that can be isolated and estimated in terms of its impact. Alternative care is simply the option low reliance payers have of selecting another facility to receive care from that is closer to home than distance Regional care.

The CAPW discussed how to assess the impact of such erosion and settled on the impact table below to drive the market share calculation table.

- High reliance payers will bypass all alternative care and travel to Regional care with no impact
- Moderate reliance payers will erode at a rate of 10% per alternative care they encounter en route to Regional care
- Low reliance payers will erode at a rate of 20% per alternative care they encounter en route to Regional care

by Alternative Care	High (H) Reliance	Moderate (M) Reliance		Low (L) Reliance	
	Direct Care Only No 3P	Direct Care, CHS			Direct Care, CHS, 3P
			Choice		Choice
Secondary or Tertiary Alternative Care Options "in route"	*% likely to drive*		*% likely to drive*		*% likely to drive*
1	100%		90%		80%
2	100%		80%		60%
3	100%		70%		40%

Alternative Care Using Consolidated Tribal Health as an example, the most direct route to RC at Sacramento would take them past one (1) alternative care site.

The above reductions were made to each Health Program's payer shifted, distance eroded, projected user population in the market share calculation tables.

Limiting Erosion by Payer Direction – The CAPW considered how to limit erosion as a factor of alternative care as discussed above. Again, alternative care is simply the option low reliance payers have of selecting another facility to receive care from that is closer to home than distance Regional care.

The CAPW reasoned that local Health Programs can leverage influence over certain Moderate and Low Reliance payers, essentially directing them to distant Regional care (removing choice). The mechanism for accomplishing this is not defined. And CAPW members understand that not all payers in both groups could be directed; only those without a 3rd Party Payer, including:

- Direct Care, CHS only patients
- Direct Care, CHS, Medicaid eligible patients

by Alternative Care	High (H) Reliance	Moderate (M) Reliance		Low (L) Reliance	
	Direct Care Only No 3P	Direct Care, CHS		DC, CHS, Medicaid	Direct Care, CHS, 3P
		No Choice	Choice	*No Choice*	Choice
Secondary or Tertiary Alternative Care Options "in route"	*% likely to drive*	*% likely to drive*	*% likely to drive*	% likely to drive	% likely to drive
1	100%	100%	90%	100%	80%
2	100%	100%	80%	100%	60%
3	100%	100%	70%	100%	40%

Limiting Erosion by Directing CHS Patients
Directing CHS patients without 3rd party coverage could limit a potential 30% erosion for this factor alone. Can you do this? Is this a reasonable assumption?

Limiting Erosion by Directing Medical Patients
Directing Medical patients could limit a potential 60% erosion for this factor alone. Can you do this? Is this a reasonable assumption?

Nevertheless, this reasoned approach to directing payer segments to Regional care is consistent with Portland Area Regional assumptions, and is perhaps the most significant of all market erosion factors, reducing potential erosion by an average of 12.7% basis points for all scenarios.

This logic produced a "High" market share percentage which was adopted for all planning scenarios (as opposed to the "Low" market share percentage).

Reform

The Affordable Care Act (ACA) will have a distinct impact on the delivery of care to AI/ANs. At a minimum, current published documents identify the following:

- AI/AN participation in Health Insurance Exchanges
- Expanded Medicaid eligibility
- IHS and I/T/U responsibility and reimbursement opportunities
- Reauthorization of the Indian Health Care Improvement Act
- Grant opportunities for I/T/U entities

For this project, the second item above related to Medicaid eligibility is of greatest concern because it will drive a shift in payer segmentation, resulting in a greater percentage of insured payers (Medicaid) and a much smaller percentage of un-insured payers (no 3rd Party).

Nationally, the expansion of Medicaid will make 185,000 to 380,000 uninsured AI/ANs who receive care from IHS providers eligible for Medicaid coverage. Additionally, the ACA places a new emphasis on Medicaid enrollment assistance and will require that all applicants be able to apply by mail, in person, online, and by phone. (*Implications of Health Reform for American Indians and Alaska Native Populations*, Robert Wood Johnson Foundation)

The latest information from the California Health Interview Survey (CHIS) indicates the following:

Insured Status	All California	All AI/ANs	AI/ANs (Age 0-18)	AI/ANs (Age 19-64)	AI/ANs (Age (65+)
Currently Insured	85.5%	76.9%	96.3%	63.2%	99.9%
Not Currently Insured	14.5%	23.1%	3.7%	36.8%	

The UCLA Center for Health Policy Research projects the following:

- The ACA will likely have the greatest impact on the estimated 152,000 AI/ANs in California who are currently uninsured (27% of those age 19-64).
- Of California AI/AN adults who are currently uninsured, about 29% (an estimated 44,000) may qualify for coverage under the MCE (Medicaid Expansion) program and another 14% (an estimated 21,000) may qualify for coverage under the HCCI (Health Care Cost Institute) program.

This suggests that of those currently uninsured AI/ANs in the state of California, Reform could shift at least 43% into insured status through Medicaid. This would mean that 57% of current uninsured would remain uninsured for a variety of reasons.

The shift from uninsured to insured was captured in projected market share calculation tables by reassigning 43% of the current uninsured AI/AN population to the future Medicaid payer group. Further discussion of Reform payer shifts can be found in the Market Share Erosion Methodology discussed elsewhere in this report.

While Reform will shift payers across all payer segments, this single percentage shift (from uninsured to Medicaid) is the most reliable indicator to use in modeling.

The significance of payer Reform will be both good and bad:

- Good – newly insured AI/AN members are enabled to seek specialty care and take that revenue to a distant regional or area wide medical center (market share goes up)
- Bad – newly insured AI/AN members now have a choice and can go to a distant regional or area wide medical center or choose a closer alternative care site (market share goes down)

The enabling of newly insured AI/AN members with a choice has enduring consequences for distant regional or area wide care:

- Centers must elevate patient care and safety – users don't have to come
- Centers must reach out to patients providing clear motivation for why care is superior at a distant Regional site
- Centers must understand their new role in competing with private sector facilities, one with much more experience in market share capture

The Robert Wood Johnson Foundation identifies extended Reform impact that is much harder to quantify:

- Subsidies will be extended to individuals between 138-400% FPL to help defray the cost of purchasing insurance through the exchanges.
- ACA designates I/T/U as payers of last resort. Other public, private, and state health care initiatives for which an individual qualifies will cover the majority of health care expenses.
- IHCIA reauthorization extends services…
    - Behavioral health prevention and treatment programs
    - Hospice, assisted living, and home and community based services
    - Gives I/T/U organizations more power to recover costs from liable third parties
    - Permits tribes or tribal organizations operating under the Indian Self-Determination Act and urban Indian organizations operating under Title V to purchase coverage for employees through the Federal Employees Health Benefits program.
    - Allows IHS to share medical services and facilities with the Department of Veteran's Affairs and the Department of Defense
    - Permits I/T/U providers to purchase coverage for IHS beneficiaries

- Authorizes I/T/U organizations to establish programs to train and employ AI/ANs to provide health care services.
- In addition, the ACA offers grants for the initiation or expansion of programs targeted to AI/ANs

Should Regional planning go forward in the coming years, these impacts should be carefully watched and assessed.

[i]

[i] Carolyn Ingram, Shannon McMahon, Veronica Guerra, and Alice Weiss, *Implications of Health Reform for American Indian and Alaska Native Populations*, State Health Reform Assistance Network Policy Brief, February 2012, Robert Wood Johnson Foundation

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Composition of the Nonelderly Uninsured Under Reform, By Income, Urban Institute Analysis, HIPSM 2011

Regional Center Services Characteristics

Planning tool used in iterative fashion with HSP files (varying market share, Diagnostic Imaging, ED & OB services). Assumes no Primary Care. Does not provide gap analysis.

	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Specialty Care						
	Provider Visits					
Orthopedics	2,093	Providers	0.8	0.0	$272	$0
Ophthalmology	2,638	Providers	0.7	0.0	$279	$0
Dermatology	1,503	Providers	0.4	0.0	$128	$0
General Surgery	1,050	Providers	0.6	0.0	$242	$0
Otolaryngology	1,003	Providers	0.4	0.0	$199	$0
Cardiology	1,239	Providers	0.5	0.0	$241	$0
Urology	804	Providers	0.3	0.0	$242	$0
Neurology	574	Providers	0.2	0.0	$230	$0
Other Surg Specialties	1,356	Providers	0.5	0.5	$373	$505,203
Other Med Specialties	5,575	Providers	2.3	2.3	$128	$714,618
Specialty Care Total	6,931	Providers	2.8	7.9	<=Total FTE	$1,219,822
		Dept. Gross Sq. Meters	87	207		
Other Ambulatory Care						
Dental Specialty Care		Specialists	3.1	10	$0	$0
		Support Staff FTEs	7.3			
		Operatories	8.0			
		Dept. Gross Sq. Meters	440	440		
Audiology Visits	1,661	Audiologists	0.8	3.0	$487	$809,588
		Audiology Booths	1.0			
		Dept. Gross Sq. Meters	81	81		
Other Ambulatory Care Total		Providers	3.9	13.4	<=Total FTE	$809,588
		Dept. Gross Sq. Meters	521	521		
Outpatient Behavioral Health						
Psychiatry	1,370	Counselors	0.8			
Behavioral Health Total		Total Counselors	0.8		$527	$721,516
		Counselor Offices	1			
		Total FTE	1.6	1.6		
		Dept. Gross Sq. Meters	39	39		

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Regional Center Services Characteristics

Planning tool used in iterative fashion with HSP files (varying market share, Diagnostic Imaging, ED & OB services). Assumes no Primary Care. Does not provide gap analysis.

	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Inpatient Care						
Pediatric Patient Days	0	# of Beds	0.0	0.0	$1,857	$0
Adult Medical Acute Care	0	# of Beds	0.0	0.0	$1,370	$0
Adult Surgical Acute Care *Gyn Surgery Days*	0	# of Beds	0.0	0.0	$1,370	$0
Intensive Care Patient Days	0	# of Beds	0.0	0.0	$1,923	$0
Inpatient Care Total		**Total Beds**	0	0		$0
		Total DGSM	*0*	0	<Total Staff	
		Total ICU DGSM	*0*	0	<Total Space	
Ancillary Services						
Laboratory Services						
Lab Total	9,020	# of FTEs	1.0	1.0	$188	$1,691,521
		Dept. Gross Sq.Meters	80	80		
Pharmacy	105,438	Pharmacists	1.5	2.0	$0	$0
		Dept. Gross Sq. Meters	167	167		
Diagnostic Imaging						
Rad Exams	5,862	Rooms	1.0	1.0	$255	$1,493,517
Ultrasound Exams	1,047	Rooms	0.0	0.0	$200	$0
Mammography Exams	1,865	Rooms	1.0	1.0	$138	$258,041
Fluoroscopy Exams	497	Rooms	0.0	0.0	$382	$0
CT	889	Rooms	0.0	0.0	$407	$0
MRI exams	566	Rooms	0.0	0.0	$459	$0
Diagnostic Imaging Total	7,727	*Radiologists with Telemed Buyback:*	0.7	0.7		$1,751,558
	10,726	*Total Radiologist*	1.0			
		Dept. Gross Sq. Meters	168.0	192.0		
	1.0	All DI Staff (Not Radiologist)	3.5	3.5	<=Total FTE	
Rehabilitation Services						
OT Visits	2,020	Therapists	1.1		$0	$0
Speech Therapy Visits	535	Therapists	0.3		$0	$0
Rehab Total	2,555	Therapists	1.4			$0
		Dept. Gross Sq. Meters	50	50		
		Total FTE OT & Speech Only	3.3	3.3		

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Regional Center Services Characteristics

Planning tool used in iterative fashion with HSP files (varying market share, Diagnostic Imaging, ED & OB services). Assumes no Primary Care. Does not provide gap analysis.

	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Surgery						
Outpatient Endoscopy Cases	213	Endoscopy Suites	1.0	0.0	$1,398	$297,818
Outpatient Surgery Cases	544	Outpatient ORs	1.0	1.0	$1,562	$849,634
		# of Pre-Op Spaces	2.0			
		# of PACU Spaces	1.0			
		# of Phase II Spaces	3.0			
	3	# Observation Beds	1.0	1.0		
		# Observation FTEs	0.5			
OP Surgical Case Total	757	# of ORs	1.0	3.0	<=Total FTE	$1,147,452
		Dept. Gross Sq. Meters	637	336		
Administrative Support						
Administration		# of FTE	5.8	8.0		
		Dept. Gross Sq. Meters	192	211		
Nursing Administration		# of FTE	0.0			
		Dept. Gross Sq. Meters	0			
Quality Management		# of FTE	0.9			
		Dept. Gross Sq. Meters	17			
Information Management		# of FTE	3.2	3.0		
		Dept. Gross Sq. Meters	79	79		
Health Information Mngmt.		# of FTE	7.8	8.0		
		Dept. Gross Sq. Meters	210	210		
Business Office		# of FTE	5.5	4.0		
		Dept. Gross Sq. Meters	36	73		
Security		# of FTE	1.1	1.0		
		Dept. Gross Sq. Meters	16	16		
Transportation		# of FTE	0.5			
		Dept. Gross Sq. Meters	3			
Administration Total		# of FTE	24.7	24.0		
		Dept. Gross Sq. Meters	553	589		
Facility Support Services						
Clinical Engineering		# of FTE	1.0	1.0		
		Dept. Gross Sq. Meters	10	10		
Facility Management		# of FTE	4.9	5.0		
		Dept. Gross Sq. Meters	61	61		
Central Sterile / Medical Supply		# of FTE	0.7	1.0		
		Dept. Gross Sq. Meters	30	30		
Property & Supply		# of FTE	0.7	1.0		
		Dept. Gross Sq. Meters	53	87		
Housekeeping & Linen		# of FTE	6.0	6.0		
		Dept. Gross Sq. Meters	78	78		
Facility Support Services Total		# of FTE	13.3	14.0		
		Dept. Gross Sq. Meters	232	491		

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Regional Center Services Characteristics

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Other Programs						
	Telemedicine % Inc					
Case Management	80%	# of FTE	5.1	5.1	$0	$0
		Dept. Gross Sq. Meters	90	90		
Pain Management	20%	# of Specialist Providers	0.3	0.3	$0	$0
		# of Support Staff FTEs	0.6	0.6		
		Dept. Gross Sq. Meters	47	46.7		
Other Funded Programs Total		# of FTEs	6.0	6.0		$0
		Dept. Gross Sq. Meters	136	136		

IHS Supportable Totals

Staff FTEs (including Non-RRM)	**59.7**	**80.4**		**$7,341,456**
Dept. Gross Sq. Meters	**5,044**	**3,776**		**$7,341,456**

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Regional Center Services Characteristics

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Specialty Care						
	Provider Visits					
Orthopedics	5,053	Providers	1.8	1.8	$299	$1,511,343
Ophthalmology	6,443	Providers	1.7	1.7	$307	$1,975,359
Dermatology	3,579	Providers	0.9	0.9	$140	$502,054
General Surgery	2,548	Providers	1.6	1.6	$265	$675,679
Otolaryngology	2,398	Providers	0.9	0.9	$218	$523,791
Cardiology	2,972	Providers	0.0	0.0	$264	$0
Urology	1,963	Providers	0.7	0.0	$265	$0
Neurology	1,368	Providers	0.6	0.0	$252	$0
Other Surg Specialties	3,224	Providers	1.2	1.2	$409	$1,318,522
Other Med Specialties	13,491	Providers	5.4	5.4	$141	$1,898,127
Specialty Care Total	36,736	Providers	13.5	22.6	<=Total FTE	$8,404,875
		Dept. Gross Sq. Meters	966	1,144.1		
Other Ambulatory Care						
Dental Specialty Care		Specialists	7.3	25	$0	$0
		Support Staff FTEs	17.3			
		Operatories	18.0			
		Dept. Gross Sq. Meters	1,044	1,044		
Audiology Visits	3,866	Audiologists	1.9	5.0	$535	$2,068,465
		Audiology Booths	2.0			
		Dept. Gross Sq. Meters	143	143		
Other Ambulatory Care Total		Providers	9.2	29.6	<=Total FTE	$2,068,465
		Dept. Gross Sq. Meters	1,187	1,187		
Outpatient Behavioral Health						
Psychiatry	3,378	Counselors	2.0			
Behavioral Health Total		Total Counselors	2.0		$578	$1,952,762
		Counselor Offices	2			
		Total FTE	4.0	4		
		Dept. Gross Sq. Meters	63	63		

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Inpatient Care						
Pediatric Patient Days	1,746	# of Beds	8.0	8.4	$2,039	$3,559,902
Adult Medical Acute Care	15,006	# of Beds	43.0	51.7	$1,504	$22,564,672
Adult Surgical Acute Care	9,491	# of Beds	29.0	34.4	$1,504	$14,271,712
Gyn Surgery Days						
Intensive Care Patient Days	3,569	# of Beds	14.0	14.9	$2,111	$7,535,801
Inpatient Care Total		**Total Beds**	94	109		$47,932,087
		Total DGSM	*4,000*	247	<Total Staff	
		Total ICU DGSM	*1,050*	5,468	<Total Space	
Ancillary Services						
Laboratory Services						
Lab Total	120,071	# of FTEs	8.0	7.5	$206	$24,716,615
		Dept. Gross Sq.Meters	382	329		
Pharmacy	438,051	Pharmacists	10.9	15.0	$0	$0
		Dept. Gross Sq. Meters	343	255		
Diagnostic Imaging						
Rad Exams	17,180	Rooms	3.0	3.0	$280	$4,804,902
Ultrasound Exams	3,320	Rooms	2.0	2.0	$220	$730,168
Mammography Exams	4,647	Rooms	2.0	2.0	$152	$705,786
Fluoroscopy Exams	1,485	Rooms	1.0	1.0	$419	$622,126
CT	2,179	Rooms	1.0	1.0	$446	$972,553
MRI exams	1,401	Rooms	0.0	0.0	$503	$0
Diagnostic Imaging Total	28,811	*Radiologists with Telemed Buyback:*	2.5	2.5		$7,835,535
	30,212	*Total Radiologist*	2.6			
		Dept. Gross Sq. Meters	885.0	845.7		
	9.0	All DI Staff (Not Radiologist)	14.6	14.6	<=Total FTE	
Rehabilitation Services						
OT Visits	4,803	Therapists	2.7		$0	$0
Speech Therapy Visits	1,081	Therapists	0.6		$0	$0
Rehab Total	5,884	Therapists	3.3			$0
		Dept. Gross Sq. Meters	115	115		
		Total FTE OT & Speech Only	9.9	9.9		

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Regional Center Services Characteristics

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Surgery						
Outpatient Endoscopy Cases	517	Endoscopy Suites	1.0	1.0	$1,535	$793,512
Outpatient Surgery Cases	2,678	Outpatient ORs	2.0	4.0	$1,714	$4,591,297
		# of Pre-Op Spaces	3.0			
		# of PACU Spaces	2.0			
		# of Phase II Spaces	5.0			
	12	# Observation Beds	1.0	1.0		
		# Observation FTEs	0.5			
OP Surgical Case Total	3,195	# of ORs	2.0	28.5	<=Total FTE	$5,384,809
		Dept. Gross Sq. Meters	1,467	1,300		
Administrative Support						
Administration		# of FTE	16.8	33.5		
		Dept. Gross Sq. Meters	197	553		
Nursing Administration		# of FTE	13.0	0.0		
		Dept. Gross Sq. Meters	248	0		
Quality Management		# of FTE	6.5	0.0		
		Dept. Gross Sq. Meters	124	0		
Information Management		# of FTE	11.7	10.0		
		Dept. Gross Sq. Meters	206	190		
Health Information Mngmt.		# of FTE	46.7	42.0		
		Dept. Gross Sq. Meters	619	605		
Business Office		# of FTE	22.9	18.0		
		Dept. Gross Sq. Meters	104	191		
Security		# of FTE	3.8	3.0		
		Dept. Gross Sq. Meters	25	20		
Transportation		# of FTE	3.9	0.0		
		Dept. Gross Sq. Meters	24	0		
Administration Total		# of FTE	125.4	106.5		
		Dept. Gross Sq. Meters	1,546	1,559		
Facility Support Services						
Clinical Engineering		# of FTE	3.8	4.0		
		Dept. Gross Sq. Meters	101	93		
Facility Management		# of FTE	25.6	20.5		
		Dept. Gross Sq. Meters	246	211		
Central Sterile / Medical Supply		# of FTE	1.7	1.5		
		Dept. Gross Sq. Meters	74	556		
Property & Supply		# of FTE	5.8	5.5		
		Dept. Gross Sq. Meters	366	469		
Housekeeping & Linen		# of FTE	34.0	26.5		
		Dept. Gross Sq. Meters	253	238		
Facility Support Services Total		# of FTE	70.9	87.5		
		Dept. Gross Sq. Meters	1,041	2,777		

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Regional Center Services Characteristics

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		Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Other Programs							
	Telemedicine % Inc					
Case Management	80%	# of FTE	11.4	11.4	$0	$0
		Dept. Gross Sq. Meters	200	200		
Pain Management	20%	# of Specialist Providers	0.7	0.7	$0	$0
		# of Support Staff FTEs	1.5	1.5		
		Dept. Gross Sq. Meters	112	111.9		
Other Services Total		# of FTEs	13.6	13.6		$0
		Dept. Gross Sq. Meters	312	312.1		

IHS Supportable Totals

Staff FTEs (including Non-RRM)	**265.6**	**589.0**	**$98,295,148**
Dept. Gross Sq. Meters	**17,512**	**20,637**	**$98,295,148**

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Specialty Care						
	Provider Visits					
Orthopedics	2,093	Providers	0.8	0.0	$272	$0
Ophthalmology	2,638	Providers	0.7	0.0	$279	$0
Dermatology	1,503	Providers	0.4	0.0	$128	$0
General Surgery	1,050	Providers	0.6	0.0	$242	$0
Otolaryngology	1,003	Providers	0.4	0.0	$199	$0
Cardiology	1,239	Providers	0.5	0.0	$241	$0
Urology	804	Providers	0.3	0.0	$242	$0
Neurology	574	Providers	0.2	0.0	$230	$0
Other Surg Specialties	1,356	Providers	0.5	0.5	$373	$505,203
Other Med Specialties	5,575	Providers	2.3	2.3	$128	$714,618
Specialty Care Total	6,931	Providers	2.8	7.9	<=Total FTE	$1,219,822
		Dept. Gross Sq. Meters	87	207.4		
Other Ambulatory Care						
Dental Specialty Care		Specialists	3.1	10	$0	$0
		Support Staff FTEs	7.3			
		Operatories	8.0			
		Dept. Gross Sq. Meters	440	440		
Audiology Visits	1,661	Audiologists	0.8	3.0	$487	$809,588
		Audiology Booths	1.0			
		Dept. Gross Sq. Meters	81	81		
Other Ambulatory Care Total		Providers	3.9	13.4	<=Total FTE	$809,588
		Dept. Gross Sq. Meters	521	521		
Outpatient Behavioral Health						
Psychiatry	1,370	Counselors	0.8			
Behavioral Health Total		Total Counselors	0.8		$527	$721,516
		Counselor Offices	1			
		Total FTE	1.6	1.6		
		Dept. Gross Sq. Meters	39	39		

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Inpatient Care						
Pediatric Patient Days	216	# of Beds	2.0	0.0	$1,857	$0
Adult Medical Acute Care	2,056	# of Beds	8.0	9.5	$1,370	$2,816,402
Adult Surgical Acute Care	736	# of Beds	4.0	0.0	$1,370	$0
Gyn Surgery Days						
Intensive Care Patient Days	397	# of Beds	1.6	0.0	$1,923	$0
Inpatient Care Total		**Total Beds**	16	10		$2,816,402
		Total DGSM	*700*	21	<Total Staff	
		Total ICU DGSM	*117*	477	<Total Space	
Ancillary Services						
Laboratory Services						
Lab Total	22,475	# of FTEs	3.0	3.0	$188	$4,214,737
		Dept. Gross Sq.Meters	183	132		
Pharmacy	129,859	Pharmacists	2.5	3.0	$0	$0
		Dept. Gross Sq. Meters	167	167		
Diagnostic Imaging						
Rad Exams	5,862	Rooms	1.0	1.0	$255	$1,493,517
Ultrasound Exams	1,047	Rooms	0.0	0.0	$200	$0
Mammography Exams	1,865	Rooms	1.0	1.0	$138	$258,041
Fluoroscopy Exams	497	Rooms	0.0	0.0	$382	$0
CT	889	Rooms	0.0	0.0	$407	$0
MRI exams	566	Rooms	0.0	0.0	$459	$0
Diagnostic Imaging Total	7,727	*Radiologists with Telemed Buyback:*	0.7	0.7		$1,751,558
	10,726	*Total Radiologist*	1.0			
		Dept. Gross Sq. Meters	463.5	327.8		
	2.0	All DI Staff (Not Radiologist)	4.5	4.5	<=Total FTE	
Rehabilitation Services						
OT Visits	2,020	Therapists	1.1		$0	$0
Speech Therapy Visits	535	Therapists	0.3		$0	$0
Rehab Total	2,555	Therapists	1.4			$0
		Dept. Gross Sq. Meters	50	50.0		
		Total FTE OT & Speech Only	3.3	3.3		

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Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Surgery						
Outpatient Endoscopy Cases	213	Endoscopy Suites	1.0	1.0	$1,398	$297,818
Outpatient Surgery Cases	862	Outpatient ORs	1.0	2.0	$1,562	$1,346,295
		# of Pre-Op Spaces	2.0			
		# of PACU Spaces	1.0			
		# of Phase II Spaces	3.0			
	4	# Observation Beds	1.0	1.0		
		# Observation FTEs	0.5			
OP Surgical Case Total	1,075	# of ORs	1.0	9.5	<=Total FTE	$1,644,113
		Dept. Gross Sq. Meters	863	637		
Administrative Support						
Administration		# of FTE	9.7	11.0		
		Dept. Gross Sq. Meters	198	248		
Nursing Administration		# of FTE	0.0			
		Dept. Gross Sq. Meters	0			
Quality Management		# of FTE	1.3			
		Dept. Gross Sq. Meters	25			
Information Management		# of FTE	4.1	3.5		
		Dept. Gross Sq. Meters	90	85		
Health Information Mngmt.		# of FTE	10.0	10.0		
		Dept. Gross Sq. Meters	225	225		
Business Office		# of FTE	6.0	4.0		
		Dept. Gross Sq. Meters	36	73		
Security		# of FTE	1.6	1.5		
		Dept. Gross Sq. Meters	30	23		
Transportation		# of FTE	0.8			
		Dept. Gross Sq. Meters	5			
Administration Total		# of FTE	33.6	30.0		
		Dept. Gross Sq. Meters	610	653		
Facility Support Services						
Clinical Engineering		# of FTE	2.3	2.5		
		Dept. Gross Sq. Meters	42	42		
Facility Management		# of FTE	9.7	9.5		
		Dept. Gross Sq. Meters	99	99		
Central Sterile / Medical Supply		# of FTE	1.7	1.0		
		Dept. Gross Sq. Meters	74	122		
Property & Supply		# of FTE	1.3	1.5		
		Dept. Gross Sq. Meters	73	165		
Housekeeping & Linen		# of FTE	13.2	12.0		
		Dept. Gross Sq. Meters	115	101		
Facility Support Services Total		# of FTE	28.2	37.5		
		Dept. Gross Sq. Meters	403	1,267		

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Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Other Programs						
	Telemedicine % Inc					
Case Management	80%	# of FTE	5.1	5.1	$0	$0
		Dept. Gross Sq. Meters	90	90		
Pain Management	20%	# of Specialist Providers	0.3	0.3	$0	$0
		# of Support Staff FTEs	0.6	0.6		
		Dept. Gross Sq. Meters	47	47		
Other Services Total		# of FTEs	6.0	6.0		$0
		Dept. Gross Sq. Meters	136	136.3		

IHS Supportable Totals

Staff FTEs (including Non-RRM)	**86.6**	**141.9**		**$13,177,736**
Dept. Gross Sq. Meters	**7,495**	**6,201**		**$13,177,736**

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Specialty Care						
	Provider Visits					
Orthopedics	5,053	Providers	1.8	1.8	$299	$1,511,343
Ophthalmology	6,443	Providers	1.7	1.7	$307	$1,975,359
Dermatology	3,579	Providers	0.9	0.9	$140	$502,054
General Surgery	2,548	Providers	1.6	1.6	$265	$675,679
Otolaryngology	2,398	Providers	0.9	0.9	$218	$523,791
Cardiology	2,972	Providers	1.1	0.0	$264	$0
Urology	1,963	Providers	0.7	0.0	$265	$0
Neurology	1,368	Providers	0.6	0.0	$252	$0
Other Surg Specialties	3,224	Providers	1.2	1.2	$409	$1,318,522
Other Med Specialties	13,491	Providers	5.4	5.4	$141	$1,898,127
Specialty Care Total	36,736	Providers	13.5	22.6	<=Total FTE	$8,404,875
		Dept. Gross Sq. Meters	966	1,144.1		
Other Ambulatory Care						
Dental Specialty Care		Specialists	7.3	25	$0	$0
		Support Staff FTEs	17.3			
		Operatories	18.0			
		Dept. Gross Sq. Meters	1,044	1,044		
Audiology Visits	3,866	Audiologists	1.9	5.0	$535	$2,068,465
		Audiology Booths	2.0			
		Dept. Gross Sq. Meters	143	143		
Other Ambulatory Care Total		Providers	9.2	29.6	<=Total FTE	$2,068,465
		Dept. Gross Sq. Meters	1,187	1,187		
Outpatient Behavioral Health						
Psychiatry	3,378	Counselors	2.0			
Behavioral Health Total		Total Counselors	2.0		$578	$1,952,762
		Counselor Offices	2			
		Total FTE	4.0	4		
		Dept. Gross Sq. Meters	63	63		

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Regional Center Services Characteristics

Planning tool used in iterative fashion with HSP files (varying market share, Diagnostic Imaging, ED & OB services). Assumes no Primary Care. Does not provide gap analysis.

	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Inpatient Care						
Pediatric Patient Days	1,221	# of Beds	6.0	6.4	$2,039	$2,489,485
Adult Medical Acute Care	6,727	# of Beds	21.0	25.5	$1,504	$10,115,457
Adult Surgical Acute Care *Gyn Surgery Days*	7,503	# of Beds	23.0	28.0	$1,504	$11,282,336
Intensive Care Patient Days	2,442	# of Beds	9.6	10.9	$2,111	$5,156,185
Inpatient Care Total		**Total Beds**	60	71		$29,043,463
		Total DGSM	*2,500*	160	<Total Staff	
		Total ICU DGSM	*718*	3,540	<Total Space	
Ancillary Services						
Laboratory Services						
Lab Total	120,071	# of FTEs	7.0	7.5	$206	$24,716,615
		Dept. Gross Sq.Meters	382	329		
Pharmacy	438,051	Pharmacists	9.7	15.0	$0	$0
		Dept. Gross Sq. Meters	343	255		
Diagnostic Imaging						
Rad Exams	17,180	Rooms	3.0	3.0	$280	$4,804,902
Ultrasound Exams	3,320	Rooms	2.0	2.0	$220	$730,168
Mammography Exams	4,647	Rooms	2.0	2.0	$152	$705,786
Fluoroscopy Exams	1,485	Rooms	1.0	1.0	$419	$622,126
CT	2,179	Rooms	1.0	1.0	$446	$972,553
MRI exams	1,401	Rooms	0.0	0.0	$503	$0
Diagnostic Imaging Total	28,811	*Radiologists with Telemed Buyback:*	2.5	2.5		$7,835,535
	30,212	*Total Radiologist*	2.6			
		Dept. Gross Sq. Meters	885.0	845.7		
	8.0	All DI Staff (Not Radiologist)	13.6	13.6	<=Total FTE	
Rehabilitation Services						
OT Visits	4,803	Therapists	2.7		$0	$0
Speech Therapy Visits	1,081	Therapists	0.6		$0	$0
Rehab Total	5,884	Therapists	3.3			$0
		Dept. Gross Sq. Meters	115	115		
		Total FTE OT & Speech Only	9.9	9.9		

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Surgery						
Outpatient Endoscopy Cases	517	Endoscopy Suites	1.0	1.0	$1,535	$793,512
Outpatient Surgery Cases	2,678	Outpatient ORs	2.0	4.0	$1,714	$4,591,297
		# of Pre-Op Spaces	3.0			
		# of PACU Spaces	2.0			
		# of Phase II Spaces	5.0			
	12	# Observation Beds	1.0	1.0		
		# Observation FTEs	0.5			
OP Surgical Case Total	3,195	# of ORs	2.0	28.5	<=Total FTE	$5,384,809
		Dept. Gross Sq. Meters	1,467	1,300		
Administrative Support						
Administration		# of FTE	15.8	33.5		
		Dept. Gross Sq. Meters	247	553		
Nursing Administration		# of FTE	12.2	0.0		
		Dept. Gross Sq. Meters	232	0		
Quality Management		# of FTE	4.9	0.0		
		Dept. Gross Sq. Meters	93	0		
Information Management		# of FTE	10.1	10.0		
		Dept. Gross Sq. Meters	206	190		
Health Information Mngmt.		# of FTE	41.8	42.0		
		Dept. Gross Sq. Meters	619	605		
Business Office		# of FTE	19.6	18.0		
		Dept. Gross Sq. Meters	104	191		
Security		# of FTE	3.8	3.0		
		Dept. Gross Sq. Meters	25	20		
Transportation		# of FTE	3.3	0.0		
		Dept. Gross Sq. Meters	20	0		
Administration Total		# of FTE	111.4	106.5		
		Dept. Gross Sq. Meters	1,546	1,559		
Facility Support Services						
Clinical Engineering		# of FTE	3.8	4.0		
		Dept. Gross Sq. Meters	101	93		
Facility Management		# of FTE	22.4	20.5		
		Dept. Gross Sq. Meters	246	211		
Central Sterile / Medical Supply		# of FTE	1.7	1.5		
		Dept. Gross Sq. Meters	74	360		
Property & Supply		# of FTE	4.9	5.5		
		Dept. Gross Sq. Meters	366	469		
Housekeeping & Linen		# of FTE	29.4	26.5		
		Dept. Gross Sq. Meters	253	238		
Facility Support Services Total		# of FTE	62.1	87.5		
		Dept. Gross Sq. Meters	1,041	2,581		

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Regional Center Services Characteristics

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Other Programs						
	Telemedicine % Inc					
Case Management	80%	# of FTE	11.4	11.4	$0	$0
		Dept. Gross Sq. Meters	200	200		
Pain Management	20%	# of Specialist Providers	0.7	0.7	$0	$0
		# of Support Staff FTEs	1.5	1.5		
		Dept. Gross Sq. Meters	112	111.9		
Other Services Total		# of FTEs	13.6	13.6		$0
		Dept. Gross Sq. Meters	312	312.1		

IHS Supportable Totals

Staff FTEs (including Non-RRM)	**240.8**	**500.8**	**$79,406,525**
Dept. Gross Sq. Meters	**17,512**	**17,782**	**$79,406,525**

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Specialty Care						
	Provider Visits					
Orthopedics	3,409	Providers	1.2	0.0	$298	$0
Ophthalmology	4,190	Providers	1.1	0.0	$306	$0
Dermatology	2,413	Providers	0.6	0.0	$140	$0
General Surgery	1,654	Providers	1.0	0.0	$264	$0
Otolaryngology	1,615	Providers	0.6	0.0	$218	$0
Cardiology	1,991	Providers	0.8	0.0	$264	$0
Urology	1,275	Providers	0.5	0.0	$264	$0
Neurology	930	Providers	0.4	0.0	$252	$0
Other Surg Specialties	2,189	Providers	0.8	0.8	$408	$892,642
Other Med Specialties	8,934	Providers	3.6	3.6	$140	$1,253,854
Specialty Care Total	11,123	Providers	4.4	12.4	<=Total FTE	$2,146,496
		Dept. Gross Sq. Meters	189	455.3		
Other Ambulatory Care						
Dental Specialty Care		Specialists	4.6	15.5	$0	$0
		Support Staff FTEs	10.9			
		Operatories	11.0			
		Dept. Gross Sq. Meters	658	658		
Audiology Visits	2,605	Audiologists	1.3	3.0	$534	$1,390,184
		Audiology Booths	2.0			
		Dept. Gross Sq. Meters	81	81		
Other Ambulatory Care Total		Providers	5.9	18.5	<=Total FTE	$1,390,184
		Dept. Gross Sq. Meters	739	739		
Outpatient Behavioral Health						
Psychiatry	2,097	Counselors	1.2			
Behavioral Health Total		Total Counselors	1.2		$577	$1,208,945
		Counselor Offices	2			
		Total FTE	2.4	2.4		
		Dept. Gross Sq. Meters	63	63		

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Inpatient Care						
Pediatric Patient Days	0	# of Beds	0.0	0.0	$2,034	$0
Adult Medical Acute Care	0	# of Beds	0.0	0.0	$1,500	$0
Adult Surgical Acute Care	0	# of Beds	0.0	0.0	$1,500	$0
Intensive Care Patient Days	0	# of Beds	0.0	0.0	$2,106	$0
Inpatient Care Total		**Total Beds**	0	0		$0
		Total DGSM	*0*	0	<Total Staff	
		Total ICU DGSM	*0*	0	<Total Space	
Ancillary Services						
Laboratory Services						
Lab Total	14,434	# of FTEs	2.0	2.0	$205	$2,963,589
		Dept. Gross Sq. Meters	80	80		
Pharmacy	114,356	Pharmacists	2.3	3.0	$0	$0
		Dept. Gross Sq. Meters	167	167		
Diagnostic Imaging						
Rad Exams	8,492	Rooms	2.0	2.0	$279	$2,368,843
Ultrasound Exams	1,415	Rooms	1.0	1.0	$219	$310,394
Mammography Exams	2,944	Rooms	1.0	1.0	$151	$445,987
Fluoroscopy Exams	708	Rooms	0.0	0.0	$418	$0
CT	1,403	Rooms	0.0	0.0	$445	$0
MRI exams	883	Rooms	0.0	0.0	$502	$0
Diagnostic Imaging Total	12,851	*Radiologists with Telemed Buyback:*	1.2	1.2		$3,125,224
	15,845	*Total Radiologist*	1.5			
		Dept. Gross Sq. Meters	355.6	355.6		
	1	All DI Staff (Not Radiologist)	4.7	4.7	<=Total FTE	
Rehabilitation Services						
OT Visits	3,122	Therapists	1.7		$0	$0
Speech Therapy Visits	785	Therapists	0.4		$0	$0
Rehab Total	3,907	Therapists	2.2			$0
		Dept. Gross Sq. Meters	76	76		
		Total FTE OT & Speech Only	5.7	5.7		

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Regional Center Services Characteristics

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Surgery						
Outpatient Endoscopy Cases	353	Endoscopy Suites	1.0	0.0	$1,531	$540,397.11
Outpatient Surgery Cases	865	Outpatient ORs	1.0	2.0	$1,710	$1,479,158.65
		# of Pre-Op Spaces	2.0			
		# of PACU Spaces	1.0			
		# of Phase II Spaces	3.0			
	5	# Observation Beds	1.0	1.0		
		# Observation FTEs	0.5			
OP Surgical Case Total	1,218	# of ORs	1.0	4.0	<=Total FTE	$2,019,556
		Dept. Gross Sq. Meters	637	637		

Administrative Support

Administration	# of FTE	6.0	8.0	
	Dept. Gross Sq. Meters	187	211	
Nursing Administration	# of FTE	0.0		
	Dept. Gross Sq. Meters	0		
Quality Management	# of FTE	1.1		
	Dept. Gross Sq. Meters	21		
Information Management	# of FTE	3.6	3.0	
	Dept. Gross Sq. Meters	79	79	
Health Information Mngmt.	# of FTE	11.1	10.0	
	Dept. Gross Sq. Meters	259	259	
Business Office	# of FTE	6.8	5.0	
	Dept. Gross Sq. Meters	41	81	
Security	# of FTE	1.3	1.0	
	Dept. Gross Sq. Meters	16	16	
Transportation	# of FTE	0.6		
	Dept. Gross Sq. Meters	4		
Administration Total	# of FTE	30.6	27.0	
	Dept. Gross Sq. Meters	606	646	

Facility Support Services

Clinical Engineering	# of FTE	1.3	1.0	
	Dept. Gross Sq. Meters	16	16	
Facility Management	# of FTE	5.9	6.0	
	Dept. Gross Sq. Meters	61	61	
Central Sterile / Medical Supply	# of FTE	0.7	1.0	
	Dept. Gross Sq. Meters	30	30	
Property & Supply	# of FTE	0.9	1.0	
	Dept. Gross Sq. Meters	85	87	
Housekeeping & Linen	# of FTE	7.2	7.0	
	Dept. Gross Sq. Meters	78	78	
Facility Support Services Total	# of FTE	16.1	16.0	
	Dept. Gross Sq. Meters	270	601	

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Regional Center Services Characteristics

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Other Programs						
	Telemedicine % Inc					
Case Management	80%	# of FTE	7.5	7.5	$0	$0
		Dept. Gross Sq. Meters	132	132		
Pain Management	20%	# of Specialist Providers	0.5	0.5	$0	$0
		# of Support Staff FTEs	0.9	0.9		
		Dept. Gross Sq. Meters	71	70.8		
Other Services Total		# of FTEs	9	8.9		$0
		Dept. Gross Sq. Meters	203	203		
IHS Supportable Totals						
Staff FTEs (including Non-RRM)			**79**	**105.8**		**$12,853,995**
Dept. Gross Sq. Meters			**6,187**	**5,408**		**$12,853,995**

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Specialty Care						
	Provider Visits					
Orthopedics	3,755	Providers	1.3	1.3	$265	$995,741
Ophthalmology	4,852	Providers	1.3	0.0	$272	$0
Dermatology	2,668	Providers	0.6	0.0	$124	$0
General Surgery	1,935	Providers	1.2	0.0	$235	$0
Otolaryngology	1,790	Providers	0.6	0.0	$194	$0
Cardiology	2,226	Providers	0.9	0.0	$234	$0
Urology	1,479	Providers	0.5	0.0	$235	$0
Neurology	1,017	Providers	0.4	0.0	$224	$0
Other Surg Specialties	2,415	Providers	0.9	0.9	$363	$875,543
Other Med Specialties	10,024	Providers	4.0	4.0	$125	$1,250,468
Specialty Care Total	16,194	Providers	6.2	14.0	<Total FTE	$3,121,751
		Dept. Gross Sq. Meters	439	841.0		
Other Ambulatory Care						
Dental Specialty Care		Specialists	5.6	19	$0	$0
		Support Staff FTEs	13.1			
		Operatories	14.0			
		Dept. Gross Sq. Meters	794	794		
Audiology Visits	2,939	Audiologists	1.5	3.0	$474	$1,394,173
		Audiology Booths	2.0			
		Dept. Gross Sq. Meters	81	81		
Other Ambulatory Care Total		Providers	7.1	21.7	<Total FTE	$1,394,173
		Dept. Gross Sq. Meters	875	875		
Outpatient Behavioral Health						
Psychiatry	2,512	Counselors	1.5			
Behavioral Health Total		Total Counselors	1.5		$512	$1,287,264
		Counselor Offices	2			
		Total FTE	3.0	3.0		
		Dept. Gross Sq. Meters	63	63		

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Inpatient Care						
Pediatric Patient Days	0	# of Beds	0.0	0.0	$1,808	$0
Adult Medical Acute Care	0	# of Beds	0.0	0.0	$1,333	$0
Adult Surgical Acute Care	0	# of Beds	0.0	0.0	$1,333	$0
Intensive Care Patient Days	0	# of Beds	0.0	0.0	$1,872	$0
Inpatient Care Total		**Total Beds**	0	0		$0
		Total DGSM	*0*	0	<Total Staff	
		Total ICU DGSM	*0*	0	<Total Space	
Ancillary Services						
Laboratory Services						
Lab Total	19,679	# of FTEs	2.0	2.0	$183	$3,591,614
		Dept. Gross Sq.Meters	80	80		
Pharmacy	121,331	Pharmacists	3.4	4.0	$0	$0
		Dept. Gross Sq. Meters	167	167		
Diagnostic Imaging						
Rad Exams	10,439	Rooms	2.0	2.0	$248	$2,588,457
Ultrasound Exams	1,740	Rooms	1.0	1.0	$195	$339,285
Mammography Exams	3,481	Rooms	1.0	1.0	$135	$468,739
Fluoroscopy Exams	870	Rooms	1.0	1.0	$371	$323,143
CT	1,648	Rooms	1.0	1.0	$396	$652,133
MRI exams	1,057	Rooms	0.0	0.0	$446	$0
Diagnostic Imaging Total	18,178	*Radiologists with Telemed Buyback:*	1.6	1.6		$4,371,757
	19,235	*Total Radiologist*	1.7			
		Dept. Gross Sq. Meters	579.6	633.0		
	1.0	All DI Staff (Not Radiologist)	5.3	5.3	<Total FTE	
Rehabilitation Services						
OT Visits	3,620	Therapists	2.0		$0	$0
Speech Therapy Visits	836	Therapists	0.5		$0	$0
Rehab Total	4,456	Therapists	2.5			$0
		Dept. Gross Sq. Meters	87	87.1		
		Total FTE OT & Speech Only	6.8	6.8		

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Surgery						
Outpatient Endoscopy Cases	386	Endoscopy Suites	1.0	0.0	$1,361	$525,261
Outpatient Surgery Cases	1,007	Outpatient ORs	1.0	2.0	$1,520	$1,530,670
		# of Pre-Op Spaces	2.0			
		# of PACU Spaces	1.0			
		# of Phase II Spaces	3.0			
	5	# Observation Beds	1.0	1.0		
		# Observation FTEs	0.5			
OP Surgical Case Total	1,393	# of ORs	1.0	4.0	<Total FTE	$2,055,931
		Dept. Gross Sq. Meters	637	637		
Administrative Support						
Administration		# of FTE	6.2	8.0		
		Dept. Gross Sq. Meters	141	172		
Nursing Administration		# of FTE	0.0			
		Dept. Gross Sq. Meters	0			
Quality Management		# of FTE	1.4			
		Dept. Gross Sq. Meters	26			
Information Management		# of FTE	4.0	4.0		
		Dept. Gross Sq. Meters	90	90		
Health Information Mngmt.		# of FTE	14.3	15.0		
		Dept. Gross Sq. Meters	313	313		
Business Office		# of FTE	9.2	8.0		
		Dept. Gross Sq. Meters	62	123		
Security		# of FTE	1.6	2.0		
		Dept. Gross Sq. Meters	16	16		
Transportation		# of FTE	0.8			
		Dept. Gross Sq. Meters	5			
Administration Total		# of FTE	37.5	37.0		
		Dept. Gross Sq. Meters	652	714		
Facility Support Services						
Clinical Engineering		# of FTE	1.5	1.0		
		Dept. Gross Sq. Meters	20	20		
Facility Management		# of FTE	6.8	7.0		
		Dept. Gross Sq. Meters	61	61		
Central Sterile / Medical Supply		# of FTE	0.7	1.0		
		Dept. Gross Sq. Meters	30	30		
Property & Supply		# of FTE	1.2	2.0		
		Dept. Gross Sq. Meters	124	87		
Housekeeping & Linen		# of FTE	8.5	8.0		
		Dept. Gross Sq. Meters	87	87		
Facility Support Services Total		# of FTE	18.7	19.0		
		Dept. Gross Sq. Meters	321	636		

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Other Programs						
	Telemedicine % Inc					
Case Management	80%	# of FTE	8.6	8.6	$0	$0
		Dept. Gross Sq. Meters	152	152		
Pain Management	20%	# of Specialist Providers	0.6	0.6	$0	$0
		# of Support Staff FTEs	1.1	1.1		
		Dept. Gross Sq. Meters	85	84.6		
Other Services Total		# of FTEs	10.3	10.3		$0
		Dept. Gross Sq. Meters	237	237		

IHS Supportable Totals

Staff FTEs (including Non-RRM)	**94.8**	**128.7**		**$15,822,492**
Dept. Gross Sq. Meters	**7,526**	**6,679**		**$15,822,492**

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Regional Center Services Characteristics

Planning tool used in iterative fashion with HSP files (varying market share, Diagnostic Imaging, ED & OB services). Assumes no Primary Care. Does not provide gap analysis.

	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Total Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Specialty Care						
	Provider Visits					
Orthopedics	7,123	Providers	2.6	2.6	$299	$2,130,620
Ophthalmology	8,945	Providers	2.4	2.4	$307	$2,742,448
Dermatology	5,067	Providers	1.2	1.2	$140	$710,720
General Surgery	3,541	Providers	2.2	2.2	$265	$939,002
Otolaryngology	3,390	Providers	1.2	1.2	$218	$740,497
Cardiology	4,199	Providers	1.6	1.6	$264	$1,110,152
Urology	2,726	Providers	1.0	0.0	$265	$0
Neurology	1,933	Providers	0.8	0.8	$252	$487,735
Other Surg Specialties	4,567	Providers	1.6	1.6	$409	$1,867,701
Other Med Specialties	19,011	Providers	7.7	7.7	$141	$2,674,904
Specialty Care Total	57,777	Providers	21.3	31.3	<Total FTE	$13,403,779
		Dept. Gross Sq. Meters	1,663	1,770.5		
Other Ambulatory Care						
Dental Specialty Care		Specialists	10.2	34.2	$0	$0
		Support Staff FTEs	24.0			
		Operatories	25.0			
		Dept. Gross Sq. Meters	1,452	1,452		
Audiology Visits	5,441	Audiologists	2.7	7.0	$535	$2,911,153
		Audiology Booths	3.0			
		Dept. Gross Sq. Meters	203	203		
Other Ambulatory Care Total		Providers	12.9	41.2	<Total FTE	$2,911,153
		Dept. Gross Sq. Meters	1,654	1,654.1		
Outpatient Behavioral Health						
Psychiatry	4,732	Counselors	2.8			
Behavioral Health Total		Total Counselors	2.8		$578	$2,735,525
		Counselor Offices	3			
		Total FTE	5.6	5.6		
		Dept. Gross Sq. Meters	97	97.4		

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Regional Center Services Characteristics

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Total Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Inpatient Care						
Pediatric Patient Days	1,746	# of Beds	8.0	8	$2,039	$3,559,902
Adult Medical Acute Care	15,006	# of Beds	43.0	52	$1,504	$22,564,672
Adult Surgical Acute Care	9,491	# of Beds	29.0	34	$1,504	$14,271,712
Intensive Care Patient Days	3,569	# of Beds	14.0	15	$2,111	$7,535,801
Inpatient Care Total		**Total Beds**	94	109		$47,932,087
		Total DGSM	*4,000*	247.1	<Total Staff	
		Total ICU DGSM	*1,050*	5,468	<Total Space	
Ancillary Services						
Laboratory Services						
Lab Total	145,728	# of FTEs	11.0	11.0	$206	$29,998,109
		Dept. Gross Sq.Meters	448	389		
Pharmacy	891,814	Pharmacists	15.1	21.0	$0	$0
		Dept. Gross Sq. Meters	800	593		
Diagnostic Imaging						
Rad Exams	23,647	Rooms	4.0	4.0	$280	$6,613,593
Ultrasound Exams	4,398	Rooms	2.0	2.0	$220	$967,252
Mammography Exams	6,417	Rooms	2.0	2.0	$152	$974,614
Fluoroscopy Exams	2,024	Rooms	2.0	2.0	$419	$847,935
CT	3,023	Rooms	1.0	1.0	$446	$1,349,256
MRI exams	1,938	Rooms	1.0	1.0	$503	$975,492
Diagnostic Imaging Total	41,447	*Radiologists with Telemed Buyback:*	3.6	*3.6*		$11,728,142
	41,447	*Total Radiologist*	3.6			
		Dept. Gross Sq. Meters	1,120.5	1,120.5		
	10.0	All DI Staff (Not Radiologist)	17.7	17.7	<Total FTE	
Rehabilitation Services						
OT Visits	6,732	Therapists	3.8		$0	$0
Speech Therapy Visits	1,594	Therapists	0.9		$0	$0
Rehab Total	8,326	Therapists	4.7			$0
		Dept. Gross Sq. Meters	163	162.8		
		Total FTE OT & Speech Only	16.3	16.3		

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Total Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Surgery						
Outpatient Endoscopy Cases	721	Endoscopy Suites	1.0	1.0	$1,535	$1,106,620
Outpatient Surgery Cases	3,711	Outpatient ORs	3.0	5.0	$1,714	$6,362,324
IP Cases Added to OP		# of Pre-Op Spaces	4.0			
		# of PACU Spaces	3.0			
		# of Phase II Spaces	6.0			
	17	# Observation Beds	1.0	1.0		
		# Observation FTEs	0.5			
OP Surgical Case Total	4,432	# of ORs	3.0	40.0	<Total FTE	$7,468,944
		Dept. Gross Sq. Meters	1,300	1,467.1		
Administrative Support						
Administration		# of FTE	17.9	37.0		
		Dept. Gross Sq. Meters	210	614		
Nursing Administration		# of FTE	13.0	0.0		
		Dept. Gross Sq. Meters	248	0		
Quality Management		# of FTE	7.6	0.0		
		Dept. Gross Sq. Meters	145	0		
Information Management		# of FTE	13.4	12.0		
		Dept. Gross Sq. Meters	228	217		
Health Information Mngmt.		# of FTE	55.6	49.5		
		Dept. Gross Sq. Meters	751	744		
Business Office		# of FTE	30.3	25.0		
		Dept. Gross Sq. Meters	133	254		
Security		# of FTE	4.5	4.0		
		Dept. Gross Sq. Meters	25	25		
Transportation		# of FTE	4.6	0.0		
		Dept. Gross Sq. Meters	29	0		
Administration Total		# of FTE	146.9	127.5		
		Dept. Gross Sq. Meters	1,769	1,854.2		
Facility Support Services						
Clinical Engineering		# of FTE	4.8	4.0		
		Dept. Gross Sq. Meters	123	84		
Facility Management		# of FTE	27.9	25.0		
		Dept. Gross Sq. Meters	246	246		
Central Sterile / Medical Supply		# of FTE	1.7	1.5		
		Dept. Gross Sq. Meters	74	556		
Property & Supply		# of FTE	6.8	6.5		
		Dept. Gross Sq. Meters	527	607		
Housekeeping & Linen		# of FTE	37.5	29.5		
		Dept. Gross Sq. Meters	271	262		
Facility Support Services Total		# of FTE	107.2	95.0		
		Dept. Gross Sq. Meters	1,241	3,116		

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Regional Center Services Characteristics

Planning tool used in iterative fashion with HSP files (varying market share, Diagnostic Imaging, ED & OB services). Assumes no Primary Care. Does not provide gap analysis.

		Regional Center Direct Health Care		HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Total Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Other Programs						
	Telemedicine % Inc					
Case Management	80%	# of FTE	15.9	15.9	$0	$0
		Dept. Gross Sq. Meters	280	280		
Pain Management	20%	# of Specialist Providers	1.0	1.0	$0	$0
		# of Support Staff FTEs	2.1	2.1		
		Dept. Gross Sq. Meters	157	157		
Other Services Total		# of FTEs	19.1	19.1		$0
		Dept. Gross Sq. Meters	437.1	437.1		

IHS Supportable Totals

Staff FTEs (including Non-RRM)	**350.4**	**676.3**		**$116,177,737**
Dept. Gross Sq. Meters	**20,979**	**24,364**		**$116,177,737**

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Specialty Care						
	Provider Visits					
Orthopedics	3,409	Providers	1.2	0.0	$298	$0
Ophthalmology	4,190	Providers	1.1	0.0	$306	$0
Dermatology	2,413	Providers	0.6	0.0	$140	$0
General Surgery	1,654	Providers	1.0	0.0	$264	$0
Otolaryngology	1,615	Providers	0.6	0.0	$218	$0
Cardiology	1,991	Providers	0.8	0.0	$264	$0
Urology	1,275	Providers	0.5	0.0	$264	$0
Neurology	930	Providers	0.4	0.0	$252	$0
Other Surg Specialties	2,189	Providers	0.8	0.8	$408	$892,642
Other Med Specialties	8,934	Providers	3.6	3.6	$140	$1,253,854
Specialty Care Total	11,123	Providers	4.4	12.4	<=Total FTE	$2,146,496
		Dept. Gross Sq. Meters	189	455.3		
Other Ambulatory Care						
Dental Specialty Care		Specialists	4.6	15.5	$0	$0
		Support Staff FTEs	10.9			
		Operatories	11.0			
		Dept. Gross Sq. Meters	660	659.8		
Audiology Visits	2,605	Audiologists	1.3	3.0	$534	$1,390,184
		Audiology Booths	2.0			
		Dept. Gross Sq. Meters	81	81.0		
Other Ambulatory Care Total		Providers	5.9	18.5	<=Total FTE	$1,390,184
		Dept. Gross Sq. Meters	741	740.8		
Outpatient Behavioral Health						
Psychiatry	2,097	Counselors	1.2			
Behavioral Health Total		Total Counselors	1.2		$577	$1,208,945
		Counselor Offices	2			
		Total FTE	2.4	2.4		
		Dept. Gross Sq. Meters	63	63		

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Inpatient Care						
Pediatric Patient Days	312	# of Beds	2.0	2.4	$2,034	$634,486
Adult Medical Acute Care	3,397	# of Beds	12.0	14.3	$1,500	$5,094,855
Adult Surgical Acute Care	1,200	# of Beds	6.0	6.3	$1,500	$1,799,772
Intensive Care Patient Days	655	# of Beds	2.6	4.0	$2,106	$1,379,417
Inpatient Care Total		**Total Beds**	23	27		$8,908,530
		Total DGSM	*1,000*	61	<Total Staff	
		Total ICU DGSM	*193*	1,348	<Total Space	
Ancillary Services						
Laboratory Services						
Lab Total	39,474	# of FTEs	3.0	3.0	$205	$8,104,699
		Dept. Gross Sq. Meters	218	201		
Pharmacy	192,620	Pharmacists	3.4	4.5	$0	$0
		Dept. Gross Sq. Meters	167	167		
Diagnostic Imaging						
Rad Exams	9,031	Rooms	2.0	2.0	$279	$2,519,197
Ultrasound Exams	1,619	Rooms	1.0	1.0	$219	$355,144
Mammography Exams	2,944	Rooms	1.0	1.0	$151	$445,987
Fluoroscopy Exams	766	Rooms	0.0	0.0	$418	$0
CT	1,403	Rooms	0.0	0.0	$445	$0
MRI exams	883	Rooms	0.0	0.0	$502	$0
Diagnostic Imaging Total	13,594	*Radiologists with Telemed Buyback:*	1.3	1.3		$3,320,328
	16,646	*Total Radiologist*	1.6			
		Dept. Gross Sq. Meters	573.0	483.0		
	2.0	All DI Staff (Not Radiologist)	5.7	5.7	<=Total FTE	
Rehabilitation Services						
OT Visits	3,122	Therapists	1.7		$0	$0
Speech Therapy Visits	785	Therapists	0.4		$0	$0
Rehab Total	3,907	Therapists	2.2			$0
		Dept. Gross Sq. Meters	76	76		
		Total FTE OT & Speech Only	5.7	5.7		

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Surgery						
Outpatient Endoscopy Cases	353	Endoscopy Suites	1.0	0.0	$1,531	$540,397
Outpatient Surgery Cases	1,054	Outpatient ORs	1.0	2.0	$1,710	$1,802,351
		# of Pre-Op Spaces	2.0			
		# of PACU Spaces	1.0			
		# of Phase II Spaces	3.0			
	5	# Observation Beds	1.0	1.0		
		# Observation FTEs	0.5			
OP Surgical Case Total	1,407	# of ORs	1.0	13.5	<=Total FTE	$2,342,748
		Dept. Gross Sq.Meters	863	637		
Administrative Support						
Administration		# of FTE	10.0	17.5		
		Dept. Gross Sq. Meters	360	354		
Nursing Administration		# of FTE	2.0			
		Dept. Gross Sq. Meters	38			
Quality Management		# of FTE	1.8			
		Dept. Gross Sq. Meters	35			
Information Management		# of FTE	4.7	5.0		
		Dept. Gross Sq. Meters	134	112		
Health Information Mngmt.		# of FTE	13.9	13.5		
		Dept. Gross Sq. Meters	294	290		
Business Office		# of FTE	7.5	6.0		
		Dept. Gross Sq. Meters	49	90		
Security		# of FTE	2.3	2.0		
		Dept. Gross Sq. Meters	30	23		
Transportation		# of FTE	1.1			
		Dept. Gross Sq. Meters	7			
Administration Total		# of FTE	43.2	44.0		
		Dept. Gross Sq. Meters	947	868		
Facility Support Services						
Clinical Engineering		# of FTE	2.5	2.5		
		Dept. Gross Sq. Meters	84	63		
Facility Management		# of FTE	13.0	12.0		
		Dept. Gross Sq. Meters	176	138		
Central Sterile / Medical Supply		# of FTE	1.7	1.5		
		Dept. Gross Sq. Meters	74	137		
Property & Supply		# of FTE	1.6	2.5		
		Dept. Gross Sq. Meters	138	165		
Housekeeping & Linen		# of FTE	17.3	16.0		
		Dept. Gross Sq. Meters	209	160		
Facility Support Services Total		# of FTE	36.1	48.0		
		Dept. Gross Sq. Meters	682	1,471		

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Other Programs						
	Telemedicine % Inc					
Case Management	80%	# of FTE	7.5	7.5	$0	$0
		Dept. Gross Sq. Meters	132	132		
Pain Management	20%	# of Specialist Providers	0.5	0.5	$0	$0
		# of Support Staff FTEs	0.9	0.9		
		Dept. Gross Sq. Meters	71	71		
Other Services Total		# of FTEs	9	8.9		$0
		Dept. Gross Sq. Meters	203	203.1		

IHS Supportable Totals

Staff FTEs (including Non-RRM		**114**	**228.9**	**$27,421,930**
Dept. Gross Sq. Meters		**10,512**	**9,023**	**$27,421,930**

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Specialty Care						
	Provider Visits					
Orthopedics	3,755	Providers	1.3	1.3	$265	$995,741
Ophthalmology	4,852	Providers	1.3	0.0	$272	$0
Dermatology	2,668	Providers	0.6	0.0	$124	$0
General Surgery	1,935	Providers	1.2	0.0	$235	$0
Otolaryngology	1,790	Providers	0.6	0.0	$194	$0
Cardiology	2,226	Providers	0.9	0.0	$234	$0
Urology	1,479	Providers	0.5	0.0	$235	$0
Neurology	1,017	Providers	0.4	0.0	$224	$0
Other Surg Specialties	2,415	Providers	0.9	0.9	$363	$875,543
Other Med Specialties	10,024	Providers	4.0	4.0	$125	$1,250,468
Specialty Care Total	16,194	Providers	6.2	14.0	<Total FTE	$3,121,751
		Dept. Gross Sq. Meters	439	841.0		
Other Ambulatory Care						
Dental Specialty Care		Specialists	5.6	18.7	$0	$0
		Support Staff FTEs	13.1			
		Operatories	14.0			
		Dept. Gross Sq. Meters	795	795		
Audiology Visits	2,939	Audiologists	1.5	3.0	$474	$1,394,173
		Audiology Booths	2.0			
		Dept. Gross Sq. Meters	81	81		
Other Ambulatory Care Total		Providers	7.1	21.7	<Total FTE	$1,394,173
		Dept. Gross Sq. Meters	876	876		
Outpatient Behavioral Health						
Psychiatry	2,512	Counselors	1.5			
Behavioral Health Total		Total Counselors	1.5		$512	$1,287,264
		Counselor Offices	2			
		Total FTE	3.0	3.0		
		Dept. Gross Sq. Meters	63	63.2		

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Inpatient Care						
Pediatric Patient Days	361	# of Beds	3.0	2.6	$1,808	$652,568
Adult Medical Acute Care	3,806	# of Beds	14.0	15.7	$1,333	$5,074,089
Adult Surgical Acute Care	1,373	# of Beds	6.0	7.0	$1,333	$1,830,458
Intensive Care Patient Days	742	# of Beds	2.9	4.4	$1,872	$1,389,027
Inpatient Care Total		**Total Beds**	26	30		$8,946,142
		Total DGSM	*1,150*	67.1	<Total Staff	
		Total ICU DGSM	*218*	1,485.0		
Ancillary Services						
Laboratory Services						
Lab Total	47,441	# of FTEs	3.0	3.0	$183	$8,658,366
		Dept. Gross Sq.Meters	183	201		
Pharmacy	229,776	Pharmacists	4.5	5.5	$0	$0
		Dept. Gross Sq. Meters	167	223		
Diagnostic Imaging						
Rad Exams	11,049	Rooms	2.0	2.0	$248	$2,739,713
Ultrasound Exams	1,971	Rooms	1.0	1.0	$195	$384,328
Mammography Exams	3,481	Rooms	1.0	1.0	$135	$468,739
Fluoroscopy Exams	936	Rooms	1.0	1.0	$371	$347,658
CT	1,648	Rooms	1.0	1.0	$396	$652,133
MRI exams	1,057	Rooms	0.0	0.0	$446	$0
Diagnostic Imaging Total	19,085	*Radiologists with Telemed Buyback:*	1.7	1.7		$4,592,570
	20,142	*Total Radiologist*	1.8			
		Dept. Gross Sq. Meters	633.0	638		
	3.0	All DI Staff (Not Radiologist)	7.3	7.3	<Total FTE	
Rehabilitation Services						
OT Visits	3,620	Therapists	2.0		$0	$0
Speech Therapy Visits	836	Therapists	0.5		$0	$0
Rehab Total	4,456	Therapists	2.5			$0
		Dept. Gross Sq. Meters	87	87.1		
		Total FTE OT & Speech Only	6.8	6.8		

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Surgery						
Outpatient Endoscopy Cases	386	Endoscopy Suites	1.0	0.0	$1,361	$525,261
Outpatient Surgery Cases	1,231	Outpatient ORs	1.0	3.0	$1,520	$1,871,157
		# of Pre-Op Spaces	2.0			
		# of PACU Spaces	1.0			
		# of Phase II Spaces	3.0			
	6	# Observation Beds	1.0	1.0		
		# Observation FTEs	0.5			
OP Surgical Case Total	1,617	# of ORs	1.0	16.5	<Total FTE	$2,396,418
		Dept. Gross Sq. Meters	863	863		
Administrative Support						
Administration		# of FTE	10.5	19.0		
		Dept. Gross Sq. Meters	48	373		
Nursing Administration		# of FTE	10.4			
		Dept. Gross Sq. Meters	198			
Quality Management		# of FTE	2.2			
		Dept. Gross Sq. Meters	42			
Information Management		# of FTE	5.8	5.5		
		Dept. Gross Sq. Meters	112	123		
Health Information Mngmt.		# of FTE	17.1	17.0		
		Dept. Gross Sq. Meters	320	330		
Business Office		# of FTE	9.1	8.0		
		Dept. Gross Sq. Meters	49	123		
Security		# of FTE	2.1	2.5		
		Dept. Gross Sq. Meters	16	23		
Transportation		# of FTE	1.6			
		Dept. Gross Sq. Meters	10			
Administration Total		# of FTE	58.9	52.0		
		Dept. Gross Sq. Meters	794	972		
Facility Support Services						
Clinical Engineering		# of FTE	2.7	2.5		
		Dept. Gross Sq. Meters	42	63		
Facility Management		# of FTE	12.9	14.0		
		Dept. Gross Sq. Meters	99	173		
Central Sterile / Medical Supply		# of FTE	1.7	1.5		
		Dept. Gross Sq. Meters	74	151		
Property & Supply		# of FTE	2.3	2.5		
		Dept. Gross Sq. Meters	156	165		
Housekeeping & Linen		# of FTE	17.2	23.0		
		Dept. Gross Sq. Meters	124	171		
Facility Support Services Total		# of FTE	36.7	60.0		
		Dept. Gross Sq. Meters	495	1,767		

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Regional Center Services Characteristics

Planning tool used in iterative fashion with HSP files (varying market share, Diagnostic Imaging, ED & OB services). Assumes no Primary Care. Does not provide gap analysis.

		Regional Center Direct Health Care		HSP	CHS Impact (Direct Care Value)	
Discipline	2010 Demand	Key Characteristics (KC)	# Req'd in 2010	Override or Blended Regional Requirement	Present Per Encounter Cost	Present Value
Other Programs						
	Telemedicine % Inc					
Case Management	80%	# of FTE	8.6	8.6	$0	$0
		Dept. Gross Sq. Meters	152	152		
Pain Management	20%	# of Specialist Providers	0.6	0.6	$0	$0
		# of Support Staff FTEs	1.1	1.1		
		Dept. Gross Sq. Meters	85	85		
Other Services Total		# of FTEs	10.3	10.3		$0
		Dept. Gross Sq. Meters	237	236.8		

IHS Supportable Totals

Staff FTEs (including Non-RRM)	**137.4**	**268.9**	**$30,396,685**
Building Gross Sq. Meters	**9,994**	**11,090**	**$30,396,685**

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Regional Center Services Characteristics

Planning tool used in iterative fashion with HSP files (varying market share, Diagnostic Imaging, ED & OB services). Assumes no Primary Care. Does not provide gap analysis.

	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Total Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Specialty Care						
	Provider Visits					
Orthopedics	7,123	Providers	2.6	2.6	$299	$2,130,620
Ophthalmology	8,945	Providers	2.4	2.4	$307	$2,742,448
Dermatology	5,067	Providers	1.2	1.2	$140	$710,720
General Surgery	3,541	Providers	2.2	2.2	$265	$939,002
Otolaryngology	3,390	Providers	1.2	1.2	$218	$740,497
Cardiology	4,199	Providers	1.6	1.6	$264	$1,110,152
Urology	2,726	Providers	1.0	0.0	$265	$0
Neurology	1,933	Providers	0.8	0.8	$252	$487,735
Other Surg Specialties	4,567	Providers	1.6	1.6	$409	$1,867,701
Other Med Specialties	19,011	Providers	7.7	7.7	$141	$2,674,904
Specialty Care Total	57,777	Providers	21.3	31.3	<Total FTE	$13,403,779
		Dept. Gross Sq. Meters	1,663	1,770.5		
Other Ambulatory Care						
Dental Specialty Care		Specialists	10.2	34	$0	$0
		Support Staff FTEs	24.0			
		Operatories	25.0			
		Dept. Gross Sq. Meters	1,452	1,452		
Audiology Visits	5,441	Audiologists	2.7	7.0	$535	$2,911,153
		Audiology Booths	3.0			
		Dept. Gross Sq. Meters	203	203		
Other Ambulatory Care Total		Providers	12.9	41.2	<Total FTE	$2,911,153
		Dept. Gross Sq. Meters	1,654	1,654.1		
Outpatient Behavioral Health						
Psychiatry	4,732	Counselors	2.8			
Behavioral Health Total		Total Counselors	2.8		$578	$2,735,525
		Counselor Offices	3			
		Total FTE	5.6	5.6		
		Dept. Gross Sq. Meters	97	97.4		

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Regional Center Services Characteristics

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Total Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Inpatient Care						
Pediatric Patient Days	1,184	# of Beds	6.0	6	$2,039	$2,414,046
Adult Medical Acute Care	8,746	# of Beds	27.0	32	$1,504	$13,151,448
Adult Surgical Acute Care	7,485	# of Beds	24.0	28	$1,504	$11,255,269
Intensive Care Patient Days	2,427	# of Beds	9.5	11	$2,111	$5,124,513
Inpatient Care Total		**Total Beds**	67	77		$31,945,276
		Total DGSM	*2,850*	174	<Total Staff	
		Total ICU DGSM	*714*	3,853	<Total Space	
Ancillary Services						
Laboratory Services						
Lab Total	145,728	# of FTEs	10.0	11.0	$206	$29,998,109
		Dept. Gross Sq.Meters	448	389		
Pharmacy	891,814	Pharmacists	14.1	21.0	$0	$0
		Dept. Gross Sq. Meters	748	593		
Diagnostic Imaging						
Rad Exams	23,647	Rooms	4.0	4.0	$280	$6,613,593
Ultrasound Exams	4,398	Rooms	2.0	2.0	$220	$967,252
Mammography Exams	6,417	Rooms	2.0	2.0	$152	$974,614
Fluoroscopy Exams	2,024	Rooms	2.0	2.0	$419	$847,935
CT	3,023	Rooms	1.0	1.0	$446	$1,349,256
MRI exams	1,938	Rooms	1.0	1.0	$503	$975,492
Diagnostic Imaging Total	41,447	*Radiologists with Telemed Buyback:*	3.6	*3.6*		$11,728,142
	41,447	*Total Radiologist*	3.6			
		Dept. Gross Sq. Meters	1,120.5	1,120.5		
	9.0	All DI Staff (Not Radiologist)	16.7	16.7	<Total FTE	
Rehabilitation Services						
OT Visits	6,732	Therapists	3.8		$0	$0
Speech Therapy Visits	1,594	Therapists	0.9		$0	$0
Rehab Total	8,326	Therapists	4.7			$0
		Dept. Gross Sq. Meters	163	162.8		
		Total FTE OT & Speech Only	16.3	16.3		

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Regional Center Services Characteristics

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Total Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Surgery						
Outpatient Endoscopy Cases	721	Endoscopy Suites	1.0	1.0	$1,535	$1,106,620
Outpatient Surgery Cases	3,711	Outpatient ORs	3.0	5.0	$1,714	$6,362,324
IP Cases Added to OP		# of Pre-Op Spaces	4.0			
		# of PACU Spaces	3.0			
		# of Phase II Spaces	6.0			
	17	# Observation Beds	1.0	1.0		
		# Observation FTEs	0.5			
OP Surgical Case Total	4,432	# of ORs	3.0	40.0	<Total FTE	$7,468,944
		Dept. Gross Sq. Meters	1,300	1,467.1		
Administrative Support						
Administration		# of FTE	17.1	37.0		
		Dept. Gross Sq. Meters	252	614		
Nursing Administration		# of FTE	12.4	0.0		
		Dept. Gross Sq. Meters	235	0		
Quality Management		# of FTE	6.3	0.0		
		Dept. Gross Sq. Meters	119	0		
Information Management		# of FTE	12.1	12.0		
		Dept. Gross Sq. Meters	228	217		
Health Information Mngmt.		# of FTE	51.4	49.5		
		Dept. Gross Sq. Meters	751	744		
Business Office		# of FTE	27.5	25.0		
		Dept. Gross Sq. Meters	133	254		
Security		# of FTE	4.5	4.0		
		Dept. Gross Sq. Meters	25	25		
Transportation		# of FTE	4.1	0.0		
		Dept. Gross Sq. Meters	25	0		
Administration Total		# of FTE	135.3	127.5		
		Dept. Gross Sq. Meters	1,769	1,854.2		
Facility Support Services						
Clinical Engineering		# of FTE	4.9	4.0		
		Dept. Gross Sq. Meters	123	84		
Facility Management		# of FTE	25.2	25.0		
		Dept. Gross Sq. Meters	246	246		
Central Sterile / Medical Supply		# of FTE	1.7	1.5		
		Dept. Gross Sq. Meters	74	392		
Property & Supply		# of FTE	6.1	6.5		
		Dept. Gross Sq. Meters	527	607		
Housekeeping & Linen		# of FTE	33.5	29.5		
		Dept. Gross Sq. Meters	271	262		
Facility Support Services Total		# of FTE	96.3	95.0		
		Dept. Gross Sq. Meters	1,241	2,952		

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Regional Center Services Characteristics

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2010 Demand**	**Key Characteristics (KC)**	**# Req'd in 2010**	**Total Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Other Programs						
	Telemedicine % Inc					
Case Management	80%	# of FTE	15.9	15.9	$0	$0
		Dept. Gross Sq. Meters	280	280		
Pain Management	20%	# of Specialist Providers	1.0	1.0	$0	$0
		# of Support Staff FTEs	2.1	2.1		
		Dept. Gross Sq. Meters	157	157		
Other Services Total		# of FTEs	19.1	19.1		$0
		Dept. Gross Sq. Meters	437.1	437.1		

IHS Supportable Totals

Staff FTEs (including Non-RRM)	**325.8**	**602.4**		**$100,190,927**
Dept. Gross Sq. Meters	**20,910**	**21,975**		**$100,190,927**

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Regional Center Services Characteristics

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2025 Demand**	**Key Characteristics (KC)**	**# Req'd in 2025**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Specialty Care						
	Provider Visits					
Orthopedics	10,504	Providers	3.8	3.8	$299	$3,141,911
Ophthalmology	12,976	Providers	3.5	3.5	$307	$3,978,312
Dermatology	7,460	Providers	1.8	1.8	$140	$1,046,386
General Surgery	5,114	Providers	3.1	3.1	$265	$1,356,131
Otolaryngology	4,991	Providers	1.8	1.8	$218	$1,090,084
Cardiology	6,173	Providers	2.4	2.4	$264	$1,632,309
Urology	3,941	Providers	1.4	1.4	$265	$1,045,074
Neurology	2,855	Providers	1.2	1.2	$252	$720,374
Other Surg Specialties	6,739	Providers	2.4	2.4	$409	$2,755,712
Other Med Specialties	27,875	Providers	11.3	11.3	$141	$3,922,069
Specialty Care Total	88,629	Providers	32.7	45.5	<=Total FTE	$20,688,361
		Dept. Gross Sq. Meters	2,535	2,593		
Other Ambulatory Care						
Dental Specialty Care		Specialists	14.5	48.7	$0	$0
		Support Staff FTEs	34.2			
		Operatories	35.0			
		Dept. Gross Sq. Meters	2,070	2,070		
Audiology Visits	7,931	Audiologists	3.9	11.0	$535	$4,243,402
		Audiology Booths	4.0			
		Dept. Gross Sq. Meters	293	293		
Other Ambulatory Care Total		Providers	18.4	59.7	<=Total FTE	$4,243,402
		Dept. Gross Sq. Meters	2,363	2,363		
Outpatient Behavioral Health						
Psychiatry	6,808	Counselors	4.0			
Behavioral Health Total		Total Counselors	4.0		$578	$3,935,407
		Counselor Offices	4			
		Total FTE	8.0	8.0		
		Dept. Gross Sq. Meters	130	130		

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Regional Center Services Characteristics

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2025 Demand**	**Key Characteristics (KC)**	**# Req'd in 2025**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Inpatient Care						
Pediatric Patient Days	1,746	# of Beds	8.0	8.4	$2,039	$3,559,902
Adult Medical Acute Care	15,006	# of Beds	43.0	51.7	$1,504	$22,564,672
Adult Surgical Acute Care	9,491	# of Beds	29.0	34.4	$1,504	$14,271,712
Intensive Care Patient Days	3,569	# of Beds	14.0	14.9	$2,111	$7,535,801
Inpatient Care Total		**Total Beds**	94	109		$47,932,087
		Total DGSM	*4,000*	247	<Total Staff	
		Total ICU DGSM	*1,050*	5,468	<Total Space	
Ancillary Services						
Laboratory Services						
Lab Total	173,264	# of FTEs	15.0	16.0	$206	$35,666,291
		Dept. Gross Sq. Meters	448	389		
Pharmacy	1,310,230	Pharmacists	21.3	30.0	$0	$0
		Dept. Gross Sq. Meters	1,127	860		
Diagnostic Imaging						
Rad Exams	33,460	Rooms	6.0	6.0	$280	$9,358,093
Ultrasound Exams	6,034	Rooms	3.0	3.0	$220	$1,327,058
Mammography Exams	9,234	Rooms	3.0	3.0	$152	$1,402,460
Fluoroscopy Exams	2,842	Rooms	2.0	2.0	$419	$1,190,627
CT	4,366	Rooms	2.0	2.0	$446	$1,948,677
MRI exams	2,784	Rooms	1.0	1.0	$503	$1,401,326
Diagnostic Imaging Total	58,720	*Radiologists with Telemed Buyback:*	*5.1*	*5.1*		$16,628,241
	58,720	*Total Radiologist*	*5.1*			
		Dept. Gross Sq. Meters	1,512.0	1,491.0		
	11.0	All DI Staff (Not Radiologist)	21.8	21.8	<=Total FTE	
Rehabilitation Services						
OT Visits	9,722	Therapists	5.4		$0	$0
Speech Therapy Visits	2,331	Therapists	1.3		$0	$0
Rehab Total	12,053	Therapists	6.7			$0
		Dept. Gross Sq. Meters	236	236		
		Total FTE OT & Speech Only	28.6	28.6		

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Regional Center Services Characteristics

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2025 Demand**	**Key Characteristics (KC)**	**# Req'd in 2025**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Surgery						
Outpatient Endoscopy Cases	1,057	Endoscopy Suites	1.0	2.0	$1,535	$1,622,326
Outpatient Surgery Cases	5,381	Outpatient ORs	4.0	7.0	$1,714	$9,225,455
		# of Pre-Op Spaces	5.0			
		# of PACU Spaces	4.0			
		# of Phase II Spaces	8.0			
	25	# Observation Beds	1.0	1.0		
		# Observation FTEs	0.5			
OP Surgical Case Total	6,438	# of ORs	4.0	56.5	<=Total FTE	$10,847,781
		Dept. Gross Sq. Meters	156	1,905		
Administrative Support						
Administration		# of FTE	19.4	41.5		
		Dept. Gross Sq. Meters	231	650		
Nursing Administration		# of FTE	13.0	0.0		
		Dept. Gross Sq. Meters	248	0		
Quality Management		# of FTE	9.3	0.0		
		Dept. Gross Sq. Meters	176	0		
Information Management		# of FTE	15.9	15.0		
		Dept. Gross Sq. Meters	272	250		
Health Information Mngmt.		# of FTE	68.6	62.5		
		Dept. Gross Sq. Meters	984	956		
Business Office		# of FTE	41.1	36.0		
		Dept. Gross Sq. Meters	167	330		
Security		# of FTE	5.3	5.0		
		Dept. Gross Sq. Meters	25	25		
Transportation		# of FTE	5.6	0.0		
		Dept. Gross Sq. Meters	35	0		
Administration Total		# of FTE	178.3	160.0		
		Dept. Gross Sq. Meters	2,139	2,212		
Facility Support Services						
Clinical Engineering		# of FTE	6.5	6.5		
		Dept. Gross Sq. Meters	157	157		
Facility Management		# of FTE	30.4	27.5		
		Dept. Gross Sq. Meters	185	246		
Central Sterile / Medical Supply		# of FTE	1.7	1.5		
		Dept. Gross Sq. Meters	74	556		
Property & Supply		# of FTE	8.3	8.5		
		Dept. Gross Sq. Meters	763	763		
Housekeeping & Linen		# of FTE	41.1	32.5		
		Dept. Gross Sq. Meters	119	284		
Facility Support Services Total		# of FTE	87.9	105.0		
		Dept. Gross Sq. Meters	1,299	3,427		

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2025 Demand**	**Key Characteristics (KC)**	**# Req'd in 2025**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Other Programs						
	Telemedicine % Inc					
Case Management	80%	# of FTE	22.9	22.9	$0	$0
		Dept. Gross Sq. Meters	403	403		
Pain Management	20%	# of Specialist Providers	1.5	1.5	$0	$0
		# of Support Staff FTEs	3.0	3.0		
		Dept. Gross Sq. Meters	225	225.0		
Other Services Total		# of FTE	27.4	27.4		$0
		Dept. Gross Sq. Meters	628	628		
IHS Supportable Totals						
Staff FTEs (including Non-RRM)			**401.9**	**810.9**		**$ 139,941,571**
Dept. Gross Sq. Meters			**24,594**	**29,165**		**$ 139,941,571**

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2025 Demand**	**Key Characteristics (KC)**	**# Req'd in 2025**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Specialty Care						
	Provider Visits					
Orthopedics	10,504	Providers	3.8	3.8	$299	$3,141,911
Ophthalmology	12,976	Providers	3.5	3.5	$307	$3,978,312
Dermatology	7,460	Providers	1.8	1.8	$140	$1,046,386
General Surgery	5,114	Providers	3.1	3.1	$265	$1,356,131
Otolaryngology	4,991	Providers	1.8	1.8	$218	$1,090,084
Cardiology	6,173	Providers	2.4	2.4	$264	$1,632,309
Urology	3,941	Providers	1.4	1.4	$265	$1,045,074
Neurology	2,855	Providers	1.2	1.2	$252	$720,374
Other Surg Specialties	6,739	Providers	2.4	2.4	$409	$2,755,712
Other Med Specialties	27,875	Providers	11.3	11.3	$141	$3,922,069
Specialty Care Total	88,629	Providers	32.7	45.5	<=Total FTE	$20,688,361
		Dept. Gross Sq. Meters	2,535	2,593		
Other Ambulatory Care						
Dental Specialty Care		Specialists	14.5	48.7	$0	$0
		Support Staff FTEs	34.2			
		Operatories	35.0			
		Dept. Gross Sq. Meters	2,070	2,070		
Audiology Visits	7,931	Audiologists	3.9	11.0	$535	$4,243,402
		Audiology Booths	4.0			
		Dept. Gross Sq. Meters	293	293		
Other Ambulatory Care Total		Providers	18.4	59.7	<=Total FTE	$4,243,402
		Dept. Gross Sq. Meters	2,363	2,363		
Outpatient Behavioral Health						
Psychiatry	6,808	Counselors	4.0			
Behavioral Health Total		Total Counselors	4.0		$578	$3,935,407
		Counselor Offices	4			
		Total FTE	8.0	8.0		
		Dept. Gross Sq. Meters	130	130		

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2025 Demand**	**Key Characteristics (KC)**	**# Req'd in 2025**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Inpatient Care						
Pediatric Patient Days	1,461	# of Beds	7.0	7.3	$2,039	$2,978,818
Adult Medical Acute Care	11,783	# of Beds	35.0	41.6	$1,504	$17,718,215
Adult Surgical Acute Care	8,498	# of Beds	26.0	31.2	$1,504	$12,778,528
Intensive Care Patient Days	2,986	# of Beds	11.7	12.9	$2,111	$6,304,820
Inpatient Care Total		**Total Beds**	80	93		$39,780,380
		Total DGSM	*3,400*	210	<Total Staff	
		Total ICU DGSM	*878*	4,651	<Total Space	
Ancillary Services						
Laboratory Services						
Lab Total	173,264	# of FTEs	14.0	16.0	$206	$35,666,291
		Dept. Gross Sq. Meters	448	389		
Pharmacy	1,310,230	Pharmacists	20.8	30.0	$0	$0
		Dept. Gross Sq. Meters	1,101	847		
Diagnostic Imaging						
Rad Exams	33,460	Rooms	6.0	6.0	$280	$9,358,093
Ultrasound Exams	6,034	Rooms	3.0	3.0	$220	$1,327,058
Mammography Exams	9,234	Rooms	3.0	3.0	$152	$1,402,460
Fluoroscopy Exams	2,842	Rooms	2.0	2.0	$419	$1,190,627
CT	4,366	Rooms	2.0	2.0	$446	$1,948,677
MRI exams	2,784	Rooms	1.0	1.0	$503	$1,401,326
Diagnostic Imaging Total	58,720	*Radiologists with Telemed Buyback:*	*5.1*	*5.1*		$16,628,241
	58,720	*Total Radiologist*	*5.1*			
		Dept. Gross Sq. Meters	1,512.0	1,491.0		
	11.0	All DI Staff (Not Radiologist)	21.8	21.8	<=Total FTE	
Rehabilitation Services						
OT Visits	9,722	Therapists	5.4		$0	$0
Speech Therapy Visits	2,331	Therapists	1.3		$0	$0
Rehab Total	12,053	Therapists	6.7			$0
		Dept. Gross Sq. Meters	236	236		
		Total FTE OT & Speech Only	28.6	28.6		

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Regional Center Services Characteristics

Planning tool used in iterative fashion with HSP files (varying market share, Diagnostice Imaging, ED & OB services). Assumes no Primary Care. Does not provide gap analysis.

	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2025 Demand**	**Key Characteristics (KC)**	**# Req'd in 2025**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Surgery						
Outpatient Endoscopy Cases	1,057	Endoscopy Suites	1.0	2.0	$1,535	$1,622,326
Outpatient Surgery Cases	5,381	Outpatient ORs	4.0	7.0	$1,714	$9,225,455
		# of Pre-Op Spaces	5.0			
		# of PACU Spaces	4.0			
		# of Phase II Spaces	8.0			
	25	# Observation Beds	1.0	1.0		
		# Observation FTEs	0.5			
OP Surgical Case Total	6,438	# of ORs	4.0	56.5	<=Total FTE	$10,847,781
		Dept. Gross Sq. Meters	156	1,905		
Administrative Support						
Administration		# of FTE	19.0	41.5		
		Dept. Gross Sq. Meters	253	650		
Nursing Administration		# of FTE	12.7	0.0		
		Dept. Gross Sq. Meters	241	0		
Quality Management		# of FTE	8.6	0.0		
		Dept. Gross Sq. Meters	163	0		
Information Management		# of FTE	15.2	15.0		
		Dept. Gross Sq. Meters	272	250		
Health Information Mngmt.		# of FTE	66.5	62.5		
		Dept. Gross Sq. Meters	984	956		
Business Office		# of FTE	39.7	36.0		
		Dept. Gross Sq. Meters	167	330		
Security		# of FTE	5.3	5.0		
		Dept. Gross Sq. Meters	25	25		
Transportation		# of FTE	5.4	0.0		
		Dept. Gross Sq. Meters	33	0		
Administration Total		# of FTE	172.3	160.0		
		Dept. Gross Sq. Meters	2,139	2,212		
Facility Support Services						
Clinical Engineering		# of FTE	6.5	6.5		
		Dept. Gross Sq. Meters	157	157		
Facility Management		# of FTE	28.9	27.5		
		Dept. Gross Sq. Meters	185	246		
Central Sterile / Medical Supply		# of FTE	1.7	1.5		
		Dept. Gross Sq. Meters	74	473		
Property & Supply		# of FTE	7.9	8.5		
		Dept. Gross Sq. Meters	763	763		
Housekeeping & Linen		# of FTE	39.1	32.5		
		Dept. Gross Sq. Meters	119	284		
Facility Support Services Total		# of FTE	84.1	105.0		
		Dept. Gross Sq. Meters	1,299	3,344		

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	Regional Center Direct Health Care			HSP	CHS Impact (Direct Care Value)	
Discipline	**2025 Demand**	**Key Characteristics (KC)**	**# Req'd in 2025**	**Override or Blended Regional Requirement**	**Present Per Encounter Cost**	**Present Value**
Other Programs						
	Telemedicine % Inc					
Case Management	80%	# of FTE	22.9	22.9	$0	$0
		Dept. Gross Sq. Meters	403	403		
Pain Management	20%	# of Specialist Providers	1.5	1.5	$0	$0
		# of Support Staff FTEs	3.0	3.0		
		Dept. Gross Sq. Meters	225	225.0		
Other Services Total		# of FTE	27.4	27.4		$0
		Dept. Gross Sq. Meters	628	627.8		
IHS Supportable Totals						
Staff FTEs (including Non-RRM)			**391.1**	**773.8**		**$ 131,789,865**
Dept. Gross Sq. Meters			**24,558**	**27,937**		**$ 131,789,865**

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