Health Information Technology in the IHS

- Health Information Technology has been an essential and integral part of the IHS delivery system for many years as we seek ways to provide quality and efficient patient care.
- The IHS has developed the Resource and Patient Management System (RPMS) Electronic Health Record (EHR) based on the needs of our clinicians and fiscal responsibilities.
- Now Meaningful Use has Challenged us and Focused Priorities for further EHR improvement. But, we are on track to have a CERTIFIED EHR by March.
- The Priorities for the IHS RPMS-EHR improvement to meet Meaningful Use are described in the following slides:

Priority 1 - Billing

- The IHS operations resources are a combination of Federally appropriated funds and third party collections.
- The IHS Resource and Patient Management System (RPMS) practice management applications are used to maximize collections for federal, tribal & urban users with the following applications:
  - Patient Registration
  - Admission, Discharge, Transfer
  - Scheduling
  - 3rd Party Billing
  - Accounts Receivable
  - Pharmacy Point of Sale
Priority 2 – HIE and Interoperability

- To meet Health Information Exchange requirements, IHS is developing a national gateway with Master Person Index & web viewing interface
- IHS is testing a Continuity of Care Document (C32) extract from RPMS
- Pilot production testing is being coordinated with the New Mexico HIE and will start roughly 90 days after the signing of the Data Use and Reciprocal Support Agreement (DURSA)
- Issues remain about privacy and sharing of data

Priority 3 – EHR

- IHS has been using elements of an electronic medical record (RPMS) for over 25 years
- Fully capable RPMS Electronic Health Record (EHR) was released in 2005 & deployed nationwide
  - The RPMS EHR is in use at 247 outpatient facilities, including Alaska village clinics
  - The RPMS EHR is deployed in 16 inpatient facilities
  - Telehealth applications including the VA’s Vista Imaging system implemented at 78 sites
- Quality measurement has always been included in the EHR tools for GPRA and now is part of Meaningful Use

Priority 4 – Ensuring IT Security

- Security is a never ending challenge in a large distributed system
- All RPMS Data to be encrypted for both “Data-at-Rest” and Data in Transition
- Encrypt RPMS data bases via Intersystem’s Ensemble
- CITRIX VPN solution for off-site users
- IHS IT Security Program developed and implemented a 3-year plan to meet increasingly sophisticated attacks
- Encryption of data at-rest and in-motion
- Protection of personally identifiable information
Priority 5 – Clinical Decision Support

- RPMS EHR and iCare offer numerous types of Clinical Decision Support, including order checks, Clinical Reminders, and Best Practice Prompts
- IHS RPMS will meet the CDS requirements for Certification and Meaningful Use
- Innovative options for the next level of CDS are being explored with colleagues in DoD and VHA.

Priority 6 – Meaningful Use Deployment

- Additional Support has been Contracted for Area support for MU and integration of MU requirements with Improving Patient Care (IPC) initiative
- Collaboration of IHS’ MU Team, EHR Deployment Team and IPC with NIHB REC to form Indian Country MU Initiative

Priority 7 – Workforce Development

- IT Workforce Development Project
  - IHS is partnering with American Indian Higher Education Consortium, Navajo Community College, and NIHB REC for HIT certificate to degree programs to meet IHS workforce needs.
  - NIHB Regional Extension Center (NIHB REC)
    - Collaborating with NIHB REC on HIT workforce training requirements throughout Indian Country.
Priority 8 – Telemedicine Coordination

Infrastructure
- The Federal Communication Commission’s "National Broadband Plan" identifies critical needs in the Indian Health Service network
- Plan recommends $29 million per year to upgrade the I/T/U Network
- Ongoing planning and resource review of needs for telecommunication infrastructure
- Collaborations and partnerships with other federal agencies and departments
  - Inclusion of telehealth in new MOU between IHS and Veterans Health Administration
  - Participation in NIH and HHS mHealth collaboratives
- Ongoing communication with FCC concerning national broadband infrastructure and Indian health needs

Patient Communication

- Patient Education
- Health Communications Tools
- Self-Management Support
- Access to Health Information (examples)
  - Personal Health Record
  - Patient Wellness Handout

Personal Health Record (PHR)

- Integrates with Master Patient Index (MPI)
- Aligns with MU requirements to display pt medications, recent lab results, allergies, and problem list
- Requires in person authentication to create an account
Patient Education

- Adding “readiness to learn” to patient education code string
- New patient education code updating process developed
- Revising the IHS patient ed websites
- Updating education related Health Factors
- Developing and updating patient education handout database to align with patient education codes
- Initial discussions on partnering with the National Library of Medicine to develop an info button on the EHR to access patient education handouts

The Future - Collaboration

- Cloud Computing and Virtualization
- Practice Management
- Extensible Data Warehousing
- Privacy and Security: Who owns the data?
- Telemedicine
- Mobile Health/ Social Media
- GIS
- Population Health: Early disease surveillance and notification
- Clinical Decision Support

In Closing:

- Attaining Meaningful Use is driving technology transformation within the Indian Health Service. Although the IHS has been using electronic health records for over 25 years, Meaningful Use is targeting efforts for improvement in computer-based provider order entry, e-prescribing, clinical decision support, and health information exchange.
- The IHS will continue to improve the integration of health care delivery and information technology aided by the requirements of Meaningful Use and certification.
- Questions?