

A technical evaluation of the Indian Health Care
Improvement Fund methodology and data

Technical Evaluation

Data Technical Work Group
March 12, 2010

DTWG

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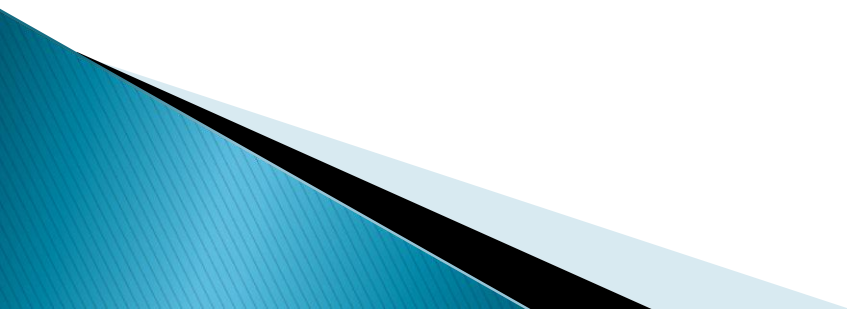
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Section 1 - Charge Letter





November 6, 2009

TO: See Below

FROM: Director

SUBJECT: Participants for the Data/Technical Work Group

Background

The Indian Health Service (IHS), in consultation with Tribes, plans to evaluate allocation of the Indian Health Care Improvement Fund. The evaluation plan consists of two complementary parts: (1) I am forming a technical work group to evaluate and update data used in the formula and to identify other recommended technical improvements; and (2) In coming weeks, I will initiate a process with Tribal leaders to consider whether the formula needs to be changed or updated.

Data/Technical Work Group

The purpose of this memo is to seek participants—at least one but no more than two from each Area—for a Data/Technical Work Group. The group will not alter formulas but will assess the accuracy of data and technical aspects of the formula, identifying areas for improvement. Good candidates include IHS and Tribal statisticians, planners, or analysts technically proficient with data used in IHS resource allocation formulas.

Schedule of Work

The Data/Technical Work Group will conduct work in three phases.

1. An initial 3-day meeting in November will be scheduled to evaluate existing data sources:
 - The work group will review existing data sources and technical aspects of the Indian Health Care Improvement Fund allocation formula.
 - Work group members from each Area will report on the Area experience and present views on the reliability and validity of the data.
 - The work group will identify follow-up assignments for further analysis.

Work group members will follow up assignments independently or collaboratively, as appropriate, during November and December, scheduling conference calls to coordinate work as needed.

2. The workgroup will hold a final 3-day meeting in early January to review findings and recommend technical improvements:
 - The work group members will consider follow-up findings.
 - The work group will identify technical improvements to data or computations that do not materially alter the formula structure or resource allocation policies.
 - Any substantive issues with the allocation formula that arise from the technical evaluation of data will be passed on as recommendations to the Tribal leader group that will advise me on whether the formula should be changed.

By November 13, 2009, please e-mail the names and contact information of recommended IHS and/or Tribal Area participants to Mr. Cliff Wiggins, Supervisory Operation Research Analyst, IHS, at cliff.wiggins@ihs.gov. Participants will be contacted directly as more information becomes available.

Thank you for responding to this important matter.

s/Yvette Roubideaux, M.D., M.P.H./

Yvette Roubideaux, M.D., M.P.H.

Addressees:

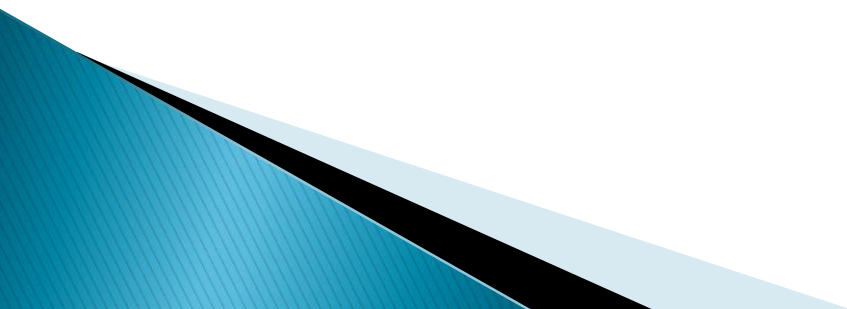
Area Directors

Deputy Area Directors

Area Executive Officers

Office Directors

Section 2 - DTWG Roster

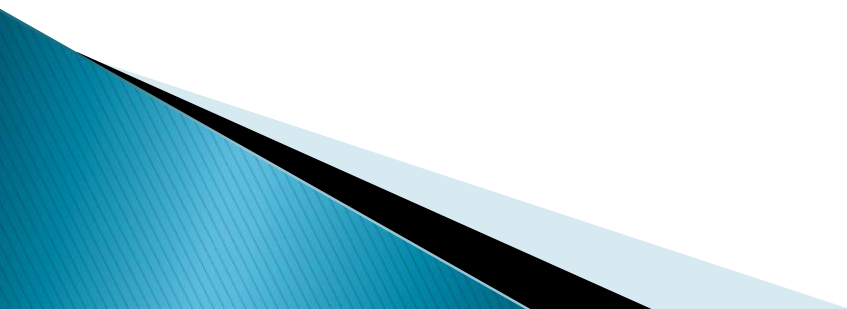


DTWG - ROSTER

The Data Technical Work Group is composed of at least one but no more than two members from each Area. The group assessed the accuracy of data and technical aspects of allocation methodology. Members and alternates include IHS and Tribal statisticians, planners, or analysts technically proficient with data used in IHS resource allocation formulas. More than two persons are listed when alternates substituted for members.

IHS Area	Name	Title	Role
Aberdeen	Coulter, Sandy	Planning Evaluation, Aberdeen AO	Mmb/Alt
Aberdeen	Fox, Marianna	Ponca Tribal Planner	Mmb/Alt
Alaska	Olson, Lee (Alt)	VP Finance, South Central Foundation	Mmb/Alt
Alaska	Mather, David	President, Mather & Assoc., Ak	Mmb/Alt
Alaska	Boedeker, Bonnie	Director, Div PEH, Alaska AO	Mmb/Alt
Albuquerque	Robertson, Regina	Director's Office, Albuquerque AO	Mmb/Alt
Albuquerque	Winfrey, Sandra	Executive Officer, Albuquerque AO	Mmb/Alt
Bemidji	Helmick, Linda	Health Director, Forest Co. Potawatomi	Mmb/Alt
Bemidji	Douglas, Jason	Statistician/Health Planner, Bemidji AO	Mmb/Alt
Billings	Racine, Leslie	Program Analyst, Billings AO	Mmb/Alt
Billings	Tribal Member	No Participation	Mmb/Alt
California	Lopez, Steven	HIPAA Compliance Officer, CAO	Mmb/Alt
California	Crouch, James	Exec. Director, CRIHB, Ca	Mmb/Alt
HQ	Wiggins, Cliff	Operations Analyst, OD, IHS	Mmb/Alt
HQ	Turk, Denise (Staff)	Staff Assistant, OD, IHS	Staff
HQ	Boney, Melissa (Obs)	Emerging Leader, OS/ASAM/IHS-OFA	Mmb/Alt
HQ	Greenway, Kirk	Senior Statistician, OPS, IHS	Mmb/Alt
HQ	Paisano, Edna	Supv Statistician, OPS, IHS	Mmb/Alt
Nashville	Rogers, Kristina	Statistician/Analyst, Nashville AO	Mmb/Alt
Nashville	Tribal Member	No Participation	Mmb/Alt
Navajo	Roanhorse, Anslem	Dir. Div. Health, Navajo Nation	Mmb/Alt
Navajo	Notah, Genevieve	Assoc Dir. OPEL, NAO	Mmb/Alt
Oklahoma	Isham-Amos, Tina M.	Statistical Officer, OCAO	Mmb/Alt
Oklahoma	Peercy, Mickey	Exec Director, Health, Choctaw Nation	Mmb/Alt
Phoenix	Longie, Keith	Dir Field Ops, PhxAO	Mmb/Alt
Phoenix	Sekerak, Jody	Statistician, PhxAO	Mmb/Alt
Phoenix	Wilson, Charlton (Alt)	Chief Operating Officer, PIMC, PhxAO	Mmb/Alt
Portland	Fox, Edward	Health Director, Squaxin Island Tribe	Mmb/Alt
Portland	Dean, Terry (Alt)	Exec Asst, Portland AO	Mmb/Alt
Portland	Roberts, Jim	Policy Analyst, NWPAlHB	Mmb/Alt
Tucson	Hamstra, Scott (Alt)	MD, Sells Hospital	Mmb/Alt
Tucson	Munoz, Francisco	Tohono O'odham Nation (No participation)	Mmb/Alt
Tucson	Lopez, Isidro	Tohono O'odham Nation (No participation)	Mmb/Alt
Tucson	Casillas, Juana (Alt)	Policy Analyst, T'ohono Odum Nation	Mmb/Alt

Section 3 - Scope of Work



DATA/TECHNICAL WORK GROUP

SCOPE OF WORK

The technical work group assesses and updates data measures and sources used in formulas allocating resources for the Indian Health Care Improvement Fund. At least one but no more than two participants from each Area are needed for the Data/Technical Work Group. The group will not alter formulas but will assess the accuracy of data and technical aspects of the formula, identifying areas for improvement.

Statisticians and analysts from IHS and tribal operated programs will assess:

- Validity and reliability of measures used in allocation formulas, changes in data definitions, collection/reporting methods, or data sources since the measures were initially adopted in 2001
- Whether alternative or supplemental data sources may improve accuracy and precision.
- Data to be assessed include:
 - user counts,
 - health, demographic, and poverty indicators,
 - alternate health care coverage and spending data, especially CMS data,
 - indicators of regional price variations for health care,
 - isolation and geographic measures that may affect access and cost,
 - available direct care (flipside: reliance on purchased care),
 - accounting data for existing IHS funding,
 - step down of shared resources (referral sites, Area-wide and IHS-wide),
 - annualized usage value of IHS constructed facilities

Collection of data needed for the FY 2010 allocation cycle will be completed before or during 2nd Quarter, FY 2010. Members of the DTWG will conduct the data update for the FY 2010 cycle concurrently with evaluation.

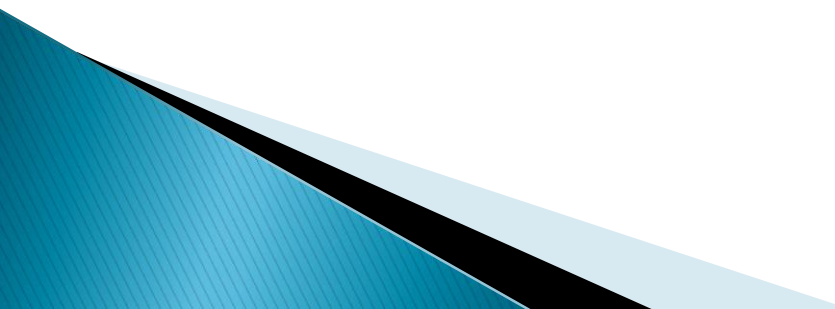
Findings and recommendations will be provided to IHS and the Allocation Policy Work Group for consideration and consultation. Improved data or refined measures can be applied in FY 2010 allocation cycle if the technical improvements are consistent with the currently approved formula framework.

SCHEDULE OF WORK

The Data/Technical Work Group will conduct work in three phases.

1. An initial 3-day meeting in December will be scheduled to evaluate existing data sources:
 - The work group will review existing data sources and technical aspects of the Indian Health Care Improvement Fund allocation formula.
 - Work group members from each Area will report on the Area experience and present views on the reliability and validity of the data.
 - The work group will identify follow-up assignments for further analysis.
2. Work group members will follow-up assignments independently or collaboratively, as appropriate, scheduling conference calls to coordinate work as needed.
3. The workgroup will hold a final 3-day meeting in mid January to review findings and recommend technical improvements:
 - The work group members will consider follow-up findings.
 - The work group will identify technical improvements to data or computations that do not materially alter the formula structure or resource allocation policies.
 - Any substantive issues with the allocation formula that arise from the technical evaluation of data will be passed to the Tribal leader group that will advise the Director on possible changes to the formula.

Section 4 - Findings and Recommendations

1. USER COUNTS
 2. ALTERNATIVE HEALTH STATUS INDEX
 3. PER USER COST BENCHMARK
 4. ADJUSTING THE BENCHMARK FOR SITES
 5. NEW GUIDANCE FOR AREA DATA COLLECTION
 6. INDEX OF CMS SPENDING
 7. FORWARDED CHS TOPICS
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SECTION 4 – FINDINGS AND RECOMMENDATIONS

4.1 USER COUNTS

User counts are critical in the IHCIF methodology. User counts shape formula results more than any other data. The workgroup examined the data quality controls, aggregation and un-duplication processes, and data rules for counting users.

User Definition: A user is an eligible AIAN person who a) registers at an IHS or Tribal delivery site, b) who resides in a county served by the delivery site, and c) who has obtained at least one personal health care service during the most recent 36 month period. Non-AIAN persons are excluded. AIAN persons who reside in another IHS or Tribal service area or who reside outside of any IHS or Tribal service area are excluded from user counts.

The workgroup focused counting rules and processes, not eligibility rules. The following counting issues potentially affect IHCIF allocations:

User Count Issue	IHCIF Implication
i. Duplicates -- Some AIAN persons, thought to be less than 5%, are delicately counted as users in more than one IHS Area.	Duplicate counts imply duplicate funding via the IHCIF. The extent is negligible overall because 1) number of duplicated persons is small, and 2) formula allocations are less than 2% of amounts necessary to exceed 100% of the benchmark.
ii. Cross-over Omissions -- Some AIAN persons residing in “X” Area obtain services in other Area “Y”. Such persons are omitted from the “Y” User count. This issue is thought to affect less than 5% of overall users.	Uncounted persons crossing over from other Areas obtain some direct care services and generate some direct care costs but are unfunded via the IHCIF. The extent is thought to be small overall but may be important at specific sites located adjacently to Area boundaries.
ii. Outside IHS service areas -- AIAN persons residing outside the geographic services areas of any IHS Area are excluded from IHS user counts altogether. Persons residing outside of the service areas, which are identified in published regulations as Contract Health Delivery Areas (CHSDA), are not eligible for CHS funded health care services, but may obtain limited direct care	Uncounted persons from outside IHS service areas consume some direct services and generate some direct costs but are unfunded via the IHCIF. Their limited eligibility constrains usage and travel times results in irregular usage of direct care services. Such differences are not modeled in the IHCIF methodology. If persons from outside IHS service areas were added to user

services at IHS or Tribal sites.	counts, the per user cost benchmark rate, which presumes full eligibility for all IHS services, would need to be reconsidered to reflect differential eligibility.
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- A. **User Count Un-duplication Rules** (issue i and ii) – Algorithms employing probabilistic matching rules currently un-duplicate multiply registered persons, but not between IHS Areas. **Recommendation:** Consider converting the existing within-Area un-duplication to IHS-wide un-duplication. IHS-wide un-duplication would resolve issues i and ii. See Appendix 2 for an illustration comparing technical details of existing and IHS-wide un-duplication. Expanding the un-duplication algorithm will require formulating new rules to resolve user count assignment for persons with multiple addresses or multiple delivery sites. The DTWG notes that fractional assignment among multiple sites reflecting frequency and intensity of use is technically possible, but did not take a position on this possibility.

- B. **Persons outside IHS Service Areas** (issue iii) – Persons residing outside IHS service areas, often but not always in adjacent urban counties, obtain limited direct care services for which costs are not recognized in the IHCIF formula. **Recommendation:** Inclusion of persons from outside IHS service areas is not merely a counting problem, but implies policy issues touching on Urban Indians, IHS’ open door policy, differences in direct and CHS eligibility. Resolving this technical problem will first require Tribal consultation to resolve the policy level issues.

- C. **Standard Codes for IHCIF Operating Units (sites)** – Historical IHS service units (for which user counts are tabulated) often do not correspond to the IHS and Tribal delivery system as now exist in the Self-Determination era. Consequently, Area staff must crosswalk counts to the sites included in the IHCIF formula. **Recommendation:** Develop a standard code book table linking older Service Unit and community codes to IHCIF “operating unit” codes. User counts for IHCIF operating units could be automatically tabulated. However, certain complexities are not fully resolvable in advance. Therefore, Area staff would review and adjust counts to reflect complexities.

- D. **Tabulations for other purposes** – IHS and Area Offices track a variety of health status and utilization indicators that depend on population counts in the denominator. **Recommendation:** If new user count rules are adopted, IHS statistical officers should specify whether and how these changes will be applied for other purposes.

4.2 ALTERNATIVE HEALTH STATUS INDEX

The IHCIF cost benchmark per user is actuarially adjusted for anticipated higher costs of AIAN patients whose health status is lower than for typical FEHP enrollees. Analogous cost variations among IHS Areas are inferred from variations in an health status index constructed of AIAN death rates for a collection of disease categories (injuries, alcoholism, diabetes, heart

disease, and cancer). The adjustment presumes that Area health care costs vary with mortality rates.

Health Status Index Issue	IHCIF Implication
<p>i. Mortality Data Proxy -- Regional death rates were adopted as a crude proxy of regional cost variation because morbidity and other data more closely linked to cost were not available</p>	<p>IHCIF funding allocations are linked to health status indicators, but the precision of the measures is uncertain and the logical connection with real health care costs is questionable.</p>
<p>ii. Composite – The health status index is a collection of indicators which vary among IHS Areas in contradictory patterns. Because, the inter-Area patterns of highs and lows often counter-balance, the combined effect of the index is flattened</p>	<p>Although health status is formally weighted at 20% in IHCIF computations, counter-balancing inter-Area variations within the composite index reduces the net impact on funding allocations. The resulting benchmark price adjustments for IHS Areas are shown in Appendix 3.</p>

A. **Cost Index based on morbidity or other data** – Is it now practical to develop morbidity based health status indices for IHS Areas and/or sites that are more closely linked to health care costs than the existing mortality index? **Recommendation:** The DTWG requests that an effort be organized involving IHS/Tribal Epidemiology centers to address two questions:

1. Is IHS disease incidence or prevalence data sufficiently complete and accurate to permit construction of health status indices for AIAN sub-populations such as Areas and or individual sites?
2. Would such an index better reflect variations in anticipated health care costs caused by underlying health conditions of the sub-populations?

Studies undertaken with IHS/Tribal Epidemiology Centers should focus linking health care cost variations to health status variations among the AIAN sub-population, e.g., assume a uniform benefits package is uniformly rendered at uniform prices for every AIAN person with identical health conditions. The index is to predict cost variations among Areas and sites that are exclusively linked to variations in population health. The ideal index is free of measurement biases arising from service availability, system capacity and manpower, differing medical practices and treatment patterns, and differences in resource constraints. The DTWG believes such complex work cannot be completed immediately but some useful products might be completed within 12 months.

4.3 PER USER COST BENCHMARK

Funding needs are projected per user using a cost benchmark derived from average premiums of PPO type plans in the Federal Employees Health Plans (FEHP). The initial cost benchmark was constructed by actuaries using relatively conservative industry standard assumptions. The benchmark cost per user was adjusted downward to exclude costs of services the IHS does not typically provide. The benchmark was adjusted upward to include co-

pays that insurance subscribers pay out of pocket because IHS services are at no charge to AIAN patients. The IHS updates the cost benchmark on a 3-year cycle using the most recent data available. See Appendix 4 for an overview of the current approach to benchmarking.

The DTWG reviewed all of the data elements used to construct the cost benchmark.

Benchmark Cost Issue	IHCIF Implication
<p>i. – Parity: The DTWG notes that the benchmark is significantly less than some other commonly cited measures of US per capita health care expenditures.</p>	<p>Workgroup members hold varying opinions. Some hold that the benchmark is perhaps too conservative and understates costs for AIAN. Others note that a conservative benchmark is more defensible against criticism, particularly that IHS is not really an individual insurance model and that non-IHS health coverage (Medicare, Medicaid, VA, Private Insurance, etc.) for AIAN is not fully accounted for at present.</p>
<p>ii. – Inflation: The relative growth of the benchmark over time has lagged the growth of other per capita health care expenditures in the US.</p>	<p>This suggests the benchmark may not have fully kept pace with rising costs.</p>
<p>iii. -- Adjustments: Over the past decade, patient cost shares have expanded. Other shifts in benefits coordination, deductibles, and utilization of pharmaceuticals have been documented.</p>	<p>Benchmark adjustments to reflect a decade of shifting patterns of health care costs are necessary.</p>
<p>iv. – Self & Family Blend: Per person costs for individual plan subscribers are higher than for family plan subscribers. IHS does not enroll in this way and therefore has no direct data to apply to this issue. The model assumes a blend of 25% individual and 75% family because that proportion yields anticipated per person costs approximating the age adjustments in original actuarial computations, e.g., a younger AIAN population.</p>	<p>The blend yields a per user benchmark that is lower than for individual plans but higher than for family plans.</p>
<p>v. – Population Cross Reference: The workgroup discussed health status differences between employed populations covered by the FEHP, the US general population, and the IHS User population. There was some uncertainty about the original process used to adjust costs among these populations.</p>	<p>There is uncertainty that the original cost adjustment fully reflected the expected cost differences between a relatively healthy, educated, white collar FEHP worker population versus anticipated health care costs for a relatively unhealthy, poorer, and less educated IHS user population.</p>

- A. **Overall Approach** – The workgroup affirms the FEHP benchmark approach as a reasonable basis for comparing AIAN needs with a recognized system. The workgroup does not propose a major over haul of the FEHP based cost benchmark for 2010. Whether potential future changes are prudent will depend on whether: 1) national health insurance

reforms alter government subsidies and Medicaid eligibility particularly with respect to AIANs, and or 2) the alternate resource estimates for IHS users in the model are revised.

Recommendation: In conjunction with proposed development of an alternate resource index using CMS payment data, which should yield more complete measures of non-IHS resources supporting health care care for IHS users, the per person cost benchmark should be reconsidered to reflect such changes, e.g. if alternate resource measures are broadened, then conservative assumptions underlying the benchmark may need revision also. Seek technical assistance from HHS to assist and validate benchmark assumptions.

B. **Benchmark Adjustments** (issues ii and iii) – The workgroup considered several technical factors used to adjust the benchmark for current health care cost patterns.

Recommendation: Adjust the benchmark using the most recent data available: number and average cost of prescriptions, average deductions, average co-pays, average out-of-pocket cost, etc. Members of the workgroup have provided new references to data.

C. **Self & Family Blend** (issue iii) – The workgroup did not reach a conclusion about proportions for blending costs for Self and Family type plans. **Recommendation:** This complex issue is connected to the underlying actuarial approach and to be reconsidered as proposed in A above.

D. **Population Cross Reference** – There are unanswered questions regarding original actuarial techniques adjusting benchmark costs to health status characteristics of the IHS user population. **Recommendation:** This complex issue is connected to the underlying actuarial approach and to be reconsidered as proposed in A above.

4.4 ADJUSTING THE BENCHMARK FOR SITES

The IHS-wide per user cost benchmark is adjusted for each site to reflect local conditions such as higher costs or lower costs due to geographic variations in health care prices, internal volume based efficiencies, health status of users, and poverty rates. The DTWG reviewed these in detail and does not propose any changes except to enlist IHS and Tribal Epi centers to study feasibility of an improved health status index (see Section 4.2).

Site Level Adjustment Issues	IHCIF Implication
<p>i. Site Adjustments -- The DTWG reviewed the adjustment factors in detail and does not propose any changes except to enlist IHS and Tribal Epi centers to determine feasibility of an improved health status index.</p>	<p>None, unless a new health status index is developed and adopted.</p>

<p>ii. – Proportion of internal (direct care) and external (purchased CHS). This factor sets proportions for applying internal and external price data in the calculation. The proportion is reported by Areas, usually referencing CHS spending. Some inconsistencies in the approach and definitions were identified.</p>	<p>New detailed guidance by HQ would help Areas improve reliability this data element.</p>
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- A. **Benchmark Adjustments for Sites** (issue i) – The workgroup does not propose any changes except to enlist IHS and Tribal Epidemiology centers to determine feasibility of an improved health status index (see Section 4.2)
- B. **Internal versus External** (issue ii) – The workgroup noted some inconsistency in data reported for this purpose. **Recommendation:** Headquarters should develop and issue more precise guidance. Guidance has been developed and issued. See Appendix 5. In particular, the guidance offered an optional new approach based on a “service mode inventory.” The detailed version of the optional service mode inventory lists 31 categories of services linked to the reference FEHP benefits package – see Appendix 6.

4.5 NEW GUIDANCE FOR AREA DATA COLLECTION

The workgroup noted a large number of data elements are gathered on a 3-year cycle for the IHCIF calculations. It notes a diversity of conditions and circumstances existing among the Areas, a varying extent of staff expertise and understanding of data definitions and the IHCIF model.

Data Collection Issues	IHCIF Implication
<p>i. Reporting Consistency -- The workgroup notes that Area level data tabulation is subject to some inconsistency due to complexity of data elements, 3 year lag of IHCIF cycles, and varying levels of understanding of the IHCIF model.</p>	<p>No fundamental changes in the data collection process are proposed. New detailed guidance would help to improve reliability of data gathered for use in the IHCIF calculations.</p>

- A. **Refined Technical Guidance** – No fundamental changes in the data collection process are proposed. **Recommendation:** Headquarters should develop and issue more precise guidance. Guidance has been developed and issued. See Appendix 5. The guidance specifies detailed definitions and specifications for operating units, data granularity, service mode inventory, and for aligning actual spending data among complex overlapping service areas.

4.6 INDEX OF CMS SPENDING

Estimates of Non-IHS spending for IHS users are critical in the methodology. The IHCIF formula allocates funds in proportion to gaps in funding needed to assure a uniform benefits package. Funding gaps are measured by subtracting from benchmark projection the IHS spending and inferred spending by other parties, chiefly Medicare, Medicaid, and private insurance. Inferred spending is derived from the 22 year old Survey of American Indians and Alaska Natives (SAIAN). SAIAN findings were transformed to create a 25% deduction in the benchmark to represent third party spending on IHS users. The 25% deduction applies uniformly site-adjusted per capita costs. Most workgroup members believe the imputed spending estimate does not accurately reflect actual third party spending variations state-to-state and community-to-community.

The DTWG also reviewed analyses of Medicare spending on IHS users by State and Area from NIHB/T-TAG supported research (see Appendix 8) and also comparisons of Medicaid spending on AIAN among States (see Appendix 9). Details are complex, especially matching IHS and CMS data for services covered in the benchmark plan. The preliminary work suggests evidence-based indices of Medicare and Medicaid spending for IHS users are feasible. The DTWG noted both correspondence and difference when CMS spending in IHS Areas was compared with imputed third party spending estimates now used in the IHCIF formula. Most DTWG members believe that evidence based indices of alternate resources would be more valid than the imputed estimates based on 22 year old survey data.

Alternate Resources Issue	IHCIF Implication
<p>i. – Inferred spending: The IHCIF does not measure actual alternate resource spending.</p>	<p>Most workgroup members believe that substantial regional variations exist in non-IHS resources supporting health care for IHS users. An imputed average of 25% does not measure such variations.</p>
<p>ii. – Outdated Study: The inferred spending assumption is based on the 22 year old Survey of American Indians and Alaska Natives (SAIAN).</p>	<p>The imputed index is outdated and probably does not reflect current conditions. CMS programs have evolved substantially, both in eligibility and spending, since the late 1980s.</p>
<p>iii. -- Differences: Considering the exploratory data presented to the DTWG, both correspondence and differences are noted when CMS spending is compared with imputed spending estimates now used in the IHCIF formula.</p>	<p>These differences imply potential bias in the IHCIF model of unknown extent. Most workgroup members believe that evidence based indices of alternate resources would be more valid than the imputed estimates.</p>
<p>iv. – Index Feasibility: The DTWG considered some research already under way which could produce a useful evidence-based index of CMS spending on IHS users.</p>	<p>Most workgroup members believe that CMS – IHS data matching and other analytic tools are a reasonable basis for developing a new index of CMS spending on IHS users.</p>

<p>v. – Questions: Two basic questions arise for further research.</p>	<p>1) Whether CMS data is sufficiently complete and reliable among States and Areas to construct indices of CMS spending for IHS users. 2) Whether indices constructed with recent CMS data would be more valid than the imputed estimates now used.</p>
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- A. **Alternate Resource Spending** – The workgroup affirms that legislation specifies that the IHCIF methodology must incorporate alternate resource usage. Preliminary analyses of CMS spending data, although inexact, suggest that the imputed index of alternate spending is no longer tenable in view of publicly available CMS data which shows striking variations in CMS spending among States and IHS Areas. **Recommendation:** The workgroup proposes that IHS initiate and support research to develop evidence based indices of third party spending to replace the uniform 25% estimate. Most members of the workgroup believe such research is urgently needed, not only to replace an outdated measure that cannot measure inter-system variations, but also because ignoring CMS data maybe untenable.
- B. **Proposed Specifications** – The workgroup suggests the following principles to guide the proposed research.
1. Include CMS spending on IHS AIAN users and exclude CMS spending on persons labeled as AIAN which are not matched to or reasonably inferred as IHS/Tribal users
 2. Estimate CMS payments to IHS and Tribal sites (revenue to IHS/Tribes) and estimate CMS payments to other providers for in-scope health care services rendered to IHS users (cost avoidance to IHS/Tribes)
 3. Include CMS payments for services corresponding to benefits in the reference benefits package (FEHP BC/BS PPO National Plan) and exclude CMS payments for services not included in the reference benefits package (.e.g., nursing home care, payments to the disabled, etc.)
 4. The form of the alternate resource coverage index should permit per capita calculations e.g., discounts or offsets against projected per user.

4.7 FORWARDED CHS TOPICS

The Data Technical Work Group (DTWG) is evaluating technical aspects of the Indian Health Care Improvement Fund (IHCIF) formula. The DTWG is not evaluating the Contract Health Service (CHS) allocation formula, but in the course of work identified several topics that connect the two methodologies. The following items are forwarded for potential consideration, but the DTWG makes no recommendations on the forwarded items.

A. USER COUNT IS NOT A PRECISE MEASURE OF AIANs ELIGIBLE FOR CHS

The IHS User Count is among the most important factors in both the IHCIF and CHS formulas. An IHS User is defined as an eligible American Indian Alaska Native (AIAN) person who obtained at least 1 direct, CHS, or dental service during the preceding 3 year period. Although a person's contact with IHS may vary year-to-year, the User Count is considered a stable measure of the AIAN population that relies primarily upon the IHS/Tribal health care system for their personal health care.

- a. The IHS User Count is a broad measure of contact with the IHS/Tribal health care system. The User Count does not measure that subset of AIANs eligible for CHS. Eligibility for CHS requires residence within CHS Delivery Area (CHSDA) counties and affiliation with those Tribes located within a particular CHSDA. Consequently, the IHS User Count exceeds the count of IHS users who are actually eligible for CHS. The extent of difference between the User Count and the subset of AIAN eligible for CHS is not accurately known. Some think that perhaps 20% to 30% the IHS User Count are not CHS eligible, but variations among sites may be significant.
- b. Each person's CHS eligibility status is captured during patient registration and recorded in the Resources and Patient Management System (RPMS) database. However, there are widely held concerns among CHS staff that "front desk registration" does not always ascertain CHS eligibility status accurately. CHS staff at many sites independently verifies each applicant's CHS eligibility before issuing authorization for CHS payment. Although the RPMS data system is designed to permit separate tabulation of both direct and CHS eligibility counts, there is doubt that CHS eligibility data collected in the RPMS database is accurate.

B. CONSIDERATION OF PREVIOUS ALLOCATIONS AND BASE FUNDING

The IHCIF measures recurring base budgets to gauge intra-system funding variations. The CHS formula does not consider past CHS funding allocations nor recurring CHS base budgets. This difference in methodologies is due in part to legislative guidance.

- a. The IHCIF formula was created by an IHS/Tribal work group guided by specifications in Indian Health Care Improvement Act legislation. The purpose of the IHCIF is to gradually reduce disproportionate base funding gaps. By targeting new IHCIF funding to reduce the widest funding gaps, the IHCIF formula is intended to achieve a more equitable health care system over time.
- b. The CHS formula was created by an IHS/Tribal work group to allocate CHS funds within the IHS/Tribal health care system in proportion to population served and prevailing health care prices. There were no specifications in legislation to guide construction of the CHS formula. The CHS formula allocates funding but does not

measure whether CHS base funding is adequate or inadequate.

C. ACCESS TO DIRECT CARE SERVICES IS VARIABLE

The CHS formula contains a measure of Access (or lack of access) to inpatient care at an IHS or Tribal hospital. Access is measured as either yes or no. Only sites with no Access are counted in this part of the CHS formula. Real variations in Access to direct medical care, both inpatient and outpatient, is typically more complex than yes or no. For instance:

- a) Some facilities are formally designated as hospitals, but actually provide very basic inpatient care on-site. Many patients are still referred to private hospitals which must be paid for with CHS funds.
- b) No IHS or Tribal hospital provides all complex, tertiary type inpatient care which is referred under CHS. The mix of onsite care and CHS referrals varies site-to-site depending on actual inpatient capabilities at each hospital.
- c) Some IHS and Tribal health care sites provide a wide range of ambulatory care services onsite and refer relatively few cases under CHS. Other sites provide basic ambulatory care services onsite and refer intermediate and advanced cases under CHS. Still other sites provide few onsite services and exclusively depend on CHS funds for all or most medical services.

Appendix 1

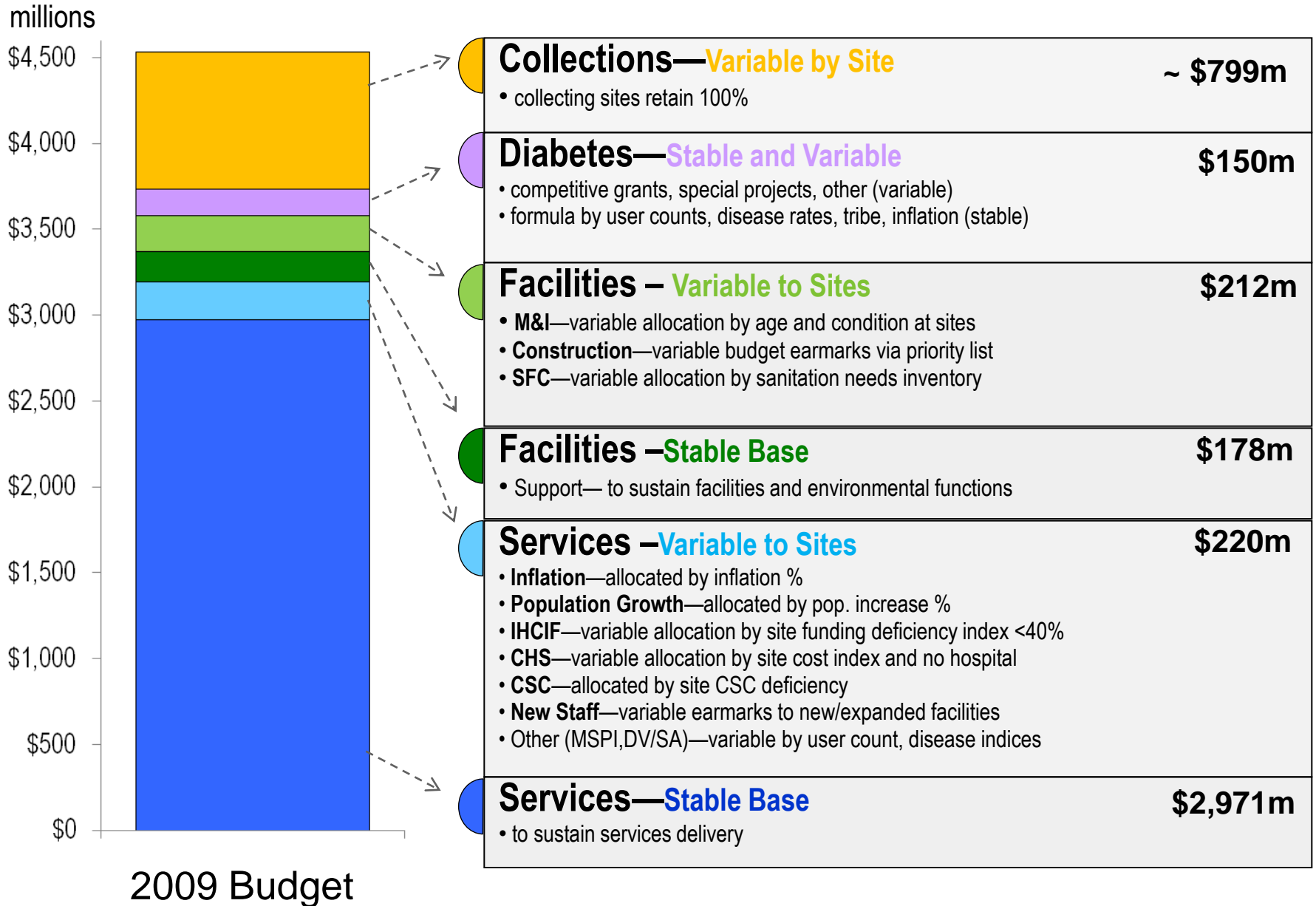
IHS Allocation Principles and Chart

Conceptual Underpinning of IHS Resource Allocation

1. Resource allocation methods were adopted with **consultation** of Tribes.
2. Resource allocation methods are **shaped by** :
 - authorizing law and guidance accompanying appropriations,
 - rationales expressed in IHS' budget requests,
 - tribal priorities as expressed through consultation, and
 - experience and professional judgment of agency health care officials.
3. Distinct resource allocation methods exist for many **distinct purposes** including:
 - to sustain existing services levels and infrastructure,
 - to compensate for evolving conditions such as inflation and population growth,
 - to target health conditions among AIAN such as diabetes, suicide, substance abuse, safe water supply and sanitation etc.,
 - to modernize and expand severely outmoded/inadequate health care facilities,
 - to compensate for isolation and variation in access to services,
 - to reimburse high cost care (CHEF) and costs of tribal contract support (CSC),
 - to reduce uneven funding among service delivery sites (e.g., IHCIF),
 - to invest in system-wide infrastructure (information technology, operational support) necessary to carry out federal laws and regulations, and
 - to invest in education and training for the AIAN health care workforce.
4. **Governing principles** for resource allocation include¹:
 - Consultation—Consult with Tribes on budget formulation and allocation methods,
 - Decentralize—accommodate diverse conditions and organizational approaches which requires decentralized management and decision making,
 - Incremental —minimize disruptions and waste that might result from abrupt change,
 - Population Outcomes—optimize health improvements for the AIAN population,
 - Alternate Resources—measure funding need net of other health care coverage,
 - Equity—reduce uneven access to services,
 - Efficiency—encourage prudent economical services delivery,
 - Incentives— e.g., recruitment / retention incentives for isolated sites.
 - Objective Indicators— use data sufficient to provide reasonable, but not absolute, assurance of validity and avoid burden and costs out of proportion to benefits.

¹ Governing principles are not mutually supportive in every possible respect.

IHS Funding by Allocation Approach



Appendix 2

User Counting Rules and Un-duplication

ILLUSTRATION: USER COUNTING RULES AND UNDUPLICATION

Counting Rules Using Existing Within-Area Unduplication

Joe Registers and Gets Service In				
		Area X Facilities Only	Area Y Facilities Only	Both Area X and Area Y Facilities
Joe Gives	Area X Address Only	X USER Joe is counted as a User in Area X	Omitted Everywhere Joe is not counted as a User anywhere, but appears in Y cross-over counts	X USER & Omitted in Y Joe is counted as a User in Area X, but appears in Y cross-over counts
	Area Y Address Only	Omitted Everywhere Joe is not counted as a User anywhere, but appears in X cross-over counts	Y USER Joe is counted as a User in Area Y	Y USER & Omitted in X Joe is counted as a User in Area Y, but appears in X cross-over counts
	Both X & Y Addresses	Not Applicable	Not Applicable	X USER & Y USER Joe is duplicately counted in both Areas (if he gives an X address to Area X and gives an Y address to Area Y)
	Address Outside of IHS	Omitted Everywhere Joe is not counted as a User anywhere, but appears in X Non-CHSDA counts	Omitted Everywhere Joe is not counted as a User anywhere, but appears in Y Non-CHSDA counts	Omitted Everywhere Joe is not counted as a User anywhere, but appears in both X and Y Non-CHSDA counts

Counting Rules If IHS-wide Unduplication Is Applied

Joe Registers and Gets Service In				
		Area X Facilities Only	Area Y Facilities Only	Both Area X and Area Y Facilities
Joe Gives	Area X Address Only	X USER Joe is counted as a User in Area X	X User or Y User New TBD new rules are needed to resolve whether & where to count Joe	X USER Joe is counted as an Area X user by existing rules, but TBD new rules might split among X and Y
	Area Y Address Only	X User or Y User New TBD new rules are needed to resolve whether & where to count Joe	Y USER Joe is counted as a User in Area Y	Y USER Joe is counted as an Area Y user by existing rules, but TBD new rules might split among X and Y
	Both X & Y Addresses	Not Applicable	Not Applicable	X User or Y User New TBD new rules are needed to resolve whether & where to count Joe or might split among X and Y
	Address Outside of IHS	Omitted Everywhere Joe is not counted as a User anywhere, but appears in Area X Non-CHSDA counts	Omitted Everywhere Joe is not counted as a User anywhere, but appears as Area Y Non-CHSDA counts	Omitted Everywhere Joe is not counted as a User anywhere, but appears in Area X and Area Y Non-CHSDA counts unless TBD new rules split Non-CHSDA counts

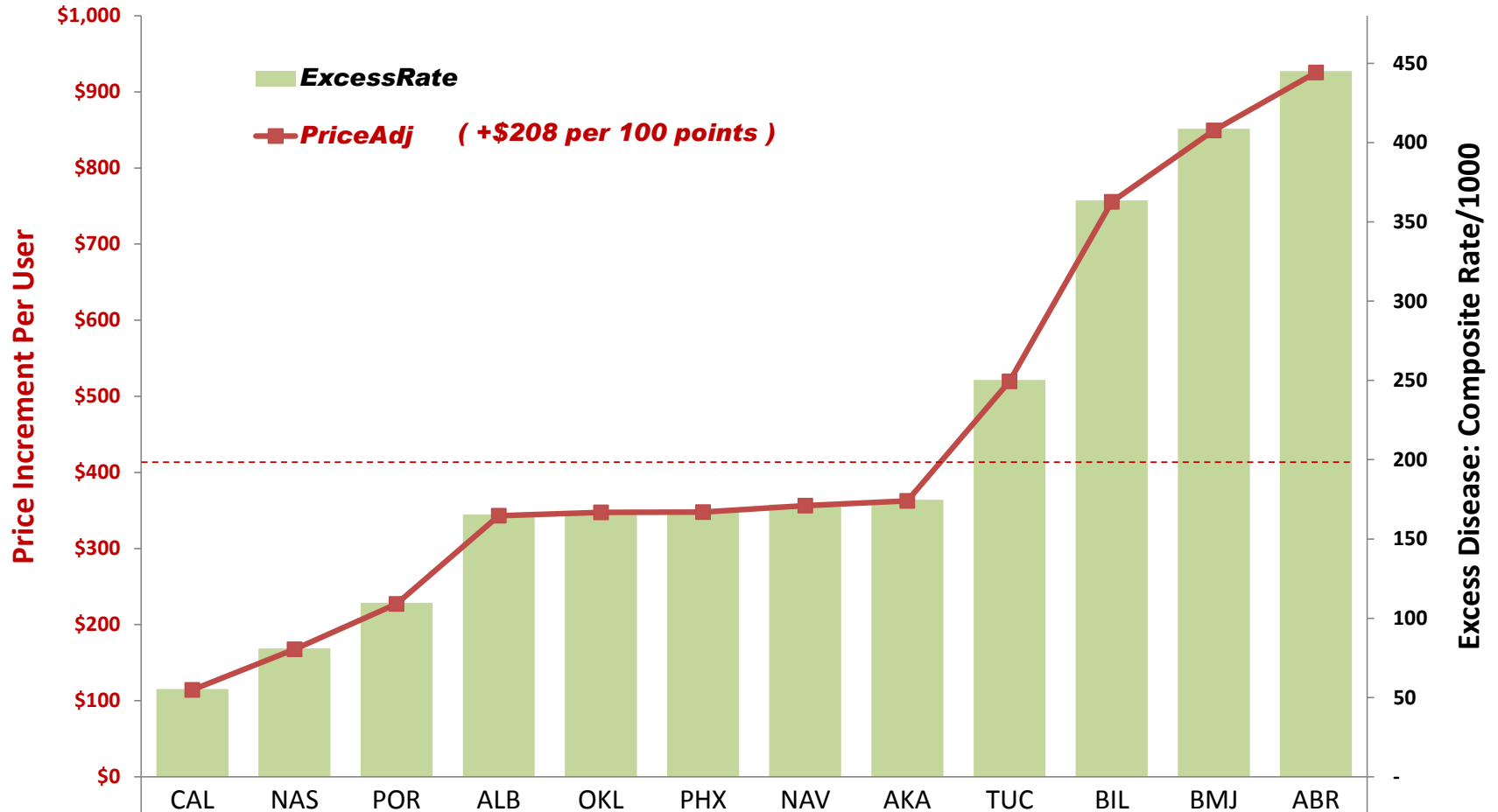
Assume IHS consists only of X and Y Areas. Cross-over relates only to residence, not tribal affiliation. By open door policy, tribal affiliation is not relevant for obtaining direct services, but is relevant for obtaining CHS services.

Appendix 3

Health Status Adjustments by Area Chart

Adjusting a Site's Benchmark Price for Variations in Demographics, Health, and Economic Factors

Adjusting a Site's Benchmark Price for Excessive Rates of Disease



ExcessRate	55	81	110	165	168	168	172	175	250	364	409	445
PriceAdj	\$114	\$167	\$227	\$343	\$348	\$348	\$356	\$363	\$520	\$756	\$849	\$925

Appendix 4

Approach to Setting a Cost Per User Benchmark

Overview of Approach to Setting the Benchmark Cost Per User

Individual, community, and infrastructure

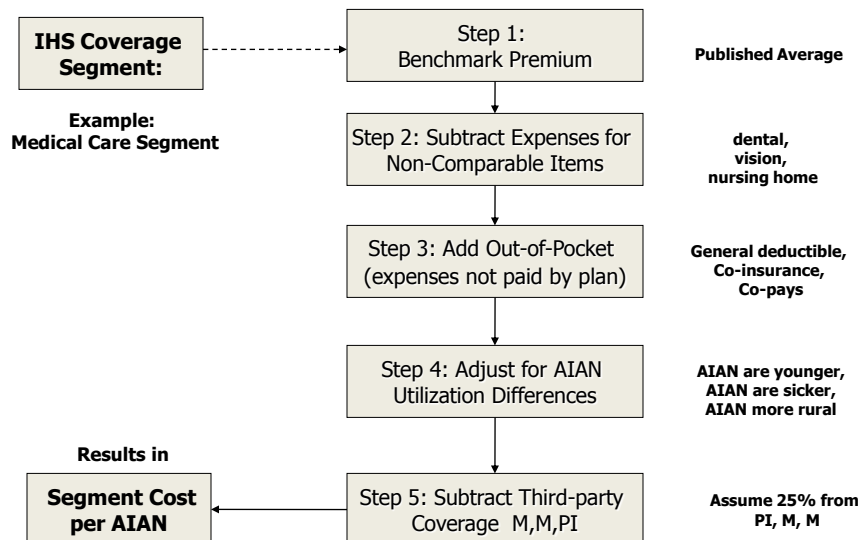
HEALTH CARE SEGMENTS	POTENTIAL BENCHMARK
1. PERSONAL HEALTH CARE SERVICES (individuals)	
– Medical Care Services	FHP BCBS PPO Plan
– Dental Care Services	FHP MetLife PPO Dental Plan
– Vision Care Services	FHP BCBS Blue Vision Plan
– Selected supplemental IHS services	No Benchmark
2. PUBLIC HEALTH PROGRAMS (communities)	
– Public Health Nursing	No Benchmark
– Community Health Representatives	No Benchmark
– Environmental Health Services	No Benchmark
– Sanitation Facilities Construction	No Benchmark
3. AUGMENT INFRASTRUCTURE (system/network)	
– AIAN Health Professionals (loans & scholarships)	No Benchmark
– Self-Determination Partnerships (Tribes & IHS)	No Benchmark

Substance-abuse/mental/behavioral health services are largely covered in #1. The Urban IHP is separate -- the "Who" team may address eligibility options. Medical facilities is assumed in #1.

FEHP Plans with Published Cost Data

- **MEDICAL SERVICES:** Blue Cross & Blue Shield Preferred Provider Organization (BCBS PPO).
 - This plan is “main-stream” in content and extent of coverage, is available in all states, and is more flexible for how “in-network” provider systems are organized, e.g. more adaptable to diverse circumstances found within the IHS network.
- **DENTAL SERVICES:** MetLife PPO Dental Plan
 - This is a “main-stream” plan within the new Federal Employees Dental and Vision Insurance Program (FEDVIP), which has characteristics similar to those listed above.
- **VISION SERVICES:** BCBS Blue Vision Plan
 - This is a “main-stream” plan within the new Federal Employees Dental and Vision Insurance Program (FEDVIP), which has characteristics similar to those listed above.

Technical Approach

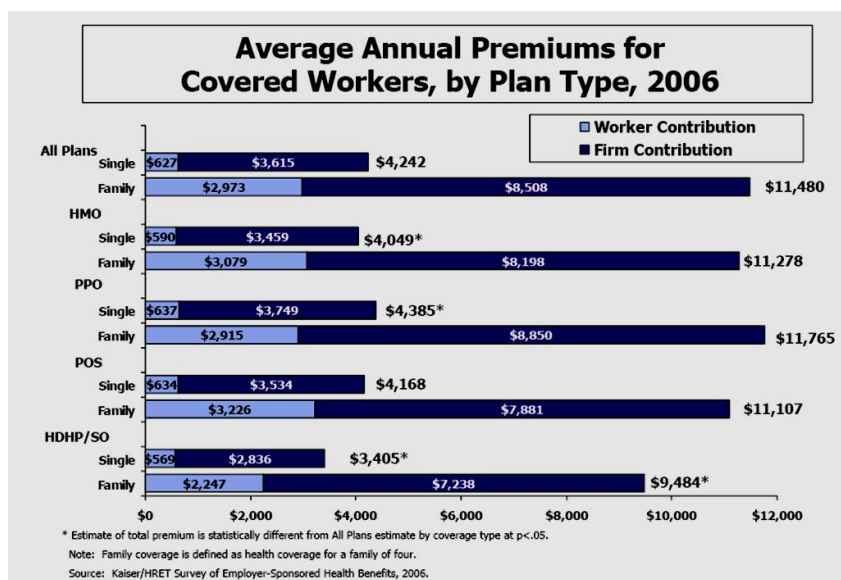


Step 1: Premiums Data and Assumptions

1. Self Coverage (single) – for enrolling individuals. The full premium relates to 1 person.
2. Self Plus One. The premium costs (which are on average 190% of self only) relate to 2 persons
3. Family Coverage – for the enrollee and immediate family members (.e.g. spouse and children). The premium costs (which are on average 270% of self only) relate to _??_ persons, we assume 3.8 persons.

Source: Center for Financing, Access, and Cost Trends, AHRQ, Insurance Component of the Medical Expenditure Panel Survey, 2004

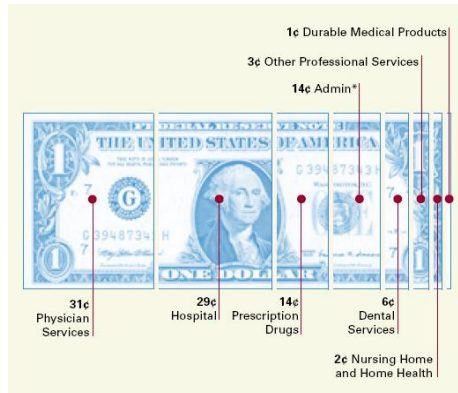
Step 1: Premiums Data



Step 2: Subtract Non-Covered Items

1. FEHP BCBS PPO incompletely covers dental care, e.g., approximately 2/3 of dental costs are out of pocket. Because we cost IHS dental care services separately, we subtract 6% of private insurance expenditures that relate to dental expenses.
2. Neither the IHS proposal nor the BCBS PPO includes nursing home care or similar home health care. We subtract 2% of average private insurance expenditures related to these expenses in aggregate cost data.

Private Insurance Healthcare Dollar 2003



Step 3: Add “Out-of-Pocket” Costs

- Premiums cover only a portion of actual health care expenses. These “cost shares” are paid out of pocket. Generally, economic pressures in recent years have caused plans to shift a larger share of total health care expenses to the enrollees.
- Ordinarily, AIAN are not charged out-of-pocket costs because of long standing legal authority and IHS practice. Therefore, estimates of out-of-pocket costs typical of FEHP plans are added to premiums in the following categories:
 1. Annual Aggregate Deductibles
 2. Co-insurance (% paid by enrollee) for certain services
 3. Co-pays (fixed \$ amount) for office visits, etc.
 4. Co-pays or co-insurance for drugs and medicine



1. Average family deductible of private sector employees enrolled in a plan with a deductible in 2004 was \$1,120
2. Average co-pay was \$18 for an office visit of private sector employees enrolled in a plan with a co-pay in 2004
3. Average coinsurance percentage was 18% employees enrolled in a plan with a coinsurance percentage for an office visits, drugs, and other procedures.

Step 4: Adjust for AIAN Utilization Differences

- ❑ Because the covered AIAN population differs from the benchmark population in ways that impact total health care costs, benchmark cost estimates are adjusted where practical. In 1999, the LNF study studied these differences actuarially and set the following cost adjustments for IHS' user population.
- ❑ **-22%** less costly due to a younger AIAN population
- ❑ **+15%** more costly due to a sicker AIAN population
- ❑ **-6%** less costly due to rural location

Older people consume more health care

- The AIAN population is younger on average than the benchmark population covered by the FEHP

Sicker people consume more health care

- The AIAN population has lower health status and more needs for services than for covered persons of similar ages

Costs in rural areas is typically less than in urban areas

- A greater portion of IHS' AIAN service population lives in rural areas where prevailing costs are typically less

Step 5: Subtract Coverage for PI, M, M

- ❑ Some AIAN served by IHS are also eligible for other services including:
 - ❑ **Employer Sponsored Private Insurance**
 - ❑ **Medicare**
 - ❑ **Medicaid**
 - ❑ **SCHIP**
 - ❑ **Veterans**
- ❑ The extent of coverage among AIANs varies place to place and time to time depending on employment rates, income, and family factors.
- ❑ IHS collects reimbursement, chiefly M&M, which help to provide supplemental services that would not otherwise be possible.
- ❑ AIANs obtain an unknown amount of services outside of the IHS system whose cost value is not known either. Many commentators suggest that AIAN do not fully realize all benefits to which they are entitled.
- ❑ There is some disagreement about dollar value of coverage for IHS covered AIAN that would be expected to come from third parties. Since the LNF study in 1999, IHS has used a system-wide rate of **25%** for planning, budgeting, and resource allocation with an understanding that this factor is crude and would vary site-to-site.

Cost Calculations: FEHP BCBS PPO

	Self-Only		Family	
	Source	Amount	Source	Amount
#1 Average Premium 2006	2006 average	\$4,385		\$11,765
#2 Coverage Adjustments				
Deduct Dental Care	6% average in 2004	\$ (263)	6% average in 2004	\$ (706)
Deduct Nursing Home Care	2% average in 2004	\$ (88)	2% average in 2004	\$ (235)
#3 Out-of-Pocket Payment Adjustments				
Add-on for Annual Deductions	avg annual deductions	\$ 473	250% of Self-Only Deductions	\$ 1,183
Add-on for Co-Insurance Payments	17% * 33% * Premium	\$ 246	250% of Self-Only Co-Ins.	\$ 615
Add-on for Office Visit Co-pays	3 Visits * \$15	\$ 45	11 Visits * \$15	\$ 165
Add-on for Drugs/Medicine Co-pays	3 prescriptions * \$15	\$ 45	11 prescriptions * \$15	\$ 165
#4 AIAN Utilization Adjustments				
Adj. Cost of Plan	higher avg cost of adults	\$ 4,843	lower cost due to children	\$ 12,951
Cost per person		\$ 4,843	plan cost / 3.8	\$ 3,408
Self-Only or Family Enrollment %	fewer AIAN are Self-Only	25%	Younger AIAN, more Family	75%
Age Adj. Cost/AIAN is 22% less	22% lower than self-only due to younger AIAN			\$3,767
Sicker AIAN cost 15% more	15% * age adj. cost			\$565
Rural Locations cost 6% less	-6% * age adj. cost			(\$226)
Full Cost/AIAN	younger, sicker, more rural			\$4,106
#5 3rd Party Coverage Adjustment				
Subtract 25% for other coverage	-25% * AIAN Adj. Full Cos/Person			(\$1,026)
Net Cost/AIAN	if 25% paid by others			\$3,079

Supplemental Personal Health Care Services

- IHS provides when possible other personal health care services that are NOT typically covered by BCBS including:
 - Exercise Programs
 - Hearing Aids/exams
 - Infant Car Seats
 - Traditional Healing Services
 - Family Counseling
- No benchmark cost data was available to estimate costs.

Reliability Caveats

- Premiums data for FEHP medical, dental and vision care plans --which correspond to roughly 80% of existing IHS expenditures-- are available to estimate costs the IHS could incur to cover comparable services, adjusting for known differences in coverage, out-of-pocket costs, and utilization. The FEHP data provide a [reasonable, market-based, external standard](#) for costing the proposed IHS list of services/programs.
- Of course, no external standard will perfectly predict costs the IHS would actually experience. Moreover, costs predicted from FEHP data are calculated as “point” estimates (e.g., \$4,106 per person). Such apparently precise numbers are better understood as the center of a uncertain cost range that may vary by several hundred dollars. Forecasting costs for individual IHS sites, especially if the population is small should be undertaken with even more caution as the range of uncertainty is wider.
- FEHP premiums correspond to the whole package of covered benefits. Benchmark cost data for individual items within the package is not publicly available. The workgroup categorized proposed IHS services into 3 tiers, but without corresponding benchmark cost data individual cost estimates for each tier are impractical. The work group is considering whether rough “back of the envelop” cost approximations for the tiers might be acceptable for some planning purposes.

Appendices and Sources

1. Proposed Services (Benefit) List – From DEC “What” Team is based on FEHP BCBS PPO PLAN
2. FEHP BCBS Service Benefit Plan for PPO
3. FEH MetLife Federal Dental Insurance PPO Plan
4. FEH Blue Vision Plan, BCBS PPO Plan
5. Employee Health Benefits, 2006 Summary of Findings, KFF and HRET
6. Employee Health Benefits, 2006 Findings Chart Pack, KFF and HRET
7. National Health Care Trends (Chart Pack), Private Insurance Trends, BCBS Association

Appendix 5

New Guidance – Definitions and Standards

DEFINITIONS AND STANDARDS

Operating Units, Granularity, Source Mode Inventory, and Spending Alignment

*Federal Disparity Index (FDI) and
Indian Health Improvement Fund Formula (IHCIF)*

OPERATING UNITS

Definition (the ideal): a unit within the IHS/Tribal health care system that assures the reference health care benefits package to a particular set of AIAN – those AIAN residing in the unit’s geographic catchment area. This concept is patient centric rather than facility centric – that is, it emphasizes assurance of equitable services to all IHS patients. The organization and facilities through which services are provided is secondary, e.g., a means not an end. Equitable assurance for individual AIAN is a fundamental value driving all others.

Few units within the IHS/Tribal system currently have resources to assure the full benefits package (the benchmark plan available to federal employees). Indeed, the purpose of the FDI/IHCIF methodology is to measure resource deficiency for assuring equitable services to all IHS users.

Measuring resource deficiency is easier in some parts of the IHS/Tribal system and more difficult in some other parts, particularly the multiply interconnected delivery sites and among overlapping geographic catchment areas. For FDI/IHCIF purposes, units within the IHS/Tribal system ideally should conform to the following criteria:

- Is responsible to assure the benefits package to a particular set of AIAN – users residing within the unit’s geographic catchment area
- Is independently managed and operated
- Is financially separate -- funded in whole or part by IHS with legal authority to expend IHS funds
- Is organizationally capable of assuring the reference benefits package if resourced at a prudent level

- Provides sound data (user, financial, operational, health) necessary for FDI/IHCIF calculations.

FILTERING AND ALIGNMENT

When delivery system organizational complexity does not conform to these criteria, additional steps should be taken to filter and realign raw data of such units so that resource deficiency is measured consistently across the whole system. Such steps are discussed in detail below.

Moreover, data may be questionable or incomplete even when units definitionally conform to the ideals. If reliability, precision and validity of a unit's data is questionable, it may be aggregated to a higher level and/or averages from other reliable sources may be substituted, e.g., measures and indicators for a particular unit may be imputed from broader data sources.

GRANULARITY

Granularity generally refers to relative size, scale, or level of detail. For purposes of FDI/IHCIF calculations, granularity refers to the level of detail for sub-dividing AIAN users into groups (units) for data collection, FDI cost forecasts, and IHCIF formula computation.

Unduly granular units increase error, increase reporting costs and burden, and may produce results that seem precise but are in fact uncertain or error prone. Credibility is stretched when data that is reliable for large populations is inappropriately used for small sub-groups.

Operating units identified for FDI/IHCIF calculations should be credible and not unduly granular.

USUAL SOURCE OF CARE

We must identify the usual sources of care for users in each operating unit to apply appropriate pricing factors and to assure data consistency in FDI/IHCIF calculations. The mix in each unit differs with varied capabilities of the unit and other local circumstances. Four source modalities are defined for purposes of FDI/IHCIF.

- Non-IHS Care** – health care services to AIAN users which are provided outside of the IHS/Tribal system and NOT paid for with IHS funds. Research has been proposed to develop a value index of non-IHS health care usage and funding. For the present, the Non-IHS mode is listed as a place-holder (TBD) in the Source Mode Inventory.
- On-Site Care** – services provided by health care staff of the operating unit
- At Other Sites** – services provided elsewhere in the IHS/Tribal system
- Purchase (CHS)** – services purchased from outside the IHS system, in full or part, with CHS funds.

SERVICE COMPLEXITY

Complexity of care often determines whether a service is delivered on-site, at another IHS/Tribal site, or purchased externally. We have defined 3 levels of complexity for ambulatory care and 2 levels of complexity for inpatient care in the FDI model:

- **Ambulatory Care – BASIC:** basic primary care diagnostic, preventive, treatment, and medication typically through a primary care provider or mid-level professional.
- **Ambulatory Care – INTERMEDIATE:** intermediate (secondary) diagnostic, preventive and treatment, and medications typically requiring a multi-person professional team and access to adequate medical equipment and laboratories.
- **Ambulatory Care – ADVANCED:** complex (tertiary) diagnostic, preventive, and treatment, and medications often requiring advanced medical staff, extensive equipment, complex laboratories and extensive professional support.
- **Inpatient Care – GENERAL:** 24 hour inpatient services with routine and lower tier intermediate medical care as typically found in smaller US hospitals. Because of remoteness and dispersed AIAN populations, typical IHS and Tribal hospitals are even smaller than the average US rural hospital.
- **Inpatient Care – ADVANCED:** higher level intermediate inpatient services and all complex advanced medical care typically found in referral hospitals of cities and regional medical centers.

SOURCE MODE INVENTORY

The Source Mode Inventory couples two frames of reference, service complexity and usual source of care, to produce a fuller picture of present capabilities in a unit of the IHS/Tribal system. The inventory can improve FDI/IHCIF calculations in two ways: 1) by providing more complete information about service locations for which corresponding FDI/IHCIF price factors will better forecast resources needed to assure services, and 2) and by more closely aligning actual spending, which is sometimes spread over many units, to costs of assuring each type of services for a particular set of AIAN patients.

A template is provided separately to conduct a service mode inventory for each operating unit. Where available, use workload and encounter data as the basis for completing the template. Detailed objective data may not be available for some units. Confer with site health directors and managers to form judgments based on their experience and knowledge. The source mode inventory is a means to approximate a useful picture of each unit as it evolves over time. It is not intended to provide a perfectly accurate record.

Source Mode Inventories are illustrated below for some common circumstances in the IHS/Tribal system. The percentages in columns A-E denote the usual sources of health care services, however insufficient they seem, for the sub-set of AIAN (OU users) for whom the benefits package is to be assured.

AIANs sometimes seek direct care services transiently and infrequently at other IHS/Tribal units. Low level usage across boundaries, inflows and outflows of less than 5-7%, can be safely ignored when randomly distributed among multiple sites, e.g. column C is deemed to be zero even if not absolutely zero. Regular and substantial usage (>5-7%) of other IHS/Tribal units by persons included in the OU user count, must be noted in Column C. List in Column F the names of other IHS/Tribal sites where outside usage is concentrated.

SERVICE MODE INVENTORY (illustration)
Stand-Alone Ambulatory Unit

<i>Site S.A.</i>		<i>Source Mode for Catchment Area Users*</i>					<i>F Other Sites Serving This Catchment Area</i>
		<i>A Non- IHS Care</i>	<i>B On-Site</i>	<i>C At Other Sites</i>	<i>D Purchase (CHS)</i>	<i>E Sub- Total B+C+D</i>	
Ambulatory Care	Basic	TBD	100%	0%	0%	100%	none
	Intermediate	TBD	60%	0%	40%	100%	none
	Advanced	TBD	0%	0%	100%	100%	none
Inpatient Care	General	TBD	0%	0%	100%	100%	none
	Advanced	TBD	0%	0%	100%	100%	none

*Primary care and some intermediate ambulatory services are provided on-site. The balance of intermediate ambulatory care, advanced ambulatory care and all inpatient care is purchased externally with CHS \$. The site is sufficiently distant from other IHS/Tribal sites that local users rarely get care from other sites. *Purchased (CHS) is the assumed default source if needed care is not provided either on-site or at other IHS/Tribal sites – even if current CHS funding is insufficient.*

SERVICE MODE INVENTORY (illustration)
Stand-Alone Basic Hospital Unit

<i>Site B.H.</i>		<i>Source Mode for Catchment Area Users*</i>					<i>F Other Sites Serving This Catchment Area</i>
		<i>A Non- IHS Care</i>	<i>B On-Site</i>	<i>C At Other Sites</i>	<i>D Purchase (CHS)</i>	<i>E Sub- Total B+C+D</i>	
Ambulatory Care	Basic	TBD	100%	0%	0%	100%	none
	Intermediate	TBD	90%	0%	10%	100%	none
	Advanced	TBD	20%	0%	80%	100%	none
Inpatient Care	General	TBD	100%	0%	0%	100%	none
	Advanced	TBD	0%	0%	100%	100%	none

*All basic and most intermediate ambulatory services are on-site. The site provides a limited advanced ambulatory care and the balance is purchased externally with CHS \$. The hospital provides general inpatient care on-site but purchases complex care externally with CHS \$. The hospital is sufficiently distant from other IHS/Tribal sites that local users rarely get care from other sites. *Purchased (CHS) is the assumed default source if needed care is not provided either on-site or at other IHS/Tribal sites – even if current CHS funding is insufficient.*

There exist more complex arrangements of interconnected overlapping catchment areas. A hospital together with 1 or more geographically separated ambulatory service areas can be labeled a “hub and spoke” network. The hospital (hub) accepts patients from satellite service areas (spokes). The next two illustrations show Service Mode Inventories for such a network.

SERVICE MODE INVENTORY (illustration)
‘Spoke’ Ambulatory Unit
part of vertically integrated network

<i>Site S.A.</i>		<i>Source Mode for Catchment Area Users*</i>					<i>F Other Sites Serving This Catchment Area</i>
		<i>A Non- IHS Care</i>	<i>B On-Site</i>	<i>C At Other Sites</i>	<i>D Purchase (CHS)</i>	<i>E Sub- Total B+C+D</i>	
Ambulatory Care	Basic	TBD	100%	0%	0%	100%	none
	Intermediate	TBD	50%	50%	0%	100%	50% at Site H.H.
	Advanced	TBD	0%	0%	100%	100%	none
Inpatient Care	General	TBD	0%	100%	0%	100%	100% at Site H.H.
	Advanced	TBD	0%	20%	80%	100%	20% at Site H.H.

*This illustrative ambulatory site is separate from the hospital with which it is associated. Users often obtain some services (both inpatient and ambulatory) at the hub site which has more capabilities than the satellite site. The satellite site provides all basic and half of intermediate ambulatory services. Half of intermediate ambulatory care and all general inpatient care is provided at the hub hospital site. Advanced ambulatory care is purchased with satellite site CHS \$ as is 80% of advanced inpatient care. *Purchased (CHS) is the assumed default source if needed care is not provided either on-site or at other IHS/Tribal sites – even if current CHS funding is insufficient.*

SERVICE MODE INVENTORY (illustration)

‘Hub’ Hospital Unit

part of vertically integrated network

Site H.H.		Source Mode for Catchment Area Users*					F Other Sites Serving This Catchment Area
Level of Service	A Non- IHS Care	B On-Site	C At Other Sites	D Purchase (CHS)	E Sub- Total B+C+D		
Ambulatory Care	Basic	TBD	100%	0%	0%	100%	none
	Intermediate	TBD	100%	0%	0%	100%	none
	Advanced	TBD	40%	0%	60%	100%	none
Inpatient Care	General	TBD	100%	0%	0%	100%	none
	Advanced	TBD	20%	0%	80%	100%	none

*This illustrative hub hospital provides inpatient and ambulatory services to the local catchment area (see percentages above) area and also substantial services are provided to persons from satellite catchment areas. The portion of the unit’s workload originating from outside the local catchment area is NOT referenced in this service mode inventory. That workload can be inferred from service mode inventories of other units of the system, especially the inventories of satellite units. The inference calculation step is not shown here. The hospital provides all basic, intermediate, but not all advanced care. Some advanced care is referred externally - the user’s home operating unit pays for external referrals with CHS \$. *Purchased (CHS) is the assumed default source if needed care is not provided either on-site or at other IHS/Tribal sites – even if current CHS funding is insufficient.*

SPENDING ALIGNMENT – COMPLEX INTERTWINED OPERATING UNITS

A Source Mode Inventory for each operating unit can provide help information to consistently align spending data for FDI/IHCIF calculations especially for portions of the IHS/Tribal system which are organizationally complex and intertwined. To see why, consider that the Level of Need Funding (LNF) score is a simple fraction consisting of a numerator and denominator.

$$\frac{\text{Actual Spending}}{\text{Benefits Package Cost}} = \text{LNF \%}$$

- The numerator measures funding currently spent on a particular set of AIAN persons - those AIAN residing in the local geographic catchment area.
- The denominator measures (projects) costs to assure the benefits package to the same set of AIAN persons.

To assure a valid comparison across the IHS system, contents of the numerator and denominator must be defined and measured in the same way for every unit. That is, for each

operating unit within the IHS/Tribal system, the:

- numerator data should
 1. include spending on persons included in the local user count, including local spending and portions of non-local spending at other IHS/Tribal sites which also benefits them, and
 2. exclude¹ spending on persons excluded from the local user count, e.g., exclude spending that benefits outsiders.
- denominator data should
 1. include forecast costs of assuring the benefits package to persons included in the local user count considering modes of delivery, locations, and other factors that affect costs, and
 2. exclude costs for persons excluded from the local user count, e.g., exclude forecast local costs that benefits outsiders.

Here is a logic table expressing ideal data for the patient centric approach.

LOGIC TABLE: EXPENDITURE REPORTING IDEAL

	<i>In Operating Unit "X"</i>		<i>Elsewhere (At <u>Other</u> OUs)</i>	
	<i>For OU "X" Users</i>	<i>For Others</i>	<i>For OU "X" Users</i>	<i>For Others</i>
SPENDING (Numerator)	cell S1 Include	cell S2 Exclude	cell S3 Include	cell S4 Exclude
FORECAST COSTS (Denominator)	cell C1 Include	cell C2 Exclude	cell C3 Include	cell C4 Exclude

Conformance to this ideal is relatively easy to achieve for many parts of the IHS system and not so easy to achieve for other parts. Below are some standards and guidelines for both. First, here are some points about the easy parts.

1. Many units within the IHS/Tribal system are distinct and geographically separated from all others. Such units exclusively serve persons residing in the OU's local catchment area who obtain few, if any, services elsewhere in the system. The OU's direct spending exclusively benefits local users. In this case, the unit conforms to the ideal definition -- both the numerator (spending) and denominator (forecast costs) are tied exclusively to

¹ It is important to understand that exclude does not mean discard completely from FDI calculations – users and spending must in the end balance with IHS totals. Rather, it means debit from one part of the system (OU "X") then credit to another part of the system (other OUs) in proportion to value of services obtained by the AIAN patients. Debiting and crediting expenditures among units gives a truer picture of resource deficiencies and funds needed to assure a uniform service package to all AIAN patients.

AIAN persons residing in the catchment area and not to any others.

2. There exists non-local spending at Area Offices and Headquarters that mutually supports multiple units within the system. Centralized non-local spending is stepped down to individual units usually in proportion to user counts (if not already transferred as shares). Spending step down of centralized spending is computed automatically in the FDI model. It is counted in the OU numerator and labeled non-local “indirect” spending. Typically, non-local “indirect” spending is a small fraction of local direct spending.
3. Most units within the IHS/Tribal system experience some random transient usage by outside persons (persons not included in the local user count). We ignore outflow and inflow usage if less than 5-7% of total workload, especially when randomly distributed among multiple OUs. Low levels of random transient usage do not materially bias LNF results.

Here are some points (standards/guidance) about the hard parts.

1. Some units are part of complex overlapping delivery systems in which users are served to varying degrees by one or more other units. Raw expenditure data (numerator) and cost forecasts (denominator) may be INCONSISTENT², e.g., not “apples to apples” ratios. The calculated LNF score will be biased (plus or minus) depending on the type of measurement inconsistency and its magnitude. Moreover, bias in one unit’s score necessarily creates counter balancing bias at other units. Actual expenditures among intertwined units often are not aligned with the users who benefit. Steps are necessary to align expenditures to user counts.
2. If no intra-unit resource transfers exist (units do not compensate each other for intra-unit patient flows, take corrective steps to:
 - i. Debit direct expenditures on others (cell S2 in the logic table)
 - ii. Credit non-local direct expenditures on local users (cell S3 in the logic table)

The source mode inventory can be helpful in inferring spending adjustments. Debits and credits must balance in total.

3. If intra-unit resource transfers exist. It is plausible that units may transfer funds among themselves to compensate for non-local costs, either in aggregate or as reimbursements

² Unit expenditures for outsiders and/or unit users get services elsewhere without local charges. For the former, the numerator includes actual spending without corresponding funding in unit budget (denominator). For the latter, the denominator includes needed funding for care which is not charged to the local budget.

for individual patients. This is not thought to be a wide-spread practice, but may exist to some degree among centrally administered consortia. If intra-unit resource transfers exist (and the expenditures are recorded at the recipient unit and not at the source unit³) then corrective steps are still necessary:

- i. Debit an OU's local direct expenditures on others (cell S2 spending in the logic table) even if the source of funds for those expenditures originated from other OUs
- ii. Credit non-local OU's direct expenditures on local users (cell S3 in the logic table) even if the source of funds for those expenditures originated from the local OU

HYBRID METHODS

Guidance outlined above for aligning spending presumes a patient centric approach. The steps for aligning spending are logically consistent with existing IHS user count definitions and the principle of assuring a reference benefits package to the set of users specified for unit user counts.

A reciprocal approach is realignment of user counts, not as currently linked to a person's residence, but in proportion to service locations and modalities. This approach is more facility centric than patient centric. Both approaches can work theoretically if applied consistently across the system. It is worth noting that historical precedents connected with the user count definition and the logic of "assurance" and equity for AIAN people, rather than for facilities, gives preference to the patient centered approach when practical.

We understand that some combination of both approaches may have been used in past years by those IHS Areas with complex intertwined internal organizations. We do not require Areas to overturn past practices if adopted or accepted by affected tribes. Regardless of the approach, fairness requires that numerator and denominator data for all operating units comply with the consistency principle⁴. However, the Source Mode Inventory data may be useful in verifying or revising past practices.

This is a complex topic. Staff may wish to confer with Headquarters to work out local details. Contact cliff.wiggins@ihs.gov.

³ It is conceivable that a sophisticated shared intra-unit financial system could record both local direct expenditures and non-local direct expenditures and automatically align them to individual patients. Such a system could obviate adjustment steps by accumulating all expenditures tied to an individual regardless of service location. We are aware of no such system within the IHS/Tribal system.

⁴ In a manner logical for that approach: If Area user counts are cross-walked among Area operating units, not by residence, but proportionate to usage among multiple facilities (e.g., the reciprocal approach realigning denominator data to match numerator). In either case, spending data (numerator) should correspond accordingly to user data (denominator). Note: a reciprocal of the logic table would apply in the latter case.

ILLUSTRATION OF SERVICE MODE INVENTORY FORM

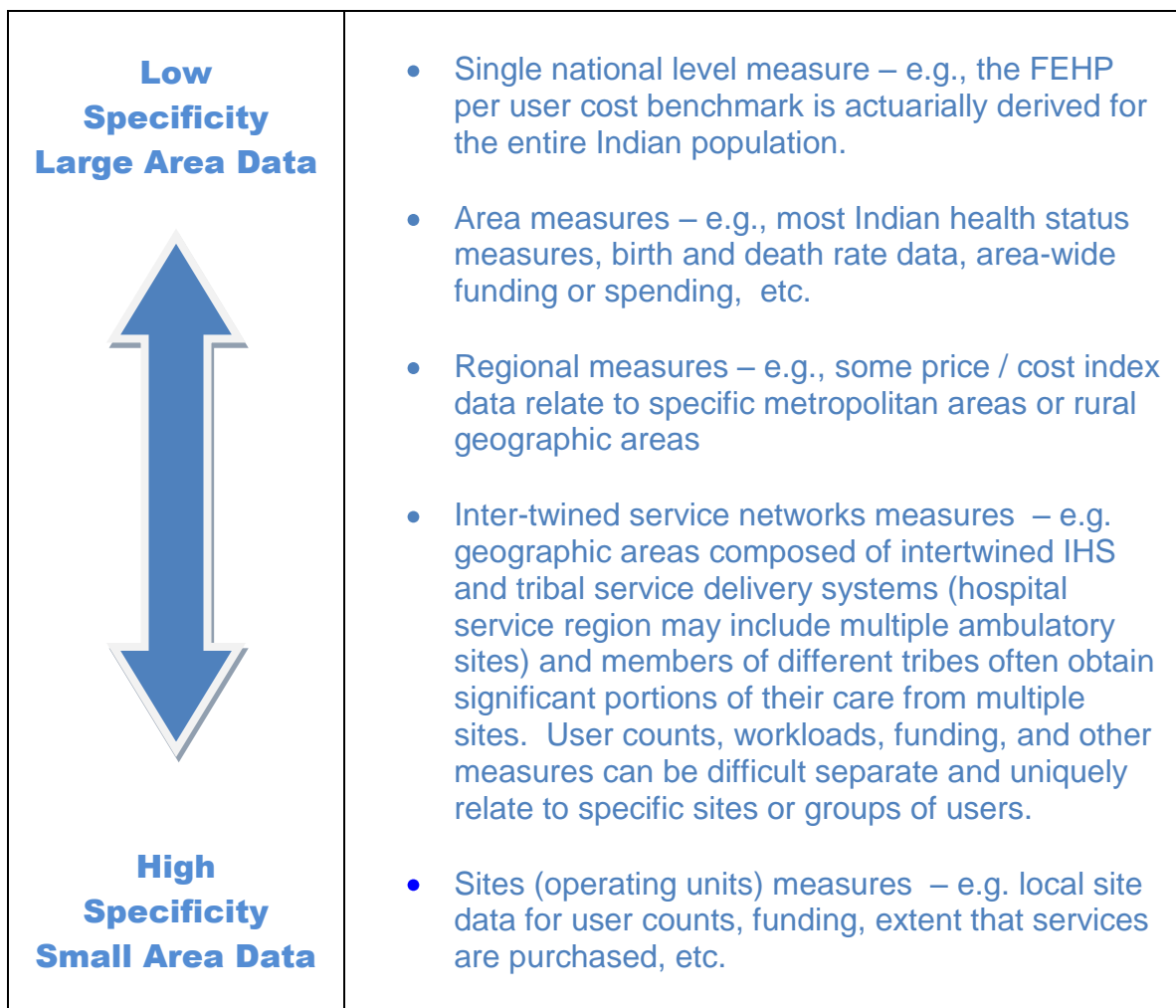
OU Catchment Area	Service		Source Mode % for Catchment Area					F Other Sites Serving this Catchment Area	G Comment
	Category	Level	A Non-IHS Care	B On-Site	C At Other Sites	D Purchase (100-B-C)	E Sub-Total B+C+D		
Standing Rock	Ambulatory Care	Basic	TBD					---	---
		Intermediate	TBD					---	---
		Advanced	TBD					---	---
	Inpatient Care	General	TBD					---	---
		Advanced	TBD					---	---
Cheyenne River	Ambulatory Care	Basic	TBD					---	---
		Intermediate	TBD					---	---
		Advanced	TBD					---	---
	Inpatient Care	General	TBD					---	---
		Advanced	TBD					---	---
Crow Creek	Ambulatory Care	Basic	TBD					---	---
		Intermediate	TBD					---	---
		Advanced	TBD					---	---
	Inpatient Care	General	TBD					---	---
		Advanced	TBD					---	---
Flandreau	Ambulatory Care	Basic	TBD					---	---
		Intermediate	TBD					---	---
		Advanced	TBD					---	---
	Inpatient Care	General	TBD					---	---
		Advanced	TBD					---	---
Santee Of Nebraska	Ambulatory Care	Basic	TBD					---	---
		Intermediate	TBD					---	---
		Advanced	TBD					---	---
	Inpatient Care	General	TBD					---	---
		Advanced	TBD					---	---

FDI QUALITY CONTROL PRACTICES

DATA SPECIFICITY

A variety of quality control steps are applied during application of the Federal Disparity Index model. Such steps are intended to assure that the model produces consistent results from the many thousands of data items used in calculations.

Some quality control practices relate to granularity or specificity of data. The specificity of data used in the FDI calculation ranges from single national measures to highly detailed individual measures for hundreds small area sites.



In general, data of greater specificity is preferred if reliable and valid. Unfortunately, higher specificity often involves tradeoffs of measurement variability and random error. A number of quality control practices are designed

to detect this inherent quality of small area data. Often, we collapse or regroup questionable small area data to a higher verifiable level or group if some of the following circumstances occur:

DATA QUALITY RED FLAGS

- a measure is widely different from prior years
- combined effect of new data produces a widely different FDI % result
- site user count is very small (small samples are statistically more erratic and variable) - the FDI model is not as reliable for small sites, but is applied if the service utilization patterns are geographically distinct, fund accounting is separate and distinct, and data appear otherwise reasonable.
- measures from non-standard sources (non-RPMS generated user counts for instance)
- funding data or step down (or lack of step down) of shared benefits appears inconsistent with assumptions used in FDI to project costs. Unless assumptions are consistent for both the numerator (IHS funds) and denominator (FDI cost projection), the FDI% can be invalid
- geographic areas containing multiple sites with inter-twined delivery systems - several exist in IHS. It is difficult to parse benefits per user where users counted at a site also obtain significant portion of services from neighboring sites (which are not compensated by the source site)
- users counted at ambulatory sites have access to inpatient benefits at IHS or tribal hospital

Regrouping or collapsing small area data to a higher level or group tends to smooth out aberrant variations that may occur as described above.

Grouping site level data also risks statistically masking real variations among small area sites. For this reason, we limit data regrouping only to specific items for which we have low confidence (most often a benefits of funding step-down), while retaining the small area data for other FDI calculations. When our confidence in small area data is at intermediate level, we sometimes will statistically combine the higher level measure with the more specific small area data to produce a blended result.

This quality control process is intended to promote a high overall level of confidence in the national level results. We also permit Areas, who have consulted with affected parties, to further refine allocations from the national model using local level data that were not part of national calculations.

Appendix 6

Service Mode Inventory – Detailed Form
Option

A Supplement to “DEFINITIONS AND STANDARDS GUIDANCE” issued for the FY 2010 application of the Indian Health Care Improvement Fund Formula

Service Mode Inventory Option: STANDARD or DETAILED

ISSUE: Questions arose regarding the Service Mode Inventory, part of the January 15 data call for the Indian Health Care Improvement Fund formula, particularly about definitions for the 5 layer service inventory--Ambulatory: primary(1), intermediate(2), advanced(3); Inpatient: general(4), advanced(5). Some feel this simplified structure is too abstract and high level to apply consistently across IHS.

OPTION: The attached form may be used for each IHS/Tribal operating unit in lieu of the original workbook. This more detailed inventory instrument is based on a reference benefits package (FEHP/BCBS). The FEHP/BCBS package is the benchmark comparison for IHCIF. The detailed inventory instrument has 35 categories detailed from the BCBS package. Although more work to complete, detailed inventory results are certain to be more precise and useful. The Area CMO, unit CEO, and unit Clinical Director are good candidates to complete the detailed service mode inventory. The due date for submitting either the original workbook or this detailed option is **delayed until Friday, February 5, 2010**.

USES: The inventory refines previous data used in the IHCIF methodology. It permits more accurate cost computations for sites by more completely listing internal and external sources. Another possibility is as a potential baseline measurement relating to the Director’s Initiative to improve access through the Indian health system. Other potential uses relate to other allocation policies including CHS, for health system planning, and as a quick snap shot of service variations across IHS.

ILLUSTRATION: I want to answer some questions about the detailed service mode inventory. This is a new process for us. Initially we seek only "expert opinion" rather than hard data. Simple illustrations may help.

Category - Organ Transplants: The judgment about sources is to be relative to all the medically necessary spending on organ transplants needed in a given year for a particular user count. We don't need to know an exact number of transplants, exact numbers of users. Rather, professionals familiar with the local clinical capabilities (,e.g., CMO, CEO, Clinical Directors) can identify realistic sources for organ transplants considering local clinical capabilities and assuming sufficient funds were available to purchase unavailable services. Transplants are typically purchased in the IHS/Tribal system. Therefore, 100% PURCHASE would be the proper response for organ transplants at most sites.

ON-SITE	0%	of medically necessary spending on organ transplants needed by this population would be on-site
OTHER SITES	0%	of medically necessary spending on organ transplants needed by this population would be at other IHS/Tribal sites

PURCHASED	100%	of medically necessary spending on organ transplants needed by this population would be from outside sources
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It won't be as easy for some categories where a mix of sources is plausible. For instance, a capable IHS/Tribal site might provide all primary level and most intermediate level care, but no advanced services. The frequency of primary and intermediate cases may be pretty high and the frequency of advanced cases low. But, advanced cases typically cost more, sometimes a lot more, e.g., 10% of advanced cases might account for 1/3 of spending in this category. So a plausible response in this hypothetical case would be:

ON-SITE	67%	of medically necessary spending needed by this population would be on-site
OTHER SITES	0%	of medically necessary spending needed by this population would be at other IHS/Tribal sites
PURCHASED	33%	of medically necessary spending needed by this population would be from outside sources

DETAILED SERVICE MODE INVENTORY FOR EACH IHS/TRIBAL UNIT

UNIT NAME		2009 AIAN USER COUNT	
IHS AREA		INVENTORY DATE	

CATEGORY	FEHB/BCBS REFERENCE BENEFITS PACKAGE ¹	SERVICE INVENTORY ²	COMMENT
Section 5(a). Medical services and supplies by physicians and other professionals			
Physician and Other Professionals diagnostic and treatment services .31	Professional services of physicians and other health care professionals: <ul style="list-style-type: none"> • Outpatient consultations • Outpatient second surgical opinions • Office visits • Home visits • Initial examination of a newborn needing definitive treatment • Pharmacotherapy (medication management) • Neurological testing Inpatient professional services: <ul style="list-style-type: none"> • During a hospital stay • Services for nonsurgical procedures during a hospital admission • Medical care by the attending physician 	The percentage of medically appropriate physician/professional services defined at left that are rendered in: []% ON-SITE settings []% OTHER IHS/TRIBAL settings []% PURCHASED CARE settings* <hr/> 100% *if CHS \$ were sufficient	
Lab, X-ray and other diagnostic tests .32	Diagnostic tests provided, or ordered by a physician, such as: <ul style="list-style-type: none"> • Blood tests • Bone density tests – screening or diagnostic • CT scans/MRIs • EKGs and EEGs • Genetic testing – diagnostic - Genetic screening is not covered. • Laboratory tests • Pathology services • Ultrasounds • Urinalysis • X-rays (including set-up of portable X-ray equipment) 	The percentage of medically appropriate lab, X-ray and other tests defined at left that are rendered in: []% ON-SITE settings []% OTHER IHS/TRIBAL settings []% PURCHASED CARE settings* <hr/> 100% *if CHS \$ were sufficient	

¹ The reference benefits package, FEHB Blue Cross and Blue Shield Service Benefit Plan – 2010, is a well defined benchmark against which to compare services in IHS/Tribal units. Most listed services have substantial cost shares to the patient. IHS does not endorse the BCBS plan, nor is IHS authorized to assure defined health care benefits to individuals. IHS authorities are more general than service details listed here. Although broadly overlapping, IHS health care services may differ in detail from those listed.

² Area CMO, Unit CEO, and the Unit Clinical Director are good candidates to make inventory judgments. Inventory judgments apply to each unit's user count and no others. The source for unavailable items, either in the unit or other IHS/Tribal settings, is to be PURCHASED CARE, e.g., if CHS \$ were sufficient.

CATEGORY	FEHB/BCBS REFERENCE BENEFITS PACKAGE ¹	SERVICE INVENTORY ²	COMMENT
<p>Preventive care, adult .33</p>	<p>Home and office visits for routine (screening) physical examinations</p> <ul style="list-style-type: none"> • History and physical examination • Chest X-ray • EKG • Urinalysis • General health panel • Basic or comprehensive metabolic panel test • CBC • Fasting lipoprotein profile (total cholesterol, LDL,HDL, and/or triglycerides) • Screening and change interventions for tobacco use and alcohol/substance abuse • Individual counseling on prevention and reducing health risks <p>Cancer diagnostic tests and screening procedures</p> <ul style="list-style-type: none"> • Colorectal cancer tests, including: <ul style="list-style-type: none"> - Fecal occult blood test - Screening colonoscopy - Sigmoidoscopy - Double contrast barium enema • Prostate cancer tests – Prostate Specific Antigen (PSA) • Cervical cancer tests (including Pap tests) • Breast cancer tests (mammograms) <p>Other diagnostic and screening procedures</p> <ul style="list-style-type: none"> • Ultrasound for aortic abdominal aneurysm <p>Routine immunizations [as licensed (FDA)], limited to:</p> <ul style="list-style-type: none"> • Hepatitis immunizations (Types A and B) for patients with increased risk or family history • Herpes Zoster (shingles) vaccines* • Human Papillomavirus (HPV) vaccines* • Influenza (one each flu season) and pneumococcal vaccines* • H1N1 Influenza (Swine) vaccines* • Meningococcal vaccines* • Tetanus-diphtheria (Td) booster – once every 10 years 	<p>The percentage of adult preventive care services defined at left that are rendered in:</p> <p>[]% ON-SITE settings []% OTHER IHS/TRIBAL settings []% PURCHASED CARE settings*</p> <p>100%</p> <p>*if CHS \$ were sufficient</p>	

CATEGORY	FEHB/BCBS REFERENCE BENEFITS PACKAGE ¹	SERVICE INVENTORY ²	COMMENT
Preventive care, children 35	<ul style="list-style-type: none"> • All healthy newborn visits including routine screening (inpatient or outpatient) • The following routine services up to the age of 22 <ul style="list-style-type: none"> - Routine physical examinations - Routine hearing tests - Laboratory tests - Immunizations - Human Papillomavirus (HPV) vaccines - Meningococcal vaccine - Rotavirus vaccines - Related office visits • H1N1 Influenza (Swine) vaccines 	<p>The percentage of childhood preventive care services defined at left that are rendered in:</p> <p>[]% ON-SITE settings []% OTHER IHS/TRIBAL settings []% PURCHASED CARE settings*</p> <hr style="width: 10%; margin-left: 0;"/> <p>100%</p> <p>*if CHS \$ were sufficient</p>	
Maternity care 36	<p>Maternity (obstetrical) care including related conditions resulting in childbirth or miscarriage, such as:</p> <ul style="list-style-type: none"> • Prenatal care (including ultrasound, laboratory, and diagnostic tests) • Tocolytic therapy and related services (when provided and billed by a home infusion therapy company or a home health care agency) <p>Maternity care benefits are not provided for oral tocolytic agents.</p> <ul style="list-style-type: none"> • Delivery • Postpartum care • Assistant surgeons/surgical assistance if required by complexity of the delivery • Anesthesia (including acupuncture) when requested by attending physician <p>Not covered: Procedures, services, drugs, and supplies related to abortions except when the life of the mother would be endangered</p>	<p>The percentage of covered maternity care services defined at left that are rendered in:</p> <p>[]% ON-SITE settings []% OTHER IHS/TRIBAL settings []% PURCHASED CARE settings*</p> <hr style="width: 10%; margin-left: 0;"/> <p>100%</p> <p>*if CHS \$ were sufficient</p>	
Family Planning .38	<p>A range of voluntary family planning services, limited to:</p> <ul style="list-style-type: none"> • Depo-Provera • Diaphragms and contraceptive rings • Intrauterine devices (IUDs) • Implantable contraceptives • Oral and transdermal contraceptives • Voluntary sterilization 	<p>The percentage of covered family planning services defined at left that are rendered in:</p> <p>[]% ON-SITE settings []% OTHER IHS/TRIBAL settings []% PURCHASED CARE settings*</p> <hr style="width: 10%; margin-left: 0;"/> <p>100%</p> <p>*if CHS \$ were sufficient</p>	

CATEGORY	FEHB/BCBS REFERENCE BENEFITS PACKAGE ¹	SERVICE INVENTORY ²	COMMENT
Infertility services 38	Diagnosis and treatment of infertility Not Covered: Assisted reproductive technology (ART) procedures such as (AI) (IVF) (GIFT) (IVI) (ICI) (IUI) are Not Covered	The percentage of covered infertility services defined at left that are rendered in: []% ON-SITE settings []% OTHER IHS/TRIBAL settings []% PURCHASED CARE settings* 100% *if CHS \$ were sufficient	
Allergy care 39	<ul style="list-style-type: none"> • Testing and treatment, including materials (such as allergy serum) • Allergy injections 	The percentage of covered allergy care services defined at left that are rendered in: []% ON-SITE settings []% OTHER IHS/TRIBAL settings []% PURCHASED CARE settings* 100% *if CHS \$ were sufficient	
Treatment therapies 40	Outpatient treatment therapies: <ul style="list-style-type: none"> • Chemotherapy and radiation therapy • Intensity-modulated radiation therapy (IMRT) • Renal dialysis – Hemodialysis and peritoneal dialysis • Intravenous (IV)/infusion therapy – Home IV or infusion therapy • Outpatient cardiac rehabilitation Inpatient treatment therapies: <ul style="list-style-type: none"> • Chemotherapy and radiation therapy • Renal dialysis – Hemodialysis and peritoneal dialysis • Pharmacotherapy (medication management) 	The percentage of medically appropriate treatment therapies defined at left that are rendered in: []% ON-SITE settings []% OTHER IHS/TRIBAL settings []% PURCHASED CARE settings* 100% *if CHS \$ were sufficient	

CATEGORY	FEHB/BCBS REFERENCE BENEFITS PACKAGE ¹	SERVICE INVENTORY ²	COMMENT
Physical therapy, occupational therapy, speech therapy, and cognitive therapy .41	<ul style="list-style-type: none"> • Physical therapy, occupational therapy, and speech therapy • Cognitive rehabilitation therapy by a licensed therapist or physician <p style="color: red;">Not covered:</p> <ul style="list-style-type: none"> • Recreational or educational therapy, and related diagnostic testing except as provided by a hospital • Maintenance or palliative rehabilitative therapy • Exercise programs • Hippotherapy (exercise on horseback) • Services provided by massage therapists 	<p>The percentage of medically appropriate covered PT, OT, speech, and cognitive therapies defined at left that are rendered in:</p> <p>[]% ON-SITE settings []% OTHER IHS/TRIBAL settings []% PURCHASED CARE settings*</p> <hr style="width: 20%; margin-left: 0;"/> <p>100%</p> <p>*if CHS \$ were sufficient</p>	
Hearing services (testing, treatment, and supplies) .41	<p>Hearing tests related to illness or injury</p> <p style="color: red;">Not covered:</p> <ul style="list-style-type: none"> • Routine hearing tests (except as indicated under Preventive care, children) • Hearing aids • Testing and examinations for the prescribing or fitting of hearing aids 	<p>The percentage of covered hearing services defined at left that are rendered in:</p> <p>[]% ON-SITE settings []% OTHER IHS/TRIBAL settings []% PURCHASED CARE settings*</p> <hr style="width: 20%; margin-left: 0;"/> <p>100%</p> <p>*if CHS \$ were sufficient</p>	
Vision services (testing, treatment, and supplies) .42	<p>Examinations and corrections for <u>accidental</u> ocular injury and specific medical conditions</p> <p style="color: red;">Not covered:</p> <ul style="list-style-type: none"> • Routine (non-injury) eyeglasses, contact lenses, routine eye examinations, or vision testing • Eye exercises, visual training, or orthoptics • LASIK, INTACS, radial keratotomy 	<p>The percentage of covered accidental ocular injury services defined at left that are rendered in:</p> <p>[]% ON-SITE settings []% OTHER IHS/TRIBAL settings []% PURCHASED CARE settings*</p> <hr style="width: 20%; margin-left: 0;"/> <p>100%</p> <p>*if CHS \$ were sufficient</p>	

CATEGORY	FEHB/BCBS REFERENCE BENEFITS PACKAGE ¹	SERVICE INVENTORY ²	COMMENT
Foot care .43	Foot care when you are under active treatment for a metabolic or peripheral vascular disease, such as diabetes	<p>The percentage of medically appropriate covered foot care services defined at left that are rendered in:</p> <p>[]% ON-SITE settings []% OTHER IHS/TRIBAL settings []% PURCHASED CARE settings*</p> <p>100%</p> <p>*if CHS \$ were sufficient</p>	
Orthopedic and prosthetic devices .43	<p>Orthopedic braces and prosthetic appliances such as:</p> <ul style="list-style-type: none"> • Artificial limbs and eyes • Functional foot orthotics when prescribed by a physician • Rigid devices attached to the foot or a brace, or placed in a shoe • Replacement, repair, and adjustment of covered devices • Following a mastectomy, breast prostheses and surgical bras, including necessary replacements • Hearing aids for children, limited to \$1,000 per ear per calendar year • Hearing aids for adults limited to \$1,000 per ear per 36-month period • Hospital benefits for internal prosthetic devices, such as artificial joints, pacemakers, cochlear implants, and surgically implanted breast implants following mastectomy 	<p>The percentage of medically appropriate covered orthopedic and prosthetic devices defined at left that are rendered in:</p> <p>[]% ON-SITE settings []% OTHER IHS/TRIBAL settings []% PURCHASED CARE settings*</p> <p>100%</p> <p>*if CHS \$ were sufficient</p>	
Durable medical equipment (DME) .44	<p>Medically necessary DME</p> <ul style="list-style-type: none"> • Home dialysis equipment • Oxygen equipment • Hospital beds • Wheelchairs, Crutches, Walkers • Continuous passive motion (CPM) and dynamic orthotic cranioplasty (DOC) • Speech-generating devices, limited to \$1,000 per calendar year • Other items that we determine to be DME, such as compression stockings <p>Not covered :</p> <ul style="list-style-type: none"> • Exercise and bathroom equipment • Lifts, such as seat, chair, or van lifts • Car seats • Air conditioners, humidifiers, dehumidifiers, and purifiers • Breast pumps • Communications equipment 	<p>The percentage of covered medically appropriate DME defined at left that are rendered in:</p> <p>[]% ON-SITE settings []% OTHER IHS/TRIBAL settings []% PURCHASED CARE settings*</p> <p>100%</p> <p>*if CHS \$ were sufficient</p>	

CATEGORY	FEHB/BCBS REFERENCE BENEFITS PACKAGE ¹	SERVICE INVENTORY ²	COMMENT
Medical supplies 45	Medical foods, as defined by the U.S. FDA <ul style="list-style-type: none"> • Ostomy and catheter supplies • Oxygen • Blood and blood plasma, except when donated or replaced, and blood plasma expanders 	The percentage of covered medical supplies defined at left that are rendered in: []% ON-SITE settings []% OTHER IHS/TRIBAL settings []% PURCHASED CARE settings* _____ 100% *if CHS \$ were sufficient	
Home health services .46	Home nursing care for two (2) hours per day, up to 25 visits per calendar year, when a registered nurse (R.N.) or licensed practical nurse (L.P.N.) provides under physician orders Not covered: <ul style="list-style-type: none"> • Nursing care for the convenience of the patient or family • Services primarily for bathing, feeding, exercising, etc • Private duty nursing 	The percentage of covered medically appropriate home health services defined at left that are rendered in: []% ON-SITE settings []% OTHER IHS/TRIBAL settings []% PURCHASED CARE settings* _____ 100% *if CHS \$ were sufficient	
Chiropractic 47	<ul style="list-style-type: none"> • One office visit per calendar year • One set of X-rays per calendar year • Spinal manipulations 	The percentage of covered chiropractic services defined at left that are rendered in: []% ON-SITE settings []% OTHER IHS/TRIBAL settings []% PURCHASED CARE settings* _____ 100% *if CHS \$ were sufficient	

CATEGORY	FEHB/BCBS REFERENCE BENEFITS PACKAGE ¹	SERVICE INVENTORY ²	COMMENT
Alternative treatments 47	Acupuncture Not Covered: <ul style="list-style-type: none"> • naturopaths • hypnotherapists • Biofeedback • Self-care 	The percentage of covered alternative treatments defined at left that are rendered in: []% ON-SITE settings []% OTHER IHS/TRIBAL settings []% PURCHASED CARE settings* _____ 100% *if CHS \$ were sufficient	
Educational classes and programs 48	<ul style="list-style-type: none"> • Smoking cessation • Diabetic education when billed by a covered provider • Nutritional counseling for up to 6 visits per year Not covered: <ul style="list-style-type: none"> • Marital, family, educational, or other counseling in class • Premenstrual syndrome (PMS), lactation, headache, eating disorder • Recreational or educational therapy, • Services performed school or halfway house 	The percentage of covered education classes and programs defined at left that are rendered in: []% ON-SITE settings []% OTHER IHS/TRIBAL settings []% PURCHASED CARE settings* _____ 100% *if CHS \$ were sufficient	

Section 5(b). Surgical and anesthesia services by physicians and other professionals

CATEGORY	FEHB/BCBS REFERENCE BENEFITS PACKAGE ¹	SERVICE INVENTORY ²	COMMENT
Surgical procedures 51	<p>A range of services provided, or ordered and billed by a physician, such as:</p> <ul style="list-style-type: none"> • Operative procedures • Treatment of fractures and dislocations, including casting • Normal pre- and post-operative care by the surgeon • Correction of amblyopia and strabismus • Colonoscopy (with or without biopsy) to diagnose or treat a specific condition • Other endoscopy procedures • Biopsy procedures • Removal of tumors and cysts • Correction of congenital anomalies (see Reconstructive surgery on page 56) • Treatment of burns • Circumcision of newborn • Insertion of internal prosthetic devices. • Voluntary sterilization (e.g., tubal ligation, vasectomy) • Assistant surgeons/surgical assistance if required because of the complexity of the surgical procedures • Gastric restrictive procedures, gastric malabsorptive procedures, and combination restrictive and malabsorptive procedures to treat morbid obesity <p>Not covered:</p> <ul style="list-style-type: none"> • Reversal of voluntary sterilization • Standby physician • Routine surgical treatment of conditions of the foot • Cosmetic surgery • LASIK, INTACS, radial keratotomy, and other refractive surgery 	<p>The percentage of covered medically appropriate surgical procedures defined at left that are rendered in:</p> <p>[]% ON-SITE settings []% OTHER IHS/TRIBAL settings []% PURCHASED CARE settings*</p> <hr/> <p>100%</p> <p>*if CHS \$ were sufficient</p>	
Reconstructive surgery .52	<ul style="list-style-type: none"> • Surgery to correct a functional defect • Surgery to correct a congenital anomaly • Treatment to restore the mouth to a pre-cancer state • All stages of breast reconstruction surgery following a mastectomy, <p>Not covered:</p> <ul style="list-style-type: none"> • Cosmetic surgery and surgeries related to sex transformation, sexual dysfunction, 	<p>The percentage of covered medically appropriate reconstructive surgery defined at left that are rendered in:</p> <p>[]% ON-SITE settings []% OTHER IHS/TRIBAL settings []% PURCHASED CARE settings*</p> <hr/> <p>100%</p> <p>*if CHS \$ were sufficient</p>	

CATEGORY	FEHB/BCBS REFERENCE BENEFITS PACKAGE ¹	SERVICE INVENTORY ²	COMMENT
Oral and maxillofacial surgery .53	<p>Oral surgical procedures, limited to:</p> <ul style="list-style-type: none"> • Excision of tumors and cysts of mouth when pathological examination is necessary • Surgery needed to correct accidental injuries • Excision of exostoses of jaws and hard palate • Incision and drainage of abscesses and cellulitis • Incision and surgical treatment of accessory sinuses, salivary glands, or ducts • Reduction of dislocations and excision of temporomandibular joints • Removal of impacted teeth <p>Not covered:</p> <ul style="list-style-type: none"> • Oral implants and transplants Surgical procedures, except treat accidental injuries • Surgical procedures involving dental implants • Orthodontic care 	<p>The percentage of covered medically appropriate oral surgery defined at left that are rendered in:</p> <p>[]% ON-SITE settings []% OTHER IHS/TRIBAL settings []% PURCHASED CARE settings*</p> <hr/> <p>100%</p> <p>*if CHS \$ were sufficient</p>	
Organ/tissue transplants .54	<p>Transplants subject to medical necessity and review are subject to extensively defined limits in pgs 55-61:</p> <ul style="list-style-type: none"> • Cornea • Heart • Heart-lung • Kidney • Liver • Pancreas • Simultaneous pancreas-kidney • Simultaneous liver-kidney • Autologous pancreas islet cell transplant • Intestinal transplants (small intestine) with multiple organs • Single, double, or lobar lung • end-stage cystic fibrosis are limited to double lung transplants <p>Blood or marrow stem cell transplants limited to specified disease stages extensively defined limitations in pgs 55-61</p>	<p>The percentage of covered medically appropriate organ/tissue transplants defined at left that are rendered in:</p> <p>[]% ON-SITE settings []% OTHER IHS/TRIBAL settings []% PURCHASED CARE settings*</p> <hr/> <p>100%</p> <p>*if CHS \$ were sufficient</p>	

CATEGORY	FEHB/BCBS REFERENCE BENEFITS PACKAGE ¹	SERVICE INVENTORY ²	COMMENT
Anesthesia 61	Anesthesia (including acupuncture) for covered medical or surgical services provided in: <ul style="list-style-type: none"> • Hospital (inpatient) • Hospital outpatient department • Skilled nursing facility • Ambulatory surgical center or Office 	The percentage of covered medically appropriate anesthesia services defined at left that are rendered in: []% ON-SITE settings []% OTHER IHS/TRIBAL settings []% PURCHASED CARE settings* _____ 100% *if CHS \$ were sufficient	

Section 5(c). Services provided by a hospital or other facility, and ambulance services

Inpatient hospital 62	Room and board, such as: <ul style="list-style-type: none"> • semiprivate or intensive care accommodations • general nursing care • meals and special diets Other hospital services and supplies, such as: <ul style="list-style-type: none"> • Operating, recovery, maternity, and other treatment rooms • Prescribed drugs • Diagnostic laboratory tests, pathology services, MRIs, machine diagnostic tests, and X-rays • Administration of blood or blood plasma • Dressings, splints, casts, and sterile tray services • Internal prosthetic devices • Other medical supplies and equipment, including oxygen • Anesthetics and anesthesia services • Take-home items • Pre-admission testing recognized as part of the hospital admissions process • Nutritional counseling • Acute inpatient rehabilitation Not covered: Hospital room and board expenses when: <ul style="list-style-type: none"> • Custodial or long term care • Convalescent care or a rest cure • Domiciliary care because care in the home is not available or is unsuitable • Did not require the acute/subacute hospital inpatient (overnight) setting • Non-covered facilities: nursing homes, extended care facilities, schools, residential treatment centers • Personal comfort items 	The percentage of medically appropriate inpatient hospital care defined at left that are rendered in: []% ON-SITE settings []% OTHER IHS/TRIBAL settings []% PURCHASED CARE settings* _____ 100% *if CHS \$ were sufficient	
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CATEGORY	FEHB/BCBS REFERENCE BENEFITS PACKAGE ¹	SERVICE INVENTORY ²	COMMENT
	<ul style="list-style-type: none"> • Private duty nursing 		
Outpatient hospital or ambulatory surgical center 65	<p>Outpatient medical services performed and billed by a hospital or freestanding ambulatory facility, such as:</p> <ul style="list-style-type: none"> • Use of special treatment rooms • Diagnostic tests, such as laboratory and pathology services, MRIs, machine diagnostic tests, and X-rays • Chemotherapy and radiation therapy • Intravenous (IV)/infusion therapy • Cardiac rehabilitation • Pulmonary rehabilitation • Physical, occupational, and speech therapy • Routine physical examinations and screening procedures • Renal dialysis • Outpatient department of a hospital for non-emergency medical care • Administration of blood, blood plasma, and other biologicals • Blood and blood plasma, if not donated or replaced, and other biologicals • Dressings, splints, casts, and sterile tray services • Other medical supplies, including oxygen <p>Outpatient surgery and related services</p> <ul style="list-style-type: none"> • Operating, recovery, and other treatment rooms • Anesthetics and anesthesia services • Pre-surgical testing performed within one business day of the covered surgical services • Facility supplies for hemophilia home care • Diagnostic tests, such as laboratory and pathology services, MRIs, machine diagnostic tests, and X-rays • Outpatient department of a hospital for non-emergency surgical care • Colonoscopy (with or without biopsy) to diagnose or treat a specific condition • Administration of blood, blood plasma, and other biologicals • Blood and blood plasma, if not donated or replaced, and other biologicals • Dressings, splints, casts, and sterile tray services • Other medical supplies, including oxygen 	<p>The percentage of medically appropriate outpatient hospital or ambulatory surgical care defined at left that are rendered in:</p> <p>[]% ON-SITE settings []% OTHER IHS/TRIBAL settings []% PURCHASED CARE settings*</p> <hr/> <p>100%</p> <p>*if CHS \$ were sufficient</p>	

CATEGORY	FEHB/BCBS REFERENCE BENEFITS PACKAGE ¹	SERVICE INVENTORY ²	COMMENT
Extended care benefits/Skilled nursing care facility benefits .67	Net of Medicare Part A – Standard Plan Nothing – Basic Plan	The percentage of covered medically appropriate extended care/skilled nursing defined at left that are rendered in: []% ON-SITE settings []% OTHER IHS/TRIBAL settings []% PURCHASED CARE settings* <hr/> 100% *if CHS \$ were sufficient	
Hospice care .67	Pre-approved periodic home hospice or continuous home hospice and short term (7 days) inpatient hospice when death is imminent. • Nursing care • Periodic physician visits • Dietary counseling • Durable medical equipment rental • Medical social services • Medical supplies • Oxygen therapy • Physical therapy, occupational therapy, and speech therapy related to the terminal medical condition • Prescription drugs • Services of home health aides	The percentage of covered hospice care services defined at left that are rendered in: []% ON-SITE settings []% OTHER IHS/TRIBAL settings []% PURCHASED CARE settings* <hr/> 100% *if CHS \$ were sufficient	
Ambulance .70	Medically appropriate local professional ambulance transport services	The percentage of covered medically appropriate ambulance service defined at left that are rendered in: []% ON-SITE settings []% OTHER IHS/TRIBAL settings []% PURCHASED CARE settings* <hr/> 100% *if CHS \$ were sufficient	

Section 5(d). Emergency services/accidents

CATEGORY	FEHB/BCBS REFERENCE BENEFITS PACKAGE ¹	SERVICE INVENTORY ²	COMMENT
Accidental injury 72	<ul style="list-style-type: none"> Physician services in the hospital outpatient department, urgent care center, or physician's office, including X-rays, MRIs, laboratory and pathology services, and machine diagnostic tests Related outpatient hospital services and supplies, including X-rays, MRIs, laboratory and pathology services, and machine diagnostic tests 	<p>The percentage of covered medically appropriate accidental injury care defined at left that are rendered in:</p> <p>[]% ON-SITE settings []% OTHER IHS/TRIBAL settings []% PURCHASED CARE settings*</p> <hr/> 100% <p>*if CHS \$ were sufficient</p>	
Medical emergency 73	<ul style="list-style-type: none"> Physician services in the hospital outpatient department, urgent care center, or physician's office, including X-rays, MRIs, laboratory and pathology services, and machine diagnostic tests Related outpatient hospital services and supplies, including X-rays, MRIs, laboratory and pathology services, and machine diagnostic tests 	<p>The percentage of covered medical emergency care defined at left that are rendered in:</p> <p>[]% ON-SITE settings []% OTHER IHS/TRIBAL settings []% PURCHASED CARE settings*</p> <hr/> 100% <p>*if CHS \$ were sufficient</p>	
Ambulance .74	Medically appropriate local professional ambulance transport services	<p>The percentage of covered medically appropriate ambulance service defined at left that are rendered in:</p> <p>[]% ON-SITE settings []% OTHER IHS/TRIBAL settings []% PURCHASED CARE settings*</p> <hr/> 100% <p>*if CHS \$ were sufficient</p>	

Section 5(e). Mental health and substance abuse benefits

CATEGORY	FEHB/BCBS REFERENCE BENEFITS PACKAGE ¹	SERVICE INVENTORY ²	COMMENT
Mental Health & Substance Abuse services .75	Diagnostic and treatment services for which prior approval for care is clinically appropriate to treat your condition <ul style="list-style-type: none"> • Professional services, including individual or group therapy • Office and home visits • In a hospital outpatient department • Psychotherapy for smoking cessation • Pharmacotherapy (medication management) • Psychological testing • Inpatient professional visits • Professional charges for facility-based intensive outpatient treatment • Professional charges for intensive outpatient treatment in a provider’s office • Inpatient services provided and billed by a hospital or other covered facility • Outpatient services provided and billed by a hospital or other covered facility Not covered: <ul style="list-style-type: none"> • Educational or training services • Psychoanalysis or psychotherapy for education or training • Residential therapeutic camps (e.g., wilderness camps, Outward Bound, etc.) 	The percentage of covered mental health and substance abuse services defined at left that are rendered in: []% ON-SITE settings []% OTHER IHS/TRIBAL settings []% PURCHASED CARE settings* 100% *if CHS \$ were sufficient	

Section 5(f). Prescription drug benefits

CATEGORY	FEHB/BCBS REFERENCE BENEFITS PACKAGE ¹	SERVICE INVENTORY ²	COMMENT
<p>Covered medications and supplies .81</p>	<p>Drugs, vitamins and minerals, and nutritional supplements that require a prescription for their purchase</p> <ul style="list-style-type: none"> • Insulin and and diabetic test strips • Needles and disposable syringes for the administration of covered medications • Clotting factors and anti-inhibitor complexes for the treatment of hemophilia • Drugs to aid smoking cessation that require a prescription • Contraceptive drugs and devices, limited to: <ul style="list-style-type: none"> • Depo-Provera • Diaphragms and contraceptive rings • Intrauterine devices (IUDs) • Implantable contraceptives • Oral and transdermal contraceptives • Routine immunizations limited to: <ul style="list-style-type: none"> • Herpes Zoster (shingles) vaccines • Human Papillomavirus (HPV) vaccines • Influenza vaccines (one each flu season) • H1N1 Influenza (Swine) vaccines • Pneumococcal vaccines • Meningococcal vaccines <p>Not covered:</p> <ul style="list-style-type: none"> • Medical supplies such as dressings and antiseptics • Drugs and supplies for cosmetic purposes • Drugs and supplies for weight loss • Drugs for orthodontic care, dental implants, and periodontal disease • Medications and orally taken nutritional supplements that do not require a prescription • Drugs for which prior approval has been denied or not obtained • Infant formula other than described on page 48 • Drugs and supplies related to sex transformations, sexual dysfunction, or sexual inadequacy • Drugs purchased through the mail or internet from pharmacies outside the United 	<p>The percentage of covered medically appropriate medications and supplies defined at left that are rendered in:</p> <p>[]% ON-SITE settings []% OTHER IHS/TRIBAL settings []% PURCHASED CARE settings*</p> <p>100%</p> <p>*if CHS \$ were sufficient</p>	

Appendix 7

Insurance Coverage in IHS

Annual Report 4A - ALL Areas

Insurance Coverage - Summary (Indian Only)

Fiscal Year: 10/01/2007 through 9/30/2008

Type of Coverage	TOTAL	% CATEG	TOTAL VET/not	VET/not	65+ yrs	<18 yrs
MEDICAID ONLY	418,128	27.96%	420,977	28.15%	1,534	236,526
MEDICAID ONLY + VET	2,849	0.19%				
MEDICAID/PRIVATE AND MEDICARE A	223	0.01%	255	0.02%	111	3
MEDICAID/PRIVATE AND MEDICARE A + VET	32	0.00%				
MEDICAID/PRIVATE AND MEDICARE B	696	0.05%	724	0.05%	585	3
MEDICAID/PRIVATE AND MEDICARE B + VET	28	0.00%				
MEDICAID/PRIVATE ONLY	101,887	6.81%	102,900	6.88%	328	49,538
MEDICAID/PRIVATE ONLY + VET	1,013	0.07%				
MEDICAID/PRIVATE/MEDICARE A & B	14,078	0.94%	14,968	1.00%	8,975	13
MEDICAID/PRIVATE/MEDICARE A & B + VET	890	0.06%				
MEDICARE PART A AND MEDICAID	447	0.03%	495	0.03%	244	7
MEDICARE PART A AND MEDICAID+ VET	48	0.00%				
MEDICARE PART A AND PRIVATE INSURANCE	3,962	0.26%	4,829	0.32%	3,962	3
MEDICARE PART A AND PRIVATE INSURANCE + VET	867	0.06%				
MEDICARE PART A ONLY	4,474	0.30%	5,726	0.38%	4,400	1
MEDICARE PART A ONLY + VET	1,252	0.08%				
MEDICARE PART B AND MEDICAID	2,450	0.16%	2,502	0.17%	2,331	0
MEDICARE PART B AND MEDICAID + VET	52	0.00%				
MEDICARE PART B AND PRIVATE INSURANCE	677	0.05%	760	0.05%	644	1
MEDICARE PART B AND PRIVATE INSURANCE + VET	83	0.01%				
MEDICARE PART B ONLY	657	0.04%	718	0.05%	558	0
MEDICARE PART B ONLY + VET	61	0.00%				
MEDICARE PARTS A & B AND MEDICAID	24,868	1.66%	26,367	1.76%	15,874	8
MEDICARE PARTS A & B AND MEDICAID + VET	1,499	0.10%				
MEDICAID PARTS A & B AND PRIVATE INSURANCE	29,280	1.96%	34,725	2.32%	29,086	10
MEDICAID PARTS A & B AND PRIVATE INSURANCE + VET	5,445	0.36%				
MEDICARE PARTS A & B ONLY	30,431	2.03%	35,935	2.40%	27,016	13
MEDICARE PARTS A & B ONLY + VET	5,504	0.37%				
PRIVATE INSURANCE ONLY	332,043	22.20%	343,278	22.95%	4,495	89,923
PRIVATE INSURANCE ONLY + VET	11,235	0.75%				
VET ONLY	13,732	0.92%	13,732	0.92%	730	6
NO INSURANCE	486,739	32.54%	486,739	32.54%	5,196	128,133
GRAND TOTAL	1,495,630				106,069	504,188
VET (Included above)	44,590					

Print Date: 12/19/2008

Fiscal Year: 2008

Userpop Version: 31

Appendix 8

T-TAG Study of Medicare Enrollment
and Utilization by AIAN

GA A A 5FMCB@M

**AMERICAN INDIAN AND ALASKA NATIVE
MEDICARE
PROGRAM AND POLICY STATISTICS**

November 30, 2009

**MEDICARE 2006
Enrollment & Utilization
Release for IHS Data Technical Work Group (DTWG)
Feedback**

for the

Centers for Medicare & Medicaid Services
Tribal Technical Advisory Group



Prepared by

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Center for Medicaid and Medicare Services (CMS)

through the Indian Health Service (IHS) and

National Indian Health Board



Please provide feedback so that data reported in the future may better meet your needs:

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SUMMARY

This report was commissioned by the Centers for Medicaid and Medicare Services (CMS) to investigate Medicare enrollment and utilization data available for American Indians and Alaska Natives (AIAN) using criteria set out in the CMS AIAN Strategic Plan of 2006. The goal is to demonstrate the strengths and limitations of Medicare data in providing useful information for Medicare program planning and policy analysis that affects the health and health care of AIAN.

A major strength of Medicare data is that the Enrollees identified as 'AIAN' in Medicare data are very similar to the 'IHS AIAN' defined in the Strategic Plan. We found that 99.9% of enrollees identified as 'AIAN' in the Medicare master enrollment database are identified during the on-going linkages of Medicare enrollment and IHS registry data. Thus AIAN in Medicare data are recognized as AIAN by the IHS and have at some point in their lives been in the user population of the IHS health care delivery system. The major difference between this group and 'IHS AIAN' defined in the Strategic Plan is that it is not known whether the AIAN in Medicare data are currently users of IHS system providers. We found that 13.4% of AIAN in Medicare data for 2006 did not live in an IHS service delivery area ('CHSDA') county.

A major limitation of Medicare data is that it does not identify the groups of AIAN or the IHS providers defined in the CMS AIAN Strategic Plan of 2006 for program planning and policy analysis. The Strategic Plan defined three groups of AIAN (Racial, IHS and Tribal) and three groups of Indian Health Service (IHS) health care delivery system providers (IHS, Tribal and Urban). Medicare could better identify IHS and Tribal AIAN, and health care delivery system providers in their data. Medicare currently links its master enrollment data with IHS registry data several times each year for the purposes of identifying 'AIAN' in Medicare data. In the recommendations we emphasize that additional information should be retained by Medicare from the on-going Medicare-IHS data linkages. Information could be retained that identifies 'IHS AIAN' and 'Tribal AIAN' and their IHS, Tribal and Urban providers according to the definitions included in the CMS AIAN Strategic Plan of 2006.

We build on the strength of the Medicare data that exists for IHS AIAN to present in this report analysis of Medicare enrollment and health care utilization data for AIAN. We present findings for three relevant service areas: the United States, IHS Administrative Areas, and a consolidated Urban Service Area.

Enrollment Data

Enrollment data categories in this report are those that the annual CMS reports highlight because they are particularly useful in planning and tracking programs and policies. They include age, gender, IHS and urban service areas, eligibility groups, hospital and medical service coverage, managed care coverage and state Medicaid program purchase of Medicare premiums. We provide an analysis of AIAN enrollment data from the annual Denominator file of beneficiaries for 2006 which was finalized in 2009. Wherever possible we present the comparative information for all Medicare enrollees in the same year so that it can be better predicted how programs and policies that CMS devises might affect AIAN differently from Medicare enrollees generally. Among key findings in the report:

- ◇ **Age.** AIAN Medicare enrollees are younger than Medicare enrollees. This is true within both the Aged and Disabled eligibility groups. Among Aged AIAN nearly two-thirds (65%) are under age 75 compared with only half of all Aged Medicare enrollees (52%). Among Disabled AIAN one-third (33%) are under age 45 compared with only a quarter of all

Summary

Disabled Medicare enrollees (25%). This is important because health and health care are age dependent, and programs and policies have differential effects depending on age.

- ◇ **Eligibility.** Proportionately fewer AIAN are in the Aged eligibility group, and more in the Disabled eligibility group than Medicare enrollees generally. The fraction of AIAN enrollees who are Disabled (29%) is nearly twice as large as that for all Medicare enrollees (16%).
- ◇ **Hospital and Medical Coverage.** In the U.S. as a whole, 91% of all AIAN enrollees have both Hospital and Medical Medicare coverage (Parts A and B). This is almost the same as the 92% rate for all Medicare beneficiaries.
- ◇ **Managed Care.** The fraction of AIAN Medicare enrollees who are in Managed Care (9%) is less than half as large as that of all Medicare enrollees (20%). Managed care penetration varied a great deal among the IHS Areas with a low of 0% in Alaska Area to 20% in the Tucson Area. In the Urban Service Area the proportion of AIAN enrollees in managed care was 20%.
- ◇ **Medicaid Payment of Medicare Premiums.** State Medicaid programs paid premiums for Medicare coverage for 39% of AIAN enrollees who have Hospital and Medical Medicare coverage (Parts A and B). The rate is essentially the same for the IHS Areas (40%) and for the Urban Area (39%), but the rate varies a great deal among the IHS Areas from a low of 29% in Oklahoma Area to a high of 61% in Navajo Area. A major determinant of this variation across the IHS Areas is the difference in rates that Medicaid programs paid premiums for Aged and Disabled eligibility groups.

AIAN in the 12 IHS Areas and the Urban Service Area vary in their demographics, eligibility and coverage. No single Area dominates the characteristics associated with better or worse health and health care, but the Areas vary substantially in all characteristics. This variation in enrollment among areas needs to be considered in Medicare program planning and policy analysis.

Utilization Data

Medicare health care utilization data is divided among numerous data files that are classified according to service or provider type. Unlike enrollment data, there is no annual summary file. Since essentially all enrollees are covered for hospital care (Medicare Part A), and payments to hospital facilities constitute the highest paid Medicare benefit category, we analyzed the AIAN data in the hospitalizations (MedPAR) file for Short Stay and Long Stay hospitals in 2006. Wherever possible we compare information AIAN data to that for all Medicare enrollees in the same year.

Key indicators of hospital service utilization are, 1) the rates at which populations are hospitalized (hospitalization rates), 2) their average days of hospital care, and 3) their average length of stay. Higher values for any of these indicators can reflect lower health status, while low values can reflect barriers to care. We found for Short Stay hospital utilization:

- ◇ **Hospitalization Rates.** Hospitalization rates are higher for AIAN (390 stays per 1000 enrollees with hospital coverage) than for all Medicare enrollees (349 stays per 1000). Rates across IHS Service Areas range from a low of 300 per 1000 in Alaska and California Areas, to a high of 561 per 1000 in the Tucson Area. For AIAN living in the Urban Service Area the hospitalization rate was 419 stays per 1000.

Summary

- ◇ **Hospital Days and Stays.** AIAN Medicare enrollees average more total hospital days, but shorter length of days per stay, than Medicare enrollees. The hospital Days of Stay averaged 2,086 days per 1,000 AIAN enrollees with hospital coverage, while Medicare enrollees had 1,981 days per 1,000. The average length of stay for AIAN enrollees was shorter (5.4 days per stay) than the comparable rate for Medicare enrollees (5.7 days per stay). Total hospital days of stay were more than twice as high in the Tucson Area than the Portland Area, and longest lengths of stay were in the Alaska Area (6.9 days per stay).

Medicare payments to hospitals for care of AIAN enrollees in Short and Long Stay hospitals totaled \$550 million in 2006. Medicare hospital payments generally constitute the single largest category of Medicare benefit payments (62% of Part A benefit payments), 2.1 times as large as payments for physicians and other professionals, and 2.5 times as large as payments for medications. For care in Short Stay hospitals:

- ◇ **Per Capita Medicare Payments.** Medicare pays more for hospital care of AIAN enrollees on a per capita basis (\$3,299 per enrollee with hospital coverage) than for Medicare enrollees in general (\$3,008 per enrollee). With age adjustment the difference would be even greater because of the younger AIAN population covered. The lowest per capita payment is in the Albuquerque Area (\$2,532), less than half the highest in the Tucson Area (\$5,468). The large variation in Medicare per capita payments is important to take into account in determining equity of federal health care coverage for IHS user population across IHS areas. Adjustments are needed for age, medical costs and other factors affecting health care coverage as has been done in the past with IHS funding across IHS areas.
- ◇ **Medicare Payments per Hospital Stay.** Medicare payments per stay for AIAN are lower (\$8,469 per stay) than the Medicare national average (\$8,669 per stay). Medicare payments vary from a low in the Oklahoma Area of \$7,377 per stay to 50% to 100% higher payments in California (\$10,301 per stay) and Alaska (\$13,588 per stay) Areas. Medicare payments for the Urban Service Area (\$9,645 per stay) were higher than the national average.
- ◇ **Medicare Payments per Hospital Day.** Medicare payment rates per day to hospitals are a little higher for AIAN (\$1,582 per day of stay) than the Medicare national average (\$1,519 per day of stay). Medicare payments vary from a low in the Nashville Area (\$1,448 per day) to comparable highs in the Alaska (\$1,982 per day), Portland (\$1,943 per day), and California (\$1,915 per day) Areas. Medicare payments for the Urban Service Area (\$1,712) per day of stay are higher than the national average.
- ◇ **Enrollee Payments.** When all payments made for AIAN hospitalizations are totaled, Medicare pays 89% of the total, while AIAN enrollees pay about 7% for Deductibles and Coinsurance. The balance is paid by other payers (4%). Enrollee payments vary from a low of 5% of total hospital payments in the Alaska area, to a high of 8% in Oklahoma Area. AIAN enrollees paid 8% for Deductibles and Coinsurance in the Urban Service Area.

Summary


Recommendations

Medicare Data for AIAN and IHS System Providers. Recommended strategies that could improve Medicare data for program planning and policy analysis include:

- ◇ **Racial AIAN.** Medicare Beneficiary Surveys and Social Security Administration activities have had little impact on increasing the identification of the self-declared AIAN Medicare enrollee population, alternative recommended strategies would be:
 - Contact Medicare enrollees (particularly those in ‘Other’ Race category) to update their Medicare demographic information;
 - Advertise the importance of responding to this demographic ‘Update’ initiative in cultural groups and events of AIAN;
- ◇ **IHS AIAN.** Medicare does not retain information on the year(s) in which the Medicare enrollees were identified as current (active) users of IHS system providers.
 - Have the IHS identify the year(s) of confirmed IHS active user status during the quarterly linkages of Medicare enrollment data with IHS active user data;
 - During the demographic ‘Update’ initiative, give enrollees the opportunity to provide a Geographic zip code for where they physically live in addition to any zip code they may have on record for mailing purposes;
- ◇ **Tribal AIAN.** Medicare does not have any information on tribal affiliation for the individual tribes who are requesting analysis of the Medicare data of their tribal members.
 - Survey tribal leadership of federally recognized tribes to see which tribes want to have Medicare data;
 - Have the IHS identify the tribal affiliation of IHS active users during the quarterly linkages of Medicare enrollment data with IHS active user data;
 - Have AIAN Medicare enrollees provide tribal affiliation(s) and status as ‘enrolled or registered’ during the demographic ‘Update’ initiative;
- ◇ **IHS, Tribal or Urban Providers (I/T/U).** Medicare does not have codes developed that would identify IHS health care delivery system providers and their status as IHS, tribal or urban Indian operated institutions.
 - Have IHS identify the I/T/U provider(s) (that is, IHS Service Units) used during the quarterly linkages of Medicare enrollment data with IHS active user data.
- ◇ **Medicare Enrollment and Health Care Utilization Data.** This report specifies further work to be done with Medicare enrollment and utilization data files to investigate health status, access to care, and variation in care as a function of provider and payer policies and practices.

Appendix 9

Variations in CMS Spending by IHS Area




Medicaid and Indian Health Programs

Ed Fox, Squaxin Island Tribe, Health and Human Services Director

Verné Boerner, MPH Student, School of Nursing, Oregon Health and Science University

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Medicaid's positive impact on Indian Health Programs

- Medicaid is the number one source of funds identified and accessed by application of the Alternative resource rule.
 - This rule states that IHS is the secondary payor to Medicaid, Medicare or other payors and requires application of these resources before approving the expenditure of IHS funds.
- Tribes now uniformly require a completed application process for Medicaid before authorizing referrals. 20% to 50% of applicants are determined eligible for Medicaid.

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Medicaid and Medicare

- Medicaid enrollees generate payments to IHPs for services rendered and equally important result in cost avoidance for IHPs thanks to Medicaid payments to referred specialists and hospitals.
 - 2 ways Medicaid impacts our Indian health programs
 - Payments to Indian health programs
 - Cost Avoidance due to payment to other providers (transportation, pharmacy, specialists and hospitals)
 - Medicare is also important, but it represents less than 10% of Medicaid expenditures and will not be examined in this report.
- In fiscal year 2007, IHS reported \$161 million in Medicare payments; this total does not include referred care and does not include most payments to 638 programs.



Methodological notes

- Unit of analysis and Level of Analysis; patients and programs
Our concern is those patients with Medicaid who are also included in the IHS user population.
 - This excludes much, but not all of urban Indian population. It also excludes those who identify as Indian, including many tribal members, who do not use our health programs. Many urban Indians who use urban programs are Medicaid patients.
- Our unit of analysis is any Medicaid patient who is listed as one of an Indian health program's users.
- The source of information for this study is both state level reports and Medicaid data available on the Centers for Medicare and Medicaid Website, with the state reports more recent and likely more informative than what is available from CMS.



Levels of Analysis; individual, program, IHS Area

- Main unit of analysis is an Indian Health Service User, a patient of an Indian Health Program who is eligible for services based on tribal membership or descendance from a tribal member.
- An IHS User is a patient counted in the IHS user population and is someone who is eligible for IHS services and has been seen in an Indian Health Program in a three year period.
 - Our focus is on an IHS user *who is also a Medicaid beneficiary*.
- Indian Health Program (IHS and Tribal) is a program operated by a Tribe or the Indian Health Service; almost always on a reservation.
 - Indian Health Service is a federal agency of the Department of Health and Human Services that provides slightly more than half of all IHP services.
 - Tribal Health Program is a program operated under a Public Law, 93-638 contract. It is possible to have program that is part IHS and part 638-in fact all IHS programs have a 638 Alcohol Program.



Levels of Analysis

- Federal Level
 - The Indian Health Service Budget distributes funding to service User Population. Exact 'allowances' are easily obtained for each area, each tribe and in some cases each operating unit.
- State Level
 - The Medicaid Program that is jointly financed by the Federal Government and the states with minimum benefit and eligibility standards that can be enhanced by states.
- Typically, states can report how much they have paid to IHPs for AI/ANs, but not always.
 - States often report a summary total for all Indian patients, but they do not distinguish those in our user population
 - However, States are not able to say how much they have paid for our patients when they are referred to hospitals or specialists.
 - Tribal 'match' methodology utilized by Tribal EpiCenters could identify these patients.

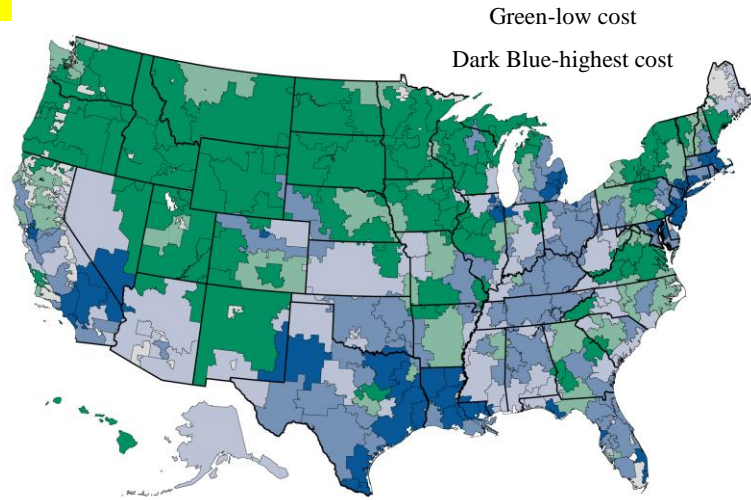


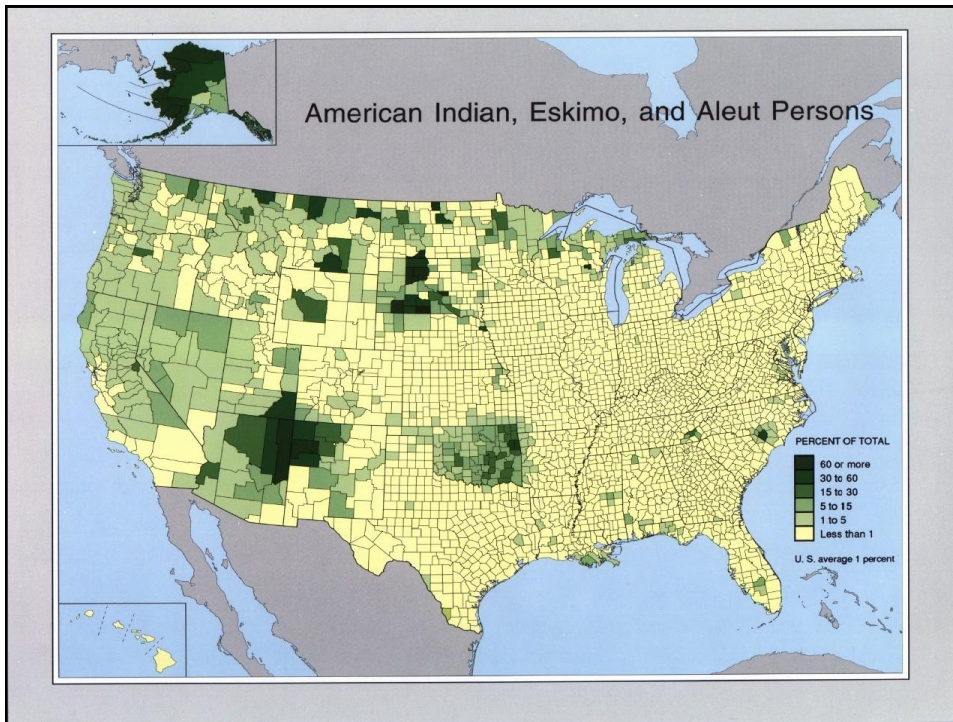
The Centers for Medicare and Medicaid (CCMS) Data

- CMS believes 800,000 American Indians are Medicaid beneficiaries in 2007. In fact, in 2002 it reported that 779,000 AI/ANs were enrolled.
- CMS estimates about 200,000 AI/ANs are Medicare Part A or B beneficiaries in 2007.
- The 1,000,000 CMS combined estimate of AI/AN beneficiaries is far greater than the number who are also 'users' of Indian health programs.
- 500,000 to 700,000 is a reasonable estimate of IHS users who are also Medicaid beneficiaries.
 - 400,000 to 550,000 Medicaid and 100,000 to 150,000 Medicare are better estimates, but no one knows for sure.
- CMS collects data through its MMIS, Medicaid Management Information System.



Tribes are located in Low Cost Areas





Dollar impact of WA Medicaid

- Payments to Indian Health Programs (IHPs) for AI/ANs
 - In Washington State payments to Indian health programs totalled \$35 million in State Fiscal Year 2008
- Cost Avoidance
 - In Washington State IHP patients received approximately \$55-\$70 million in Medicaid-paid services
 - Total benefit; cost avoidance plus payments equals \$80-105 million.
 - It is significant that Indian health programs do not know, and cannot report how much is paid for services provided to their “Medicaid” patients by outside providers (specialists and hospitals). Unfortunately, patients information is commonly not known either.
- Total impact of \$80-105 million is nearly equal to the amount received by Washington IHPs from the Indian Health Service.

Washington State's experience?



- Washington's experience is similar to many states: That is, Medicaid spending (both payments to Indian health programs and payments to other providers) is nearly the same amount as IHS payments to tribes for our patients.
- IHS payments (allowances) equals about \$100,000,000 to Washington State Tribes.
- Washington Indian health programs receive about \$110 million in IHS funding and \$85 to \$105 million in Medicaid payments.
 - Medicaid pays in excess of \$130 million for AI/ANs in Washington, but some of this is to the many Urban Indians who are not counted in the user population of the States' Tribes.

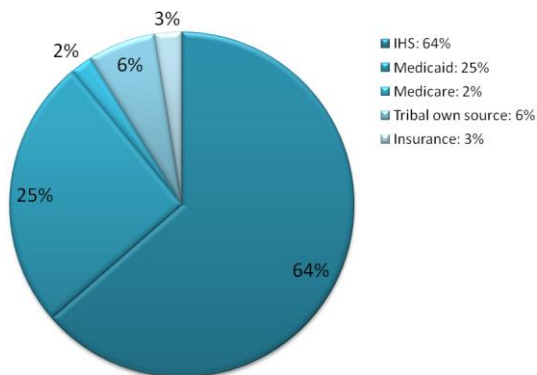
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Example of One Washington State Tribe Federal FY 2008



- Squaxin Island Tribe



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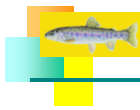
How does Medicaid revenue compare to IHS allowances?

- Over the 12 states in this study Medicaid expenditures appear to be approximately equal to IHS funds.
- There are some areas of the IHS, perhaps most, where Medicaid payments exceeds IHS.
 - Alaska, New Mexico and Arizona, with high quality state-generated data, shows that Medicaid exceeds the IHS allowance for each of these states.



Alaska Medicaid

- Alaska receives \$490,000,000 in Medicaid payments in SFY 2008 for 52,000 AI/AN patients. This is 40% of Medicaid population compared to 8% of total state population AI/AN.
 - \$134,000,000 paid directly to Alaska Native Programs
 - \$356,000,000 paid to non Native providers
- Alaska receives \$466,947,000 from the Indian Health Service (Federal FY 2008) \$490 million compared to \$466 million suggests Medicaid has a greater positive impact.
- However, Medicaid payments declined in AK from 2004 to 2007. \$40 million less paid to Alaska Native programs in 2007 compared to 2004. Some programs have had to pay back some Medicaid payments and this may contaminate these data for the purpose of longitudinal comparisons.



New Mexico and Arizona have more Medicaid spending than IHS spending for AI/ANs

Medicaid payments \$940 million, IHS \$766 million

- New Mexico
 - Albuquerque Area
- Arizona
 - Phoenix
 - Tucson
- Arizona and New Mexico
 - Navajo 34, 000 NM and 51,000 in Arizona.
- AZ Medicaid \$575 million
- NM Medicaid \$365 million
- Total \$940 million

FY 2007	IHS Area Allowance
NAVAJO	\$ 354,785,382
ALBUQUERQUE	\$ 130,573,304
TUCSON	\$ 41,599,152
PHOENIX	\$ 239,437,836
Total AZ NM	\$ 766,395,674

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FY 2007 IHS Area Allowances

Area	Area Allocation	2007 % of total	Area	Area Allocation	2007 % of total
ABERDEEN	\$249,716,543	8.86%	NASHVILLE	\$101,746,593	3.61%
ALASKA	437,811,720	15.53%	NAVAJO	354,785,382	12.59%
ALBUQUERQUE	130,573,304	4.63%	OKLAHOMA	394,892,879	14.01%
BEMIDJI	144,247,583	5.12%	PHOENIX	239,437,836	8.49%
BILLINGS	143,522,312	5.09%	PORTLAND	195,952,649	6.95%
CALIFORNIA	130,872,057	4.64%	TUCSON	41,599,152	1.48%

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IHS 2007 User Population

	User Population	2007	Total Percentage of total
1	Aberdeen	119,379	8.16%
2	Alaska	134,743	9.21%
3	Albuquerque	85,671	5.85%
4	Bemidji	100,243	6.85%
5	Billings	70,196	4.80%
6	California	75,101	5.13%
7	Nashville	47,438	3.24%
8	Navajo	237,981	16.26%
9	Oklahoma	313,901	21.44%
10	Phoenix	153,607	10.49%
11	Portland	100,784	6.89%
12	Tucson	24,708	1.69%
		1,463,752	

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2007 Population Estimates

	State	% of State pop	Census of AI/ANs
1	Alaska	13.1	88,026
2	New Mexico	9.7	189,152
3	South Dakota	8.6	67,614
4	Oklahoma	6.8	244,326
5	Montana	6.3	59,500
6	North Dakota	5.2	33,219
7	Arizona	4.5	277,732
8	Oregon	1.8	67,269
9	Washington	1.5	92,791
10	Idaho	1.1	16,250
11	Minnesota	1	51,922
12	California	0.7	265,963

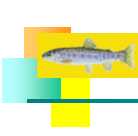
Alaska 2007 user population is 134,743

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No doubt about it: Medicaid is an important resource for Indian health programs and Indian people.

- Medicaid expenditures for the user population of the Tribes in the 12 study states is at least \$2 billion in FY 2007; about \$800 million paid to IHPs.
- This represents approximately 45% of the combined IHS and Medicaid funding of \$4.4 billion (\$2 billion Medicaid plus \$2.4 billion IHS) to Tribes in these states.
 - Note: There are some tribes, including all in the Nashville Area of the IHS, not included in this study that make up less than 10% of the total number of user's in the 12 IHS areas; i.e., 90% of the IHS user pop is included in this study.



Medicaid's importance in 12 states

Ranked according to total dollars spent on AI/AN

- Arizona \$550-600 million
- Alaska \$475-500 million
- New Mexico \$300-325 million
- Oklahoma \$250 million
- South Dakota \$185-200 million
- Minnesota \$150 million
- Montana \$125 million
- Washington \$105 million
- Oregon \$40 million
- North Dakota \$40 million
- Idaho \$25 million



American Indians and Alaska Natives are a significant share of many state's Medicaid population.

- Seven states have an Alaska Native American Indian population that exceeds 10% of the total state Medicaid census.
 - Alaska is about 40%
 - South Dakota is 36%
- Seven states' Medicaid expenditures for AI/ANs exceeds \$100,000,000.
- Four states have over 50,000 AI/ANs who are Medicaid beneficiaries.
- State program planning needs to take this population into account.

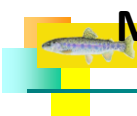


Medicaid's importance in 12 states

Ranked according to AI/AN percentage of states' total Medicaid census

- | | |
|--------------------|----------------------|
| • Alaska 40% | • Arizona 11 % |
| • South Dakota 36% | • Minnesota 4% |
| • Montana 25% | • Idaho 3% |
| • North Dakota 22% | • Washington 2.3% |
| • New Mexico 18.2% | • Oregon 2.5% |
| • Oklahoma 13% | • California ¼ of 1% |

Note: % of spending is less than % of pop. Since AI/AN are less likely to be aged



Medicaid's importance in 12 states

Ranked by total number of AI/ANs enrolled in Medicaid

- 117,000 Arizona 11 %
- 78,329 Oklahoma 13%
- 75,722 New Mexico 18.2%
- 52,000 Alaska 40%
- 36,000 South Dakota 36%
- 24,000 Minnesota 4%
- 25,000 Washington 2.3%
- 21,415 Montana 25%
- 10,000 North Dakota 22%
- 12,169 Oregon 2.5%
- 19,000 California ¼ of 1%
- 4,400 Idaho 3%



Medicaid is critical to nearly every Indian health program

- Even in states like Washington Medicaid likely produces 25% of the revenue of the typical Indian health program.
- Although Medicaid payments for medical care declined in SFY 2008 payments for mental health and dental services increased.
- Medicaid is a bit like insurance for the highest cost claims (HIV/Aids, Diabetes,) since many patients become eligible if they can't pay for the medical expenses.



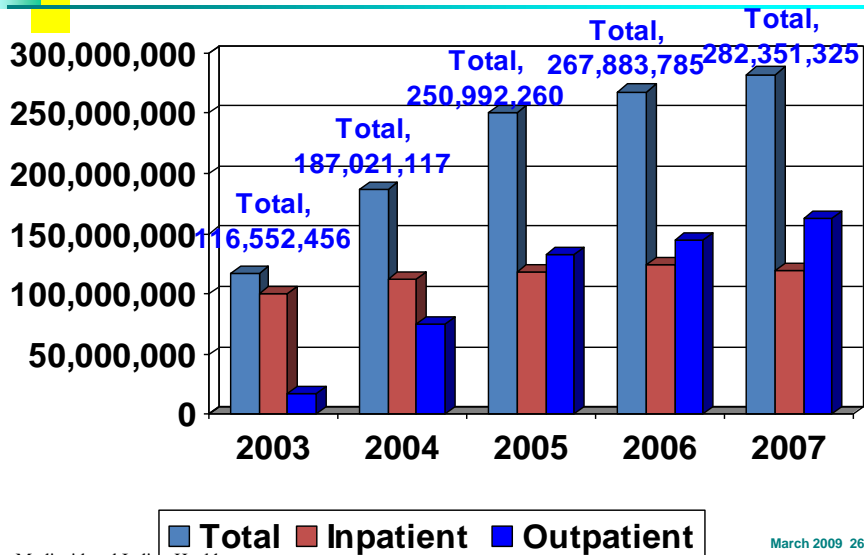
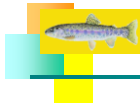
Arizona

- Arizona has the highest total in the nation with over \$575-\$585 million in Medicaid payments for AI/ANs. No estimate of how much to programs and how much to providers.
- 11% of the state's 2007 Medicaid population is AI/AN (117,000).
- 2007 Census estimate of 277,732 AI/ANs results in a 42% Medicaid enrollment rate.
- 4.5% of state's population is AI/AN.

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Growth of Medicaid payments to IHPs in Arizona 2003 to 2007



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AHCCCS (AZ Medicaid) payments to IHPs grew significantly since 2003.

- The 142% overall rate of growth in Medicaid payments to IHPs from 2003 to 2007.
- Overall payments to the state’s IHPs rose from \$116 million in 2003 to a formidable \$282 million in State Fiscal Year 2007. Most are IHS operated; a few 638
- A shift in health care delivery for IHPs (both IHS and 638 programs) is evident in the astounding rise in payments to outpatient (ambulatory) clinics which witnessed an increase from \$16 million in payments in 2003 to \$163 million in 2007!
- \$26.5 million of the 2007 total is payments from Managed Care plans to IHPs.

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New Mexico

- 75,722 AI/AN enrolled in Medicaid
- 18.2% of total Medicaid population is AI/AN
- 10.5% of NM population is AI/AN (191,475)
- \$65 million paid to New Mexico’s Indian health programs
- \$275-300 million estimated overall payments for New Mexico’s AI/ANs.

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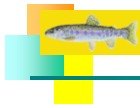
South Dakota, North Dakota

- 36% of SD Medicaid population is AI/AN or 36,355 of total of 101,042 for SFY 2006.
 - 26,081 were children
 - 36% of SFY 1998 were AI/AN –no change
- South Dakota Medicaid program paid over \$171 million in claims for service provided to AI/AN, 26% of total spending.
- North Dakota has $\frac{1}{2}$ the Indian Population of South Dakota, but only $\frac{1}{5}$ the amount of Medicaid.



Montana

- For State Fiscal Year 2005
- 25% of State Medicaid population is AI/AN.
 - 5-6% of state's total population is AI/AN (59,900)
 - 21,415 AI/AN
 - 13,517 children
 - 4,545 adults
 - 2,692 blind/disabled
 - 661 aged
- \$30,701,067 paid to Indian health programs SFY 2005 compared to \$16 million in SFY 2002
- Estimated \$70,000,000 paid to other providers for AI/ANs served by these programs. Montana closely resembles Washington State's payments to IHS and other providers.
- Key to similarity is that both states have similar delivery systems with about 30% of IHS funding for Contract Health Services (compared to 11% IHS average).




Oklahoma

- \$85 million paid to Indian health programs in 2005. Estimated \$200-250 million overall spending for AI/AN to all providers in SFY 2008.
- 78,329 AI/AN Enrolled in Medicaid (June 2008) or 13% of total (599,598), compared to 10% of 1998 total. For AI/ANs
 - 58,107 under age of 18
 - 16,264 19 to 64
 - 3,958 age 65 or older



Oregon


- 2.1% of State's Medicaid Population is AI/AN (12,169) in SFY 2004
 - \$17 million paid to Indian health programs
 - \$20 million paid to other providers for AI/AN
 - \$37.1 million total paid for AI/AN
- Estimated \$50 million in expenditures for 13,067 AI/AN IHS users for Federal FY 2005.



Minnesota

- SFY 2004 \$144 million for AI/ANs
- 27,700 4% of total
- 1% of State Population is AI/AN 55,000
- \$23 million paid (SFY 2004) to Indian health programs

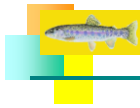
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California

- AI/AN less than ¼ of 1% of State Medicaid Population
- 31,000 estimated patients of Indian health programs
- \$19 million paid to Indian programs in SFY 2007
- Estimated \$40 to \$60 million paid to other providers for these patients.

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Medicaid payment trends

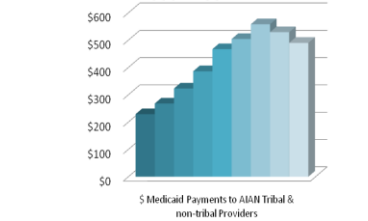
- There are some signs that Medicaid's strong growth of past 15 years is slowing or even stagnating.
- Alaska and Washington state have reported actual decreases in payments for medical care.



Medicaid growth has slowed for some states e.g., Alaska, WA plateau

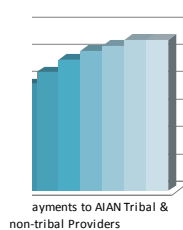
Alaska Medicaid Payments (\$millions)

1999 - 2007



Medicaid Payments (\$millions)

1999 - 2007



■ 1999 ■ 2000 ■ 2001 ■ 2002 ■ 2003 ■ 2004 ■ 2005 ■ 2006 ■ 2007

■ 1999 ■ 2000 ■ 2001 ■ 2002 ■ 2003 ■ 2004 ■ 2005 ■ 2006 ■ 2007




Conclusion: Medicaid and Indian Health Programs

- Medicaid has grown significantly in importance from 1996 to 2008 Typical Indian health program has 25% to 40% of patients bills paid by Medicaid. In 1995 less than 10% of revenues available for health care services were from Medicaid.
 - The more expensive bills are the more likely a patient is eligible for Medicaid. It is the stop-loss program for Indian health.



Conclusions

- In 2008 Medicaid expansion has leveled off in some areas of the Indian Health Service where innovative Tribes pursued Medicaid funding, most noticeably in Washington, Alaska and Oregon.
 - The early leaders in Medicaid collections are now the areas with the smallest increases
 - Likewise, late adopters of Medicaid are now seeing the largest increases in states like Montana, New Mexico, Arizona, and Oklahoma.
 - Some areas still lag far below the average and within some areas some IHS service units lag far below their own areas' average. There is still a need for education and outreach for some programs, but most are well aware of importance of Medicaid funding. Unclear if this is true for Medicare as it was not examined in this study.




Questions raised

- 1. Has the trend of sizable increases in Medicaid spending for AI/ANs for the years 1996-2006 ended?
 - If large increases are over, are some states that were once seeing greatest increases, such as Washington going to see declines in spending as Alaska did?
- 2. What is the cause of recent slowing of increases?
 - Mirrors trend of states Medicaid spending-very low growth in 2005-2007
 - Simply maturation of effort to access CMS programs?
 - Economic development raising incomes?
 - Increased monitoring of tribal-state agreements?
 - Lack of attention to outreach and recertification?
- 3. How secure/stable is Medicaid spending for AI/ANs?
 - Small changes by CMS could result in large decreases in revenues for Indian health programs.
 - Bush Administration supported cost sharing, limiting benefits, restricted payment policies.

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President Barak Obama

- Obama Administration has supported Congressional agenda to provide protections for Indian health programs with new legislation in HR1 and HR2.
 - Prohibition of cost sharing and provisions to protect from inadvertent harm from managed care plans.
 - Prohibiting mandatory enrollment in a Non-Indian Managed Care Entity (MCE)
 - Mandating payment to IHPs when an Indian member of a MCE obtains care at an IHP.
- Provided \$500 million (non recurring) to IHS in stimulus
- \$235 million in FY 2009 budget
- \$400 million in FY 2010 budget.

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End



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CMS MMIS MAX file



- The table on the following chart does not accurately depict spending for our unit of analysis. It overstates the amount paid since many who identify as Indian are not of interest to Indian health programs.
 - However, this varies widely by state. For example, California (and especially New York) probably has many who are listed as AI/AN who are not included in any tribes user population. Montana, may be the other extreme where most of the overall payments are for patients who appear in a tribes user count.
- The **Medicaid Analytic eXtract** (MAX) file could be used as an upward limit for any estimate of how much Medicaid spending is for American Indians and Alaska Natives.
- A further complication when looking at longitudinal data is that it is very likely the reliability of the data has improved over time. It is likely that most of this improvement was between the years 1996 and 2000. Nonetheless caution is advised when interpreting this data for later years as well.
- It is possible that the finding of large increases (especially pre 2000) may, in part, be an artifact of increasing attention to ensuring that AI/ANs are properly identified. Most believe this would increase reported spending.

• See link below to access MAX files.

• http://www.cms.hhs.gov/MedicaidDataSourcesGenInfo/07_MAXGeneralInformation.asp

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Cut or insert? Federal FY 2005 Medicaid total spending on AI/AN (MAX files)

Total is for all AI/ANs (self reported); including those who are not users of IHS funded health programs	STATE	AMERICAN INDIAN/ ALASKA NATIVE
	AZ	\$584,681,048
	AK	358,465,313
	NM	318,117,309
	OK	232,455,215
	SD	156,119,790
	MN	147,195,334
	CA	131,321,840
	WA	119,574,669
	MT	101,693,491
	ND	59,437,651
	OR	56,865,613
	ID	22,190,676

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