

THE INDIAN HEALTH SERVICE

Evaluation of the RPMS EHR Training and Deployment Program



Superior Health Information Management
Now and for the Future

Really Powerful at Measuring Stuff

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EHR Training and Deployment
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Indian Health Service



“Lessons Learned”

Principles, Practices & Techniques (Clinical Applications – Literature – VHA)

- **Medical Informatics**
 - Clinical Applications
 - Support via Listserv and Helpdesk
- **Total Quality Management**
 - Team
- **Project Planning**
 - Business Process and Systems Alignment
 - Onsite Implementation
- **Adult Education**
 - Evaluation
 - “Water Torture”

VA & IHS MOA

Special thanks to.....

- Clayton Curtis
- Vitalia Devlin
- Ann Rega

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Medical Informatics

Medical Informatics

The scientific field that deals with storage, retrieval, sharing and optimal use of biomedical information, data, and knowledge for problem solving and decision making.

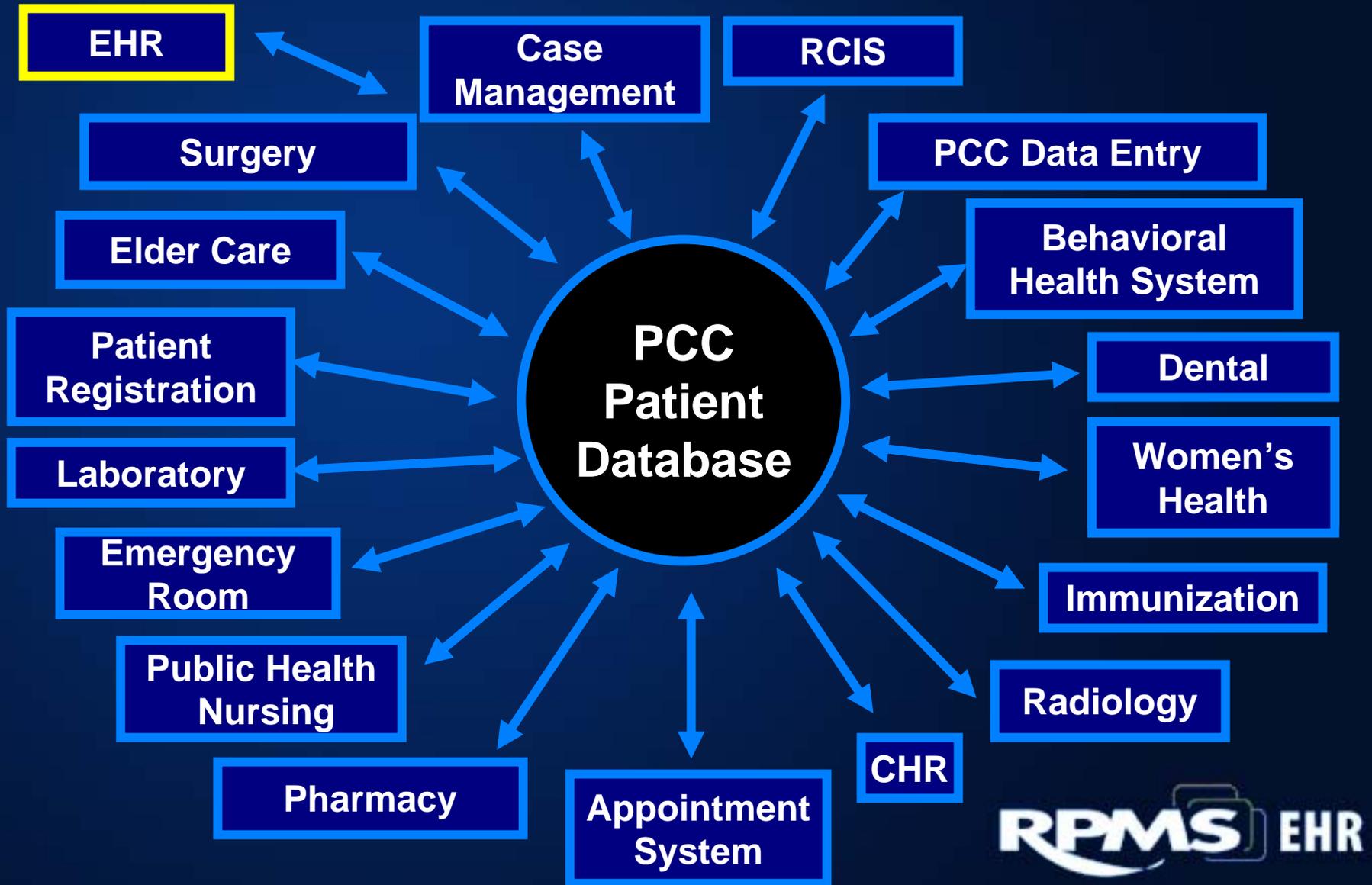
What is an EHR

- Longitudinal Collection of Electronic Health Information
- Immediate Electronic Access to Person and Population-Level Information by Authorized Users
- Provision of Knowledge and Decision Support to Enhance Quality, Safety, and Efficiency
- Support Efficient Processes for Healthcare Delivery

What is an EHR?

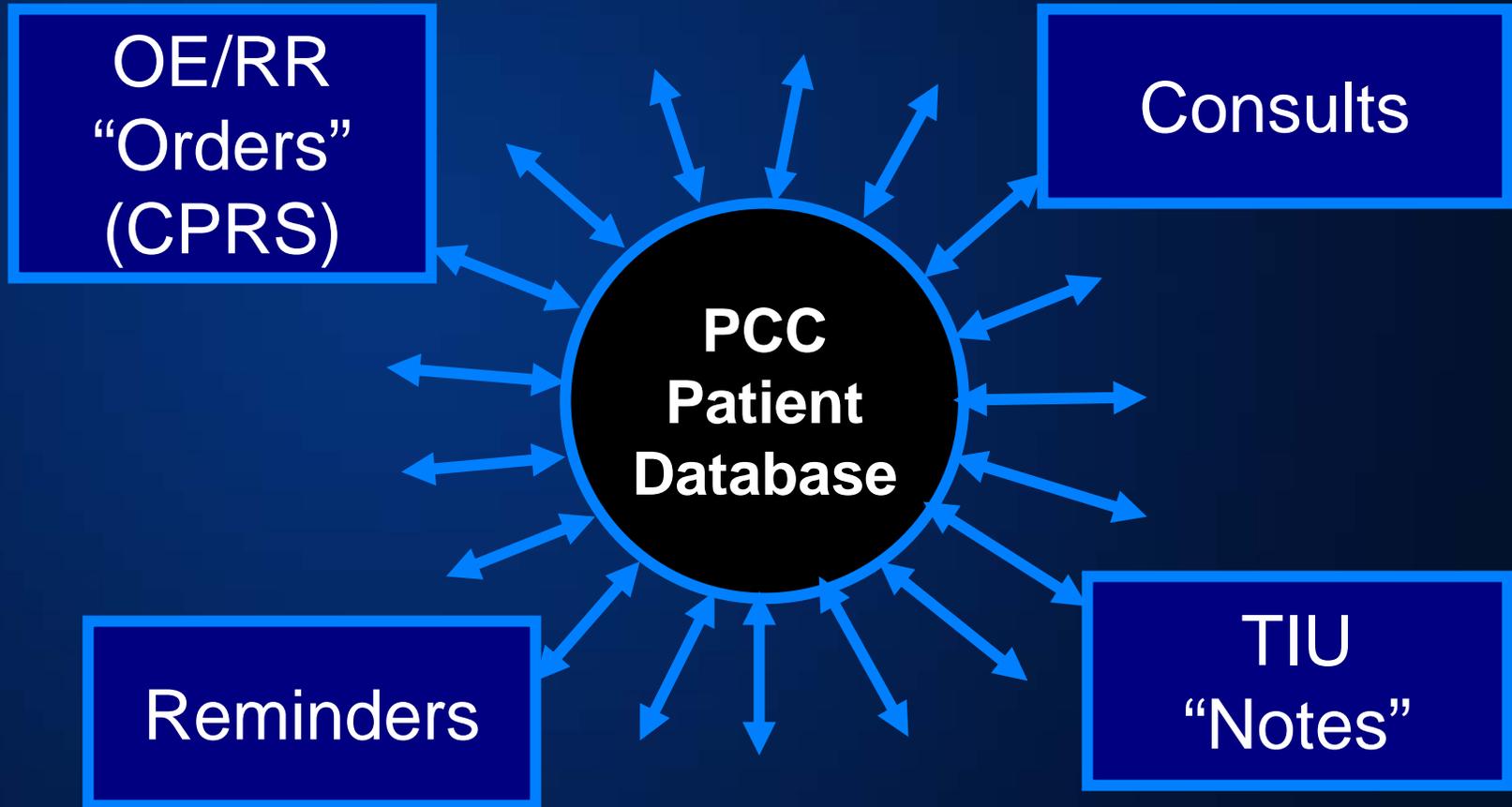
EHR is NOT Necessarily One Single System BUT a Broad Set of Functionalities that may be Provided by One or Many Systems by One or Many Providers

RPMS Integrates Multiple Clinical Systems



EHR Includes Four (4) New Packages

Myth: Does Not Replace RPMS



Medical Informatics

- RPMS “inputs” and “outputs”
- PCC Documentation Principles
- Management of Information
- Computer-Based Patient Record Systems
- “Optimize” RPMS Packages
- HIMSS
- JCAHO and AAAHC
- Delineate Document and Source of Legal Medical Record (LMR)

Journey Not a Destination (Optimize RPMS Packages)

Before RPMS EHR

- Point of Care (POC) Lab
- Point of Service Documentation of Immunizations
- Community Health Representatives (CHR) Package Optimization
- Behavioral Health GUI
- Referred Care Information System (RCIS)

“Journey not a Destination” (It’s Never Over!!!)

- Radiology Reports in Radiology Package
- Adverse Tracking Package
- “Paperless Refill” & “Coding Queue”
- IHS Patient Chart (RCIS and BH GUI)
- Diabetes Management System
- Women’s Health
- Scheduling (PIMS)
- Interfaces (POC Lab, Omnicell® , Pyxis®)

“Journey not a Destination” (It’s Never Over!!!)

- RPMS EHR
- Reminders
- Vista Imaging
- Pharmacy Signature Capture
- IM Consent
- Reference Lab Interface
- GUI Scheduling Package
- E-MAR (Inpatient)
- BCMA (Inpatient)
- ...and Don’t Forget all the Patches and Package Updates

Project Management and Total Quality Management

Critical Success Factor

Creating the Vision

- Vision Communicates How EHR Will Function in Healthcare Environment and How Will Improve Patient Care and Operations
- Vision Helps Ensure Everyone is Moving in Same Direction and Should Include:
 - Brief Description of Problem or Opportunity
 - EHR Solution
 - Business and Mission Justification for Solution
 - Measure of Success
 - Implementation Considerations

Critical Success Factor Project Management

- Initiating - Project Charter to Formally Authorize Project
- Planning – Phases, Systems, Teams, Projects
- Executing – Define Roles and Responsibilities (Team)
- Monitoring and Controlling – Change Control Process
- Closure – Document Lessons Learned

Project Planning

“Implementation Issues”

Staffing Requirements and Key Roles

- Project Manager - Day to Day Operations
- Project Owner – Typically Physician Champion
- Clinical Application Coordinator (CAC) – Marriage Counselor between “Techies” & “Funkies” and “Funkies” & “Computer Applications”
- “Super End Users” – Know how every piece fits with every person. Responsible for teaching others.
- AdPACs – Clinical Application Package Administrators
- Management of Information Committee vs. EHR Team
- End Users

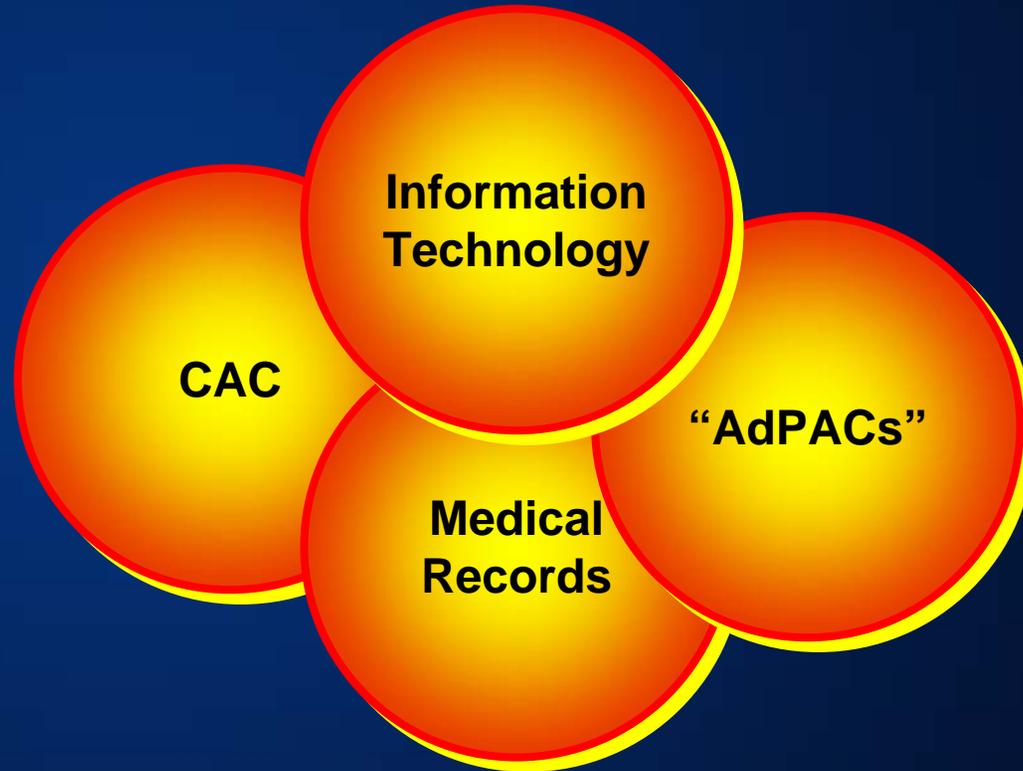
Project Planning

“Implementation Issues”

EHR Team

- Project Manager
- CAC(s)
- AdPACs
 - Pharmacy
 - Lab
 - Radiology
- HIM
 - Data Entry
 - Coding
- Business Office
- Physician Champion
- Nursing
- Site Manager/IT
- Administration
- “CoCoCACAdPACs”
- Management of Information vs. Medical Records Committee

"Crash" Delineate Roles



Conduct Self-Assessment

RPMS Functions Impacting EHR Implementation

- Problem Lists
- Health Summary
- Allergies
- Immunizations
- Ward Order Entry
- Electronic Signature
- Asthma Register System
- Behavioral Health GUI
- Paperless Refill
- Coding Queue
- Radiology Reports
- Emergency Room System
- PIMS (Scheduling)
- Diabetes Management System
- RCIS

Closing EHR Gap

- Business Alignment – Does Function Align with Business Priority of Organization
- Organizational Capacity – Staffing, Focus, Change Tolerance
- Infrastructure – Information Technology
- Interdependence – What must be Considered. For example “POC Testing” and “POC Documentation”

Project Planning “Implementation Issues” Work Flow

- Every system is perfectly designed to yield the results it yields
- Get Rid of Paper
- Look at Existing Workflow and make Electronic
- Use EHR as Tool for Where You Need to Go

Delineate Work Flow

- *Steps or flow of work from one task to the next, creating a process.*
- *Distinguish between clinician/physician workflow verses patient centered workflow. Existing CIS's are built on clinician "tasks".*

Project Planning

“Implementation Issues”

Incorporate Work Flow Design

- Patient Flow
- Work Flow
- Business Process
- PCC Principles for Telephone, Lab Only, Pharmacy Only, Chart Review
- Visit vs. Encounter
- Determines how to best use EHR rather than just computerizing paper process

Project Planning

“Implementation Issues”

Implementation Plan

- Pre-Live Preparation to include RPMS Optimization and EHR Setup
- System Testing & Acceptance
- Phasing and Roll Out
- Go-Live Support
- Post-Live Training and Support
 - Customized to Work Flow
 - Blend “How To” with Policy

Project Planning

“Implementation Issues”

- “Easy Functions” First
- Abstract Information through Optimization of RPMS Packages
- Ongoing Strategy to Manage Paper
- Configure EHR (Corolla vs. Lamborghini)
- Provider Phasing
 - Accepting Providers First
 - Group Providers or Specialties
 - Workflow Implications and Possible Redesign

“Critical Mass”

Simultaneous Deployment

- Function x Function
- Tab x Tab
 - Immunizations
 - Lab Orders
 - Radiology Orders
 - Notifications
 - Stop Filing “Cumulative Reports”
 - Medication Counseling
 - Paperless Refill
 - Coding Queue
 - Consults (Optometry, PT, Podiatry, DM, Nutrition)
 - Problem Lists
- Provider x Provider
- Clinic x Clinic
 - Paperless Refill
 - PT
 - Optometry
 - Podiatry
 - Dieticians
 - Diabetes Educators
 - Dentist (Meds)
 - Behavioral Health to use MH/SS PCC.

Delineate Legal Health Record (LHR)

- **Role of Legal Health Record**
 - Communicate Information
 - Support Reimbursement
 - Improve Health Care
 - Provide Legal Documentation
- **Hybrid LHR = Electronic and Paper**
 - Revise Policy
 - Inventory Sources of LHR
 - Qualify EHR Components as LHR

Delineate Source of Legal Health Record

| Document | Source | EHR |
|---------------|------------------|-----|
| Immunizations | Immunization Pkg | Yes |
| Med List | Pharmacy Package | Yes |
| Lab Results | Lab Package | Yes |
| Notes | TIU | Yes |
| Consent | Signed Consent | No |
| Referrals | Signed Report | No |

IHS Sites Success Factors

- Training Server
- Conducted Lots of EHR Demonstrations
- Catered to Providers
- Received Lots of Support
- Team Approach*
- Administrative Support*
- Cease Printing Health Summaries
- Cease Printing Cumulative Lab
- Networking
- Function by Function (Tab by Tab)
- Involve Nursing
- Support Providers

IHS Sites Success Factors (continued)

- Executive Leadership involved from DAY 1
- HIM & BO engaged early in process
- Workstations everywhere
- Train, Train, Train – department specific
- Implement gradually by function
- Liberal use of Quick Orders
- Identify who enters GPRA/CRS data and where
- Regular refreshers & updates
- Strong CAC support (Interpersonal Skills & Tough Skin)
- Active QI program

IHS Sites Opportunities for Improvement

- Teach Providers “Personal Preferences”
- Troubleshooting Citrix® or Wireless at same time
- Work with Providers on Templates
- Too Many Simultaneous Projects
- More CACs from Different Disciplines
- More Hardware
- Involve HIM and Business Office
- Train “Super End Users”
- Frequent Meetings and Increase Communication
- Automate MARS Months before Inpatient EHR

Gartner (and other) studies show that the following are major factors in the failure of large project implementations to meet objectives:

- Lack Executive Support.
- Lack of Business Involvement and Ownership.
- Unwilling to Commit Necessary Resources.
- Underestimate the Organizational Change Management around the New Software.
- Focused on Rapid Implementation Rather than on Business Payback.
- Unrealistic Product Expectations.

Gartner (and other) studies show that the following are major factors in the failure of large project implementations to meet objectives:

- Over Reliance on External Specialists.
- Vendor Failure to Deliver on Commitments
- Too Many Bugs, Fixes, Release Upgrade Changes.
- Product Functionality Weak in Various Areas.
- Product Value Never Realized Due to Mis-aligned Functionality and Workflow process.

Delineate Source of Legal Health Record

| Document | Source | EHR |
|---------------|------------------|-----|
| Immunizations | Immunization Pkg | Yes |
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HOME

ABOUT I H S

SITE MAP

HELP

Information
Technology
Sources

RPMS EHR

Electronic Health Record



RPMS EHR Home

Clinical
ReviewTechnical
Review

Walk Through

Preparation -
Documents and
ResourcesRPMS EHR Training
CoursesClinical Application
Coordinator (CAC)

Current Status

EHR Program
Contacts

EHR Preparation - Documents and Resources

This page contains links to documents and other resources that should be helpful to your facility and staff while preparing for EHR and after going live. These links will be updated as each document is revised.

Getting Started:

- REQUIRED! [EHR Site Survey](#)** [DOC-116KB]
 If your site is considering the move to EHR, please download and complete this survey. Instructions for submission are included with the survey. This document will help with the self-assessment process, and will provide the EHR Program with valuable information about your facility. Once received by the Program, our staff will begin to work with you toward EHR implementation. **Submission of this document to the EHR Program is required for entry into the EHR queue.**
- REQUIRED! [EHR Site Tracking Record](#)** [XLS-38KB]
 After you complete and return the Site Survey, use the Tracking Record to track your site's progress through the implementation process. The EHR Program will request periodic updates from your site, in order to be able to coordinate the activities of national staff involved with training, software installation, and other support. **Periodic submission of this document to the EHR Program is required for progression along the EHR queue.**
- REQUIRED! [EHR Cost Survey](#)** [DOC-44KB]
 Nationwide implementation of EHR is a very high profile activity, and the Office of Information Technology is required to report to DHHS and OMB on EHR progress and costs. In order to get reasonably accurate information on implementation costs at the local level, EHR sites are requested to complete and return this survey, preferably around the time they go live with EHR.
- [EHR Project Schedule for Sites](#)** [Microsoft Project-403KB]

EHR CONNECTION

From the publishers of Electronic Health Records Briefing

Microsoft Outlook Web Access - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address https://hqwebmail.ihs.gov/exchange/David.Taylor/Inbox/Articles/RE:%20EHR%20Connection%204_xF8FF_10_xF8FF_06.EML/#tip

Search Mail IM Allowed Yellow Pages Maps Shopping Quotes Weather Movies

Reply Reply to all Forward Help

To help protect your privacy, links to images, sounds, or other external content in this message have been blocked. [Click here to unblock content.](#)

From: Hays, Howard (PIMC) Sent: Mon 4/10/2006 10:52 AM
To: Moore, Catherine A.; Cullen, Theresa (OIT-Tucson); Taylor, David R (CIHA)
Cc:
Subject: RE: EHR Connection 4/10/06
Attachments:

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HEALTHCARE DELIVERY

E-prescriptions, online visits, lab-result viewing, and appointment scheduling will soon be available to some CIGNA HealthCare members in California. The health plan is teaming with RelayHealth for the service that will allow patients to use Web visits to consult with their doctors on roughly 145 non-urgent medical symptoms.

Members will go to a personalized site for their Web visit, which will include an interactive interview to send a message to the physician. The site also has an e-prescribing service that automatically screens for drug interactions and an online office where patients can request referrals, receive appointment reminders, and schedule visits.

The service will launch in California in July and will likely expand in 2007 to Arizona, Florida, and the Tri-State/New York metropolitan area.

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2. [Research](#)
3. [Resources](#)
4. [Security](#)

TIP OF THE WEEK

[Get free EHR help from IHS](#)

[Click here](#) to submit a tip.

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TIP OF THE WEEK (4/10/06)

Microsoft Outlook Web Access - Microsoft Internet Explorer

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Address: https://hqwebmail.ihs.gov/exchange/David.Taylor/Inbox/Articles/RE:%20EHR%20Connection%204_xF8FF_10_xF8FF_06.EML/#tip

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TIP OF THE WEEK

Get free EHR help from IHS

If you haven't already visited the Department of Health and Human Services' Indian Health Service (IHS) division Web site for EHR guidance, you are missing out on a valuable—and free—resource.

The federal program for American Indians and Alaskan natives provides a plethora of information, such as an EHR walkthrough in an animated format, a technical and clinical overview, a site survey to help with the self-assessment process, and business process recommendations to complete a self-evaluation.

Go to www.ihs.gov/index_main.asp and click on the EHR link in the resources box.

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SHARE THE INFO

You've been benefiting from our informative e-mail newsletter, so why not pass this resource on to your peers? Sign up a colleague and get \$20 off your next purchase on HCPPro's Healthcare Marketplace.

start | 2 Microsoft Of... | COA | Training Trend S... | 14 Internet Ex... | AOL Search | Go | Unknown Zone (Mixed) | 10:46 PM

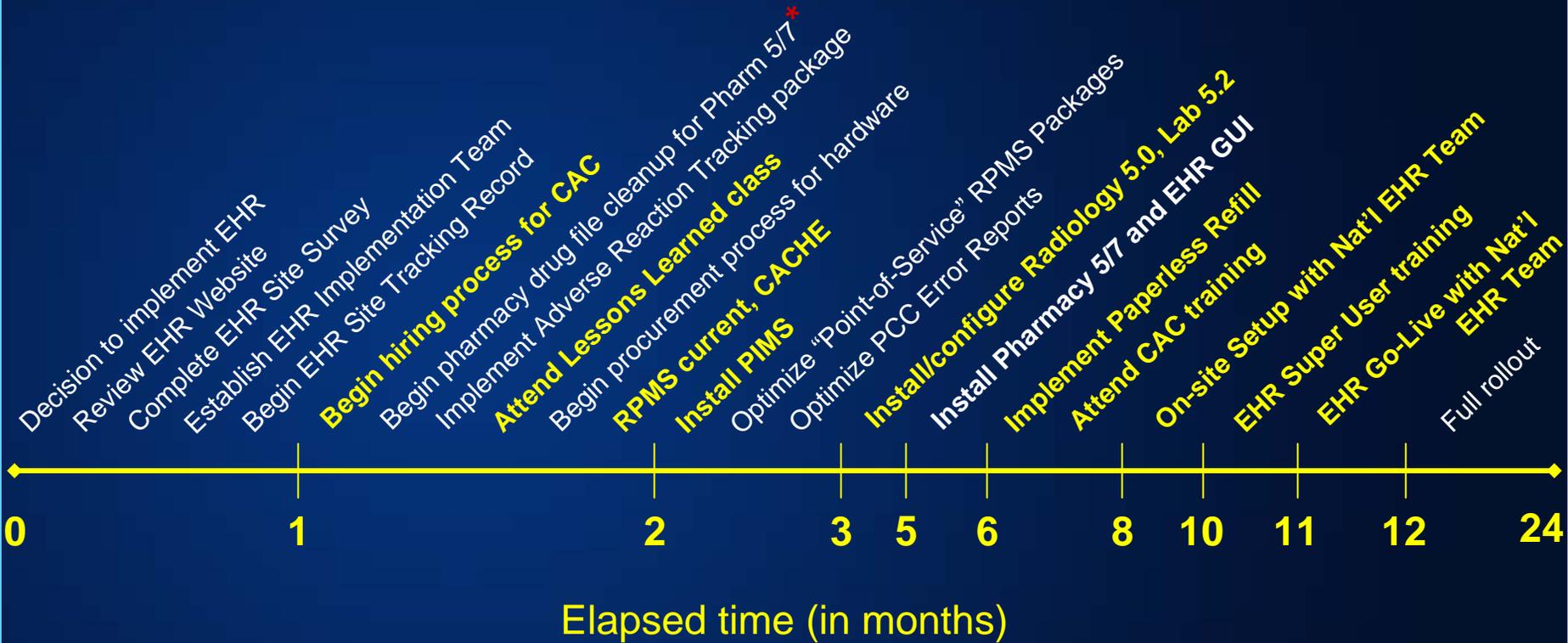
1.EHR Helps Performance at IHS

The Indian Health Service (IHS) is showing that electronic health records are an effective way to help doctors and nurses focus on meeting quality goals and improving patient care. The service's Clinical Reporting System (CRS) gathers data from the electronic records at IHS' 182 clinics and other programs nationwide. Then it compares quantitative goals with actual results. The ability to track performance and monitor it is leading to a change in what's discussed on a regular basis.

The data are available to nurses, doctors and other health professionals at each IHS hospital and clinic so they can compare patient scores. For example, at the Cherokee Indian Hospital in North Carolina, two teams of doctors compared their scores and found that one team had substantially outperformed the other. They found that the better-performing team was using the electronic system more regularly.

For 2005, IHS reported its performance on 20 clinical measures. The service did not meet its goal of 65 percent on only one of those measures — body mass index assessments. However, there was a 4 percentage point increase over the 2004 results.

EHR Planning & Implementation



Please note that this is just a general timeline of how long it might take for your site to implement EHR. Every site will be different, and the amount of time it takes to implement EHR depends upon many factors, including size of the facility, services offered at the facility, current state of RPMS and packages installed and utilized.

* Many sites contract for external resources to complete pharmacy file preparation.



Adult Education

Adult Education

- Project Planning and “Transformation”
 - Project Planning Documents
- “Water Torture”
 - Guides to include “CAC Guide” and “Clinicians Guide”
 - “CAC School” (Implementation Team)
 - Onsite Setup Consultation (Mimics “CAC School”)
 - Onsite EHR Super End User Consultation
 - Onsite “Go-Live” Consultation
 - Advanced Trainings
 - WebEx® Trainings
- Listserv, Tier One and Tier Two Help

OIT Training

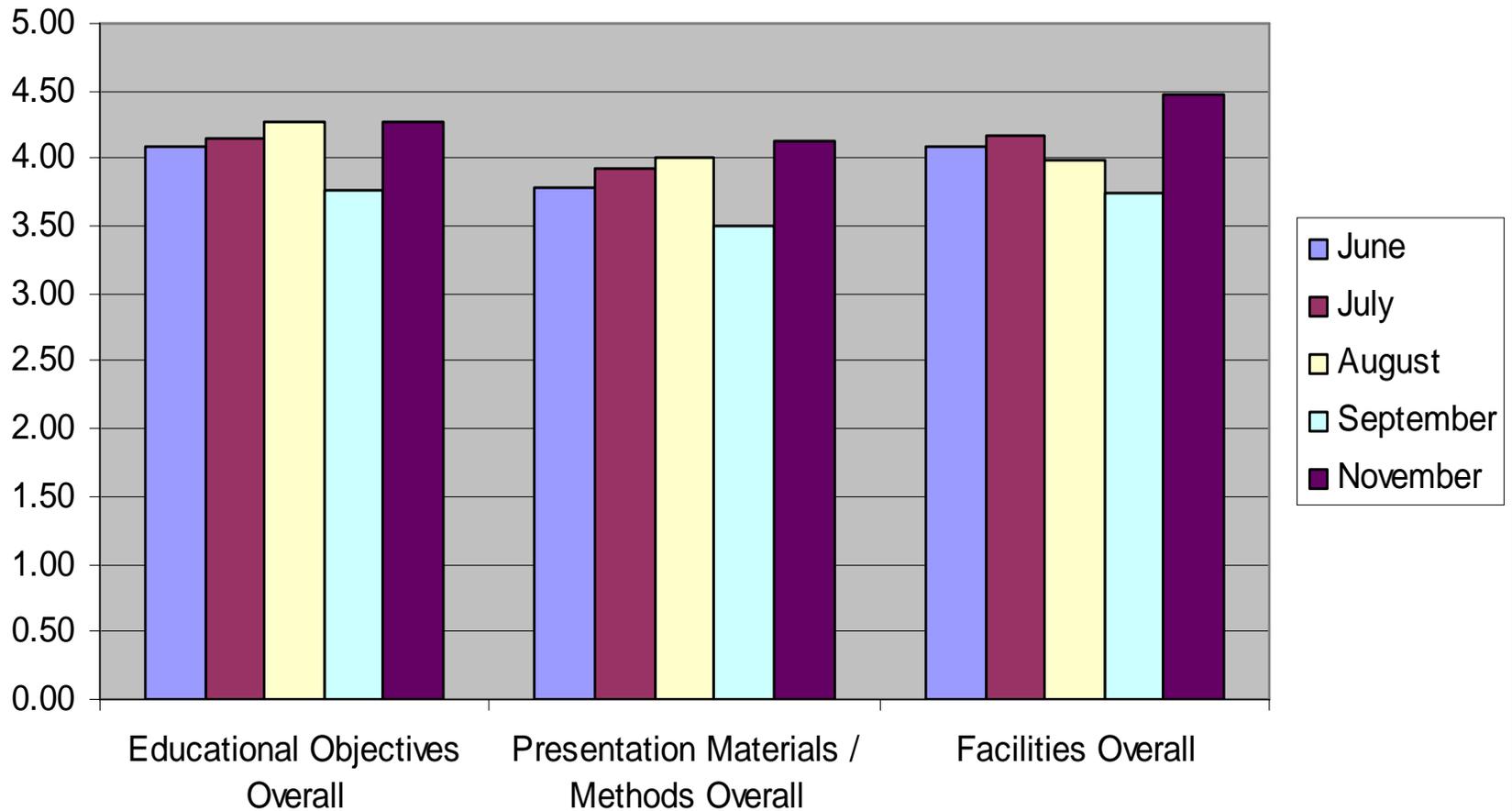
Welcome to the Office of Information Technology (OIT) National Training Schedule. Listed on this page are the current OIT sponsored trainings for all IHS Areas. Please check this site frequently as the class scheduled is updated often.

Click on the Class Title to see a description of the course. To register for a class, click on the Register Now button. If the class is full you will be able to add your name to a wait list by clicking on the Class Title, then click on "Join class wait list" button.

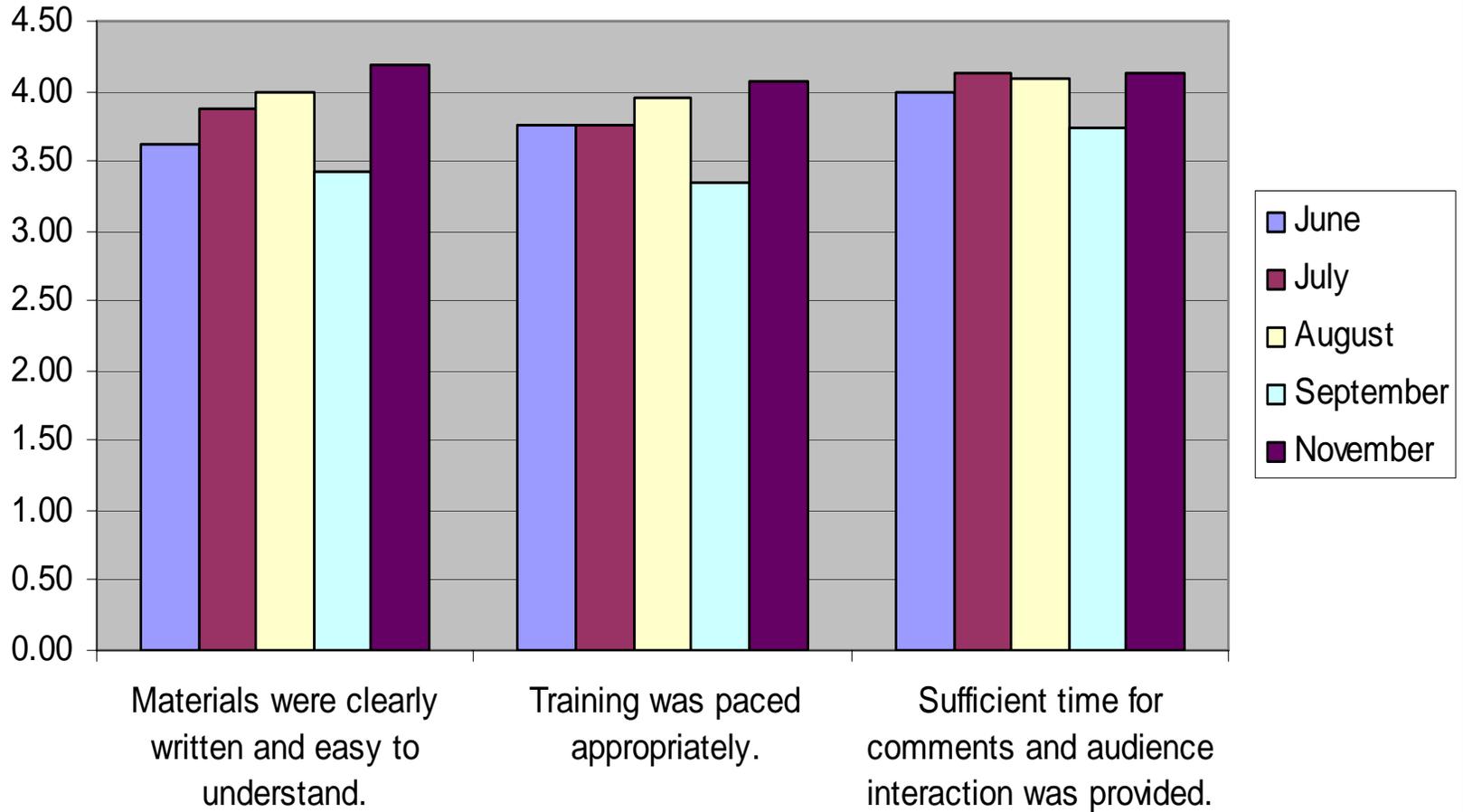
Upcoming RPMS Classes

| <u>Class</u> | <u>Location</u> | <u>Date</u> | <u>Status</u> |
|---|--------------------------|-------------|----------------------|
| <u>Camp EHR</u> | Albuquerque, NM | 06/19/2006 | Request Registration |
| <u>EHR for HIM and Business Office</u> | Albuquerque, NM | 06/21/2006 | Request Registration |
| <u>EHR WebEx: Health Summary Components</u> | WebEx teleconference, NM | 06/26/2006 | Request Registration |
| <u>EHR Super End User</u> | Yakama, WA | 07/05/2006 | Request Registration |
| <u>EHR End User - Nurses</u> | Yakama, WA | 07/05/2006 | Request Registration |
| <u>EHR End User - HIM/BO</u> | Yakama, WA | 07/06/2006 | Request Registration |
| <u>EHR CAC & Implementation Team (Set Up)</u> | Phoenix, AZ | 07/10/2006 | Request Registration |

Overall Scores



Presentation Materials / Methods



Facilities



“Most Useful” Training & Consultative Visits

- Hands On
- Networking with People from Other Sites
- Instructors
- Learning How EHR Works During Configuration Process
- Break Out Sessions
- Needs to be Longer!!!

“Opportunities for Improvement” Trainings and Consultative Visits

- Emphasize Roles of Team and Processes
- RPMS Skills Prerequisite
- “Lessons Learned” Prerequisite
- Relate RPMS to GUI
- Appropriate Attendees
- Reduce Idle Time
- More Area Folks to Attend
- Define “Super End User”

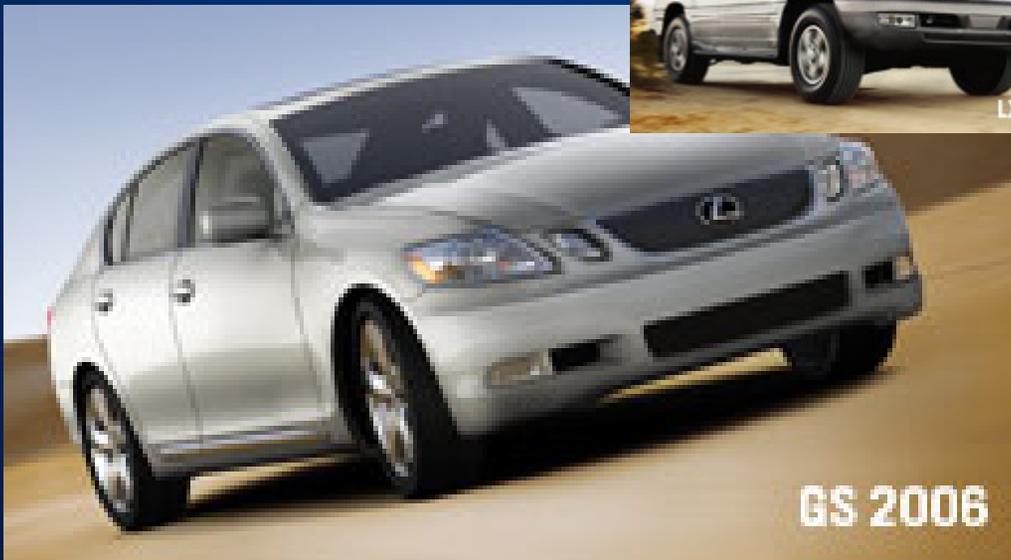
In Summary.....

“Lessons Learned with EHR”

- Standardize...Standardize...Standardize
 - Training and Develop “Guides” (Water Torture)
 - Specialty “Guides” for Inpatient, Emergency Room and HIM
 - On site Consultative Visits
- Evaluate...Evaluate...Evaluate
 - Training, Setup and “Go-Live”
 - Specialty Trainings for Techie, HIM, Inpatient, Emergency Room, Reminders, Camp EHR
- More...More...More
 - Capacity Building - “Conscription”
 - Pay it Forward or You owe us four weeks!!!
 - EHR just another RPMS Clinical Application after National roll out
- Mission of Public Health
 - “Make do, do without, use it up and wear it out”



LX 2006



GS 2006



National EHR Training & Support

- **Lessons Learned – 1 day overview**
 - Warm Springs, Cherokee, Fort Defiance, Lame Deer
 - Send 3-4 key leaders
- **CAC/Implementation Team training**
 - 1 week in Albuquerque
 - Send 4-6 key players
- **On-Site EHR Setup**
 - Business process review, EHR software configuration
- **Various specialty training sessions**
 - Techies, HIM, advanced CAC, etc.
- **Periodic web-based update sessions**

Shared EHR Training & Support

- Activities transitioning from National to Area
- On-Site EHR Setup (usually National)
 - Some Areas may elect to conduct Setup sessions
- Super End-User Training
 - Visiting clinician, 3 days intensive EHR training
- Go-Live assistance
 - Hand-holding, troubleshooting ~1st week of go-live
- Other assistance depending on local needs
- *National program can assist with identifying faculty for these events as Area builds capacity*

Why an Area EHR Team?

- EHR needs to be sponsored by Programs and driven by clinicians
- RPMS is no longer just a clinical data repository – it is the:
 - Medical record system
 - Pharmaceutical management system
 - Clinical quality improvement system

Elements of Area EHR Support

- Contact point for national EHR Program
- Area CAC
- IRM infrastructure
- Area Pharmacy consultant
- Area HIM consultant
- Area Business Office consultant
- Additional expertise – Laboratory, Radiology, other
- Consultants not necessarily at Area Office, but clear delineation of Area support responsibility

Take Care of your Sponsors (NASCAR)



Agency for Healthcare Research and Quality

Quality Research for Quality Healthcare

NATIONAL INSTITUTES OF HEALTH

National Heart, Lung, and Blood Institute

NATIONAL CHOLESTEROL EDUCATION PROGRAM



Hypertension Management: Latest Recommendation



Measuring the Quality of America's Health Care



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THE INDIAN HEALTH SERVICE

Questions and Discussion



Superior Health Information Management
Now and for the Future

Really Powerful at Measuring Stuff