

Master Patient Indexes and RHIOs

Jac Davies

Inland Northwest Health Services

Spokane, Washington

Overview

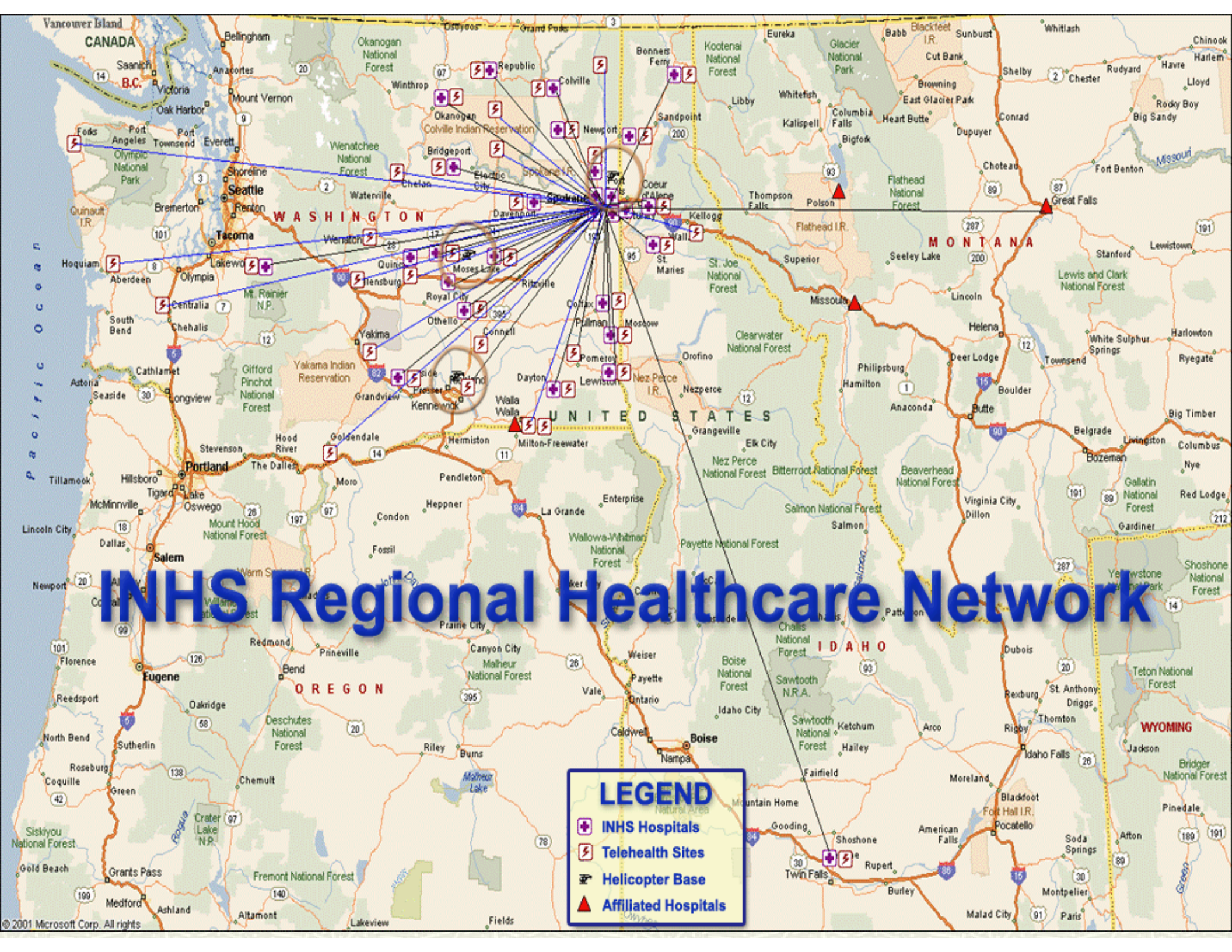
- # Description of INHS and NwRHIO
 - # Use of an MPI in INHS
 - # Use of an eMPI in a RHIO
 - # Summary
-

Inland Northwest Health Services

- INHS is a not-for-profit 501(c)3 corporation, owned by the hospitals in Spokane and serving residents of WA, ID, MT, OR and Canada. Our role is to:
 - Improve clinical outcomes through information access for physicians, hospitals, clinics and other health providers
 - Act as the custodian for a regional clinical data repository
 - Maintain strict data structures and standardization to insure ability to share and compare data
 - Leverage collaborative assets to control costs
 - Utilize advanced systems to increase patient safety
-

Scope of System

- 34 primarily independent hospitals, with over 2500 beds, participating in an integrated information system
 - More than 20 clinics receiving hospital, laboratory and imaging data via standard electronic messages
 - More than 400 physician practices able to view hospital, laboratory and imaging data via a virtual private network.
 - More than 225 physicians accessing data wirelessly in hospitals via personal digital assistants
 - 65 hospitals, clinics and public health agencies connected to the region's telemedicine network
-



INHS Regional Healthcare Network

LEGEND

- INHS Hospitals
- Telehealth Sites
- Helicopter Base
- Affiliated Hospitals

Governance

In 1997 a group of physicians and other health care providers in Spokane met to discuss collaborative health IT projects. That group became the Inland Northwest Community Health Information Project (INCHIP), which was the predecessor to the Northwest Regional Health Information Organization (NwRHIO).

NwRHIO Governance

- # The INCHIP has been filling the governance role:
 - Advisory and decision-making body on community-wide health information standards and processes
 - Voluntary coalition, with members meeting regularly to discuss and make recommendations and decisions
 - Governed by Board of Directors with physician, non-physician, and community representatives
 - Obtain agreement on key issues, i.e. data exchange processes and standards
 - # A new Board specifically for the NwRHIO may be established
-

NwRHIO Members

- # Inland Northwest Health Services
 - # Pathology Associates Medical Laboratory
 - # Inland Imaging
 - # Community Health Association of Spokane
 - # Rockwood Clinic
 - # Group Health Cooperative
 - # Spokane Regional Health District
 - # Panhandle Health District
 - # Multiple Physician Offices and Clinics
-

INHS MPI

- Meditech hospital information system used in all participating facilities
 - Approved hospital personnel are allowed to add new patients to the system
 - Seven step query process, using increasingly granular information to determine whether new patient matches existing patient (combinations of first name, last name, age, sex, birth date, and SSN)
 - If no match, new patient is entered and an MPI is assigned
 - If match, patient information and existing MPI is returned to hospital personnel
-

INHS MPI

- # A common Meditech-assigned MPI is used for all facilities on the network – each facility has it's own medical record number for a patient, but these are all linked to a system-wide MPI
 - # That MPI links each patient's records throughout the system, allowing clinicians at one facility to access clinical information from any other facility
-

INHS MPI

- When new facilities are added to the network, INHS staff run a pre-match to determine whether any patients in the new facility match any of those in the regional hospital database
 - Matches must be exact in order for the new facility's medical record number to be linked to an existing Meditech MPI
 - If there is not an exact match, the new facility's staff must go through the formal "add" process in Meditech
-

INHS MPI

- INHS has successfully mapped its data to external organizations using a process similar to that described for new hospitals on the INHS network
 - We have also established a real-time query process for one external organization, using the eMPI Query set of HL-7 transactions
 - The query process allows the external organization to determine if their patient exists in Meditech, giving the operator enough information to decide whether it's a true match
-

Matching Issues

- # Matching between Meditech and other systems requires certain information (date of birth, sex, SSN). Some organizations, especially laboratories, may not have this available.
 - # Duplicate records are often a problem in individual organizations. If they attempt to match with and add records to other databases, duplicates will proliferate throughout the system.
-

Using eMPIs in RHIOs

- # The ability to accurately and quickly identify patients is critical to the success of a RHIO
 - # Electronic record exchange cannot happen without first identifying the patient
 - # Because of the sharing of records, each organization's record-keeping decisions and processes can impact all the other organizations in the system
-

Using eMPIs in RHIOs

- # Each organization has some kind of medical record number for tracking a patient in their facility(ies)
 - # At the community/regional level there are two options:
 - Have all organizations agree to use a single identifier as their medical record number
 - Map each organization's medical record number to a single community identifier
-

Using eMPIs in RHIOs

- # Most likely approach – joint purchase of a commercial product that would assign a community MPI and link that to institutional medical record numbers
 - # Cost and scalability
 - How do you determine fair pricing for a product that serves multiple organizations across a region?
 - How do you assure that the product and process are adequately scalable, when the final scale is completely unknown?
-

Summary

- # Would a unique patient identifier simplify electronic information exchange? – Yes
 - # Is a unique patient identifier necessary to establish and maintain community-wide electronic information exchange? -- No
-

Summary

■ Necessary elements for use of MPIs in RHIOs:

- Agreement on identification processes
 - Agreement on matching processes
 - Agreement on management of duplicates
 - Tools for querying existing records and assigning a common MPI
 - Trust
-

Personal Story

- # Merger of my credit history with someone else's by Equifax Credit Reporting agency
 - # Shared Data Elements:
 - Last Name
 - Similar Sounding First Name
 - Address (at one time)
 - # Unique Data Elements:
 - Gender
 - Birthdate
 - SSN
 - Mortality status
-



Thank you

Jac Davies
Daviesjc@inhs.org

