



eHEALTH INITIATIVE

Real Solutions. Better Health.

Connecting Communities Workgroup

**Utah & Washington HIE Use
Cases**

July 23, 2013

2:00 – 3:00 pm ET

Reminder

*Please mute your line
when not speaking*

(6 to mute, *7 to unmute)*



Reminder

This call is being recorded



Agenda

- Welcome and introduction
- Data Exchange Survey
- Utah Department of Health
 - Jeff Duncan, Public Health Informatics Program Manager, Utah Dept. of Health
 - Deepthi Rajeev, Medical Informaticist, HealthInsight
- OneHealthPort (WA State HIE)
 - Rick Rubin, CEO, OneHealthPort
 - Sue Merk, Vice President, Business Development, OneHealthPort
- Q&A
- Upcoming Events



Data Exchange Survey

- Currently in the field
- HIEs can complete the survey via email link or <https://www.surveymonkey.com/s/B85F6VH>
- Other organizations should send the survey to any clients active in health data exchange



Workgroup Update

- Whitepaper on HIE governance/interoperability consortiums is almost complete
- HIE Innovations Exchange – begin compiling examples of innovative data exchange use cases/functionalities to complement other materials on eHI website



Design and Development of the Utah ePOLST: an Electronic End-of-Life Care Registry

Jeff Duncan, MS—Utah Department of Health
Deepthi Rajeev, PhD—HealthInsight



Outline

- Background on end-of-life care and POLST paradigm—Deepthi
- Software development process and current status—Jeff
- ePOLST video
- Questions

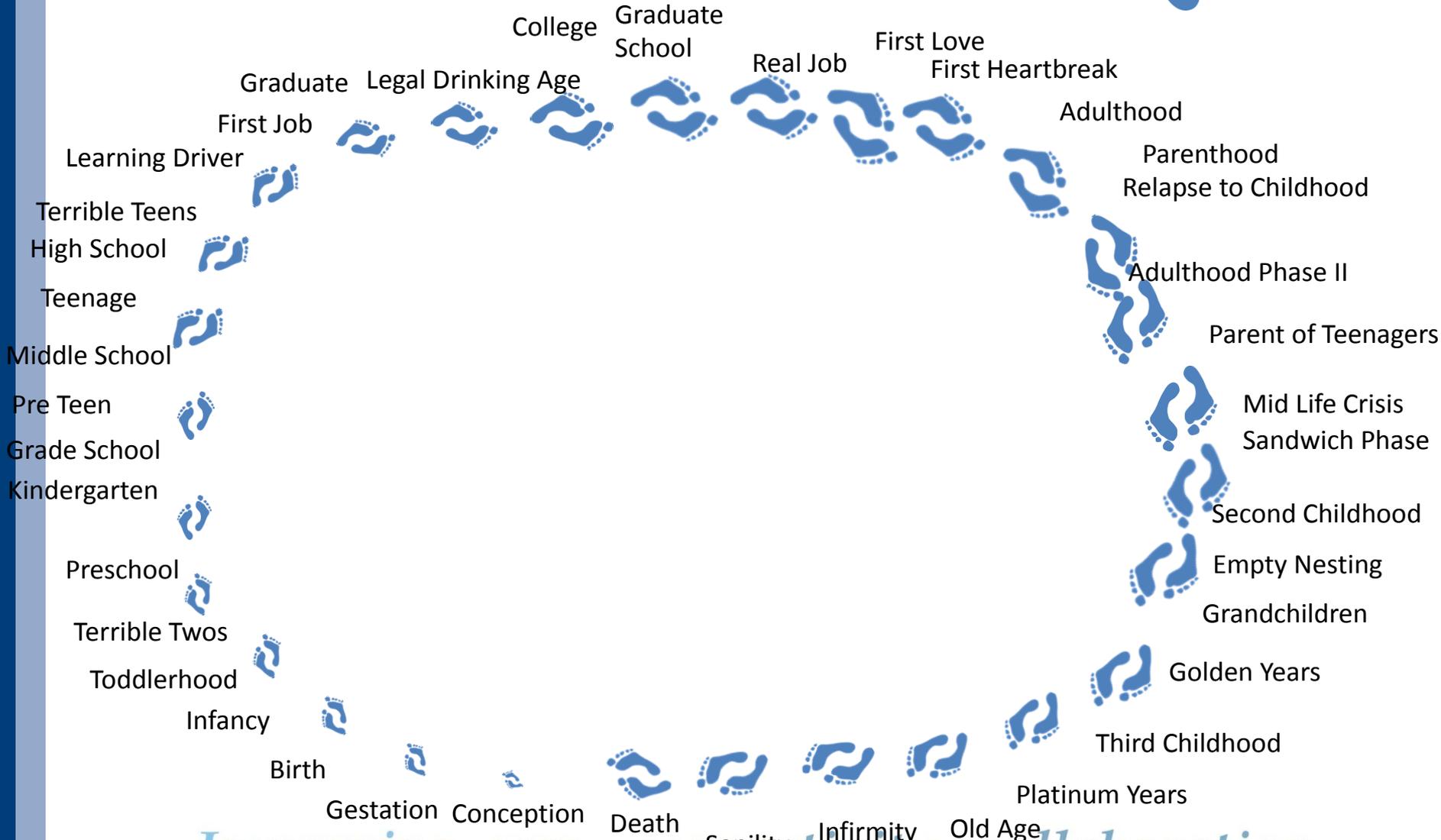


Background

- US Life expectancy is increasing (prediction for 2050: 79.4 and 83 years for men and women)
- Causes of death no longer infectious diseases
 - Heart disease and cancer
- Increased demand for palliative and end-of-life care services



Phases of Life



Improving care • connectivity • collaboration

Discussing Death



- Immortal
- Denial
- Distant Acceptance
- Acceptance
- Planning
- Preparation
- People die
- Where they die
- What happens before they die
- How can people get the death they want
- Resources



leaving  well

living well through the end of life

<http://leaving-well.org/>



POLST Paradigm

- Proposed by Oregon in 1991
- Translates patient's EOL care wishes into medical orders
- Endorsed by 15 states
 - In Utah: POLST forms are authorized under the Life with Dignity Orders under Utah Law § 75-2a-106
 - 32 states are in process of developing POLST programs
 - A tool to initiate the EOL care conversation between providers and patients (and families)



Improving care • connectivity • collaboration

POLST vs. Advance Directives

POLST	Advance Directives
Patients with life-threatening conditions or who are frail	For anyone 18 years or older
Requires the authorization from a healthcare provider to be considered a legal document	Does not require authorization from a healthcare provider
Specific orders for current treatment	General preferences for future treatment



Paper POLST Form-1

Utah Department of Health
Bureau of Health Facility Licensing, Certification and Resident Assessment

Physician Order for Life Sustaining Treatment Utah Life with Dignity Order Version 2 – 9/09

State of Utah Rule R432-31
(<http://health.utah.gov/hflcra/forms.php>)

This is a physician order sheet based on patient wishes and medical indications for life-sustaining treatment. Place this order in a prominently visible part of the patient's record. Both the patient and the physician must sign this order (two physicians must sign if the patient is a minor child). When the patient's condition makes this order applicable, first follow this order, and then, if necessary, contact the signing physician.

Physician's Name:

Physician's Phone:

Last Name of Patient:

First Name/Middle Initial:

Date of Birth:

Effective Date of this Order:

(IF NOTHING IN A SECTION IS CHECKED, CAREGIVERS SHOULD PROVIDE THE FULLEST TREATMENT DESCRIBED IN THAT SECTION UNLESS THAT TREATMENT DIRECTLY CONFLICTS WITH A TREATMENT CHECKED IN ANOTHER SECTION)

Section A
Check one

Treatment options when the patient has no pulse and is not breathing:

Attempt to resuscitate Do not attempt or continue any resuscitation (DNR)

Other instructions or clarification: _____

Paper POLST Form-2

<p>Section B Check one</p>	<p>Treatment options when the patient <u>has a pulse and is breathing</u>:</p> <p><input type="checkbox"/> Comfort measures only: Oral and body hygiene; reasonable efforts to offer food and fluids orally; medication, oxygen, positioning, warmth, and other measures to relieve pain and suffering. Provide privacy and respect for the dignity and humanity of the patient. Transfer to hospital only if comfort measures can no longer be effectively managed at current setting.</p> <p><input type="checkbox"/> Limited additional interventions: Includes care above. May also include suction, treatment of airway obstruction, bag/valve/mask ventilation, monitoring of cardiac rhythm, medications, IV fluids. Transfer to hospital if indicated, but no endotracheal intubation or long-term life support measures.</p> <p>Other instructions or clarification: _____</p> <p>_____</p> <p><input type="checkbox"/> Full treatment: Includes all care above plus endotracheal intubation, defibrillation/cardioversion, and any other life sustaining care required.</p> <p>If necessary, transfer to (hospital name): _____</p> <p>Other Instructions or clarification: _____</p> <p>_____</p> <p>_____</p>
<p>Section C Check all that apply</p>	<p>Antibiotics: (Comfort measures are always provided)</p> <p><input type="checkbox"/> No antibiotics</p> <p><input type="checkbox"/> Antibiotics may be administered</p> <p>Other Instructions or clarification: _____</p> <p>_____</p>

Paper POLST Form-3

Section D Check all that apply	Artificially administered fluid and nutrition: (Comfort measures are always provided) Feeding Tube: <input type="checkbox"/> No feeding tube <input type="checkbox"/> Defined trial period of feeding tube <input type="checkbox"/> Long-term feeding tube Other Instructions or Clarification: _____ IV Fluids: <input type="checkbox"/> No IV fluids <input type="checkbox"/> Defined trial period of IV fluids <input type="checkbox"/> IV Fluids	
Section E Check all that apply	Discussed with: <input type="checkbox"/> Patient / Parent(s) of Minor Child <input type="checkbox"/> Surrogate (source of legal authority, name, and phone number): _____ <input type="checkbox"/> Other (name and phone number): _____	
Patient preferences to guide physician in ordering life-sustaining treatment		
Section F	I have given significant thought to life-sustaining treatment. Please see the following for more information about my preferences: Advance Directive <input type="checkbox"/> no <input type="checkbox"/> yes Other: _____ I have expressed my preferences to my physician or health care provider(s) and agree with the treatment order on this document. Please review these orders if there is a substantial permanent change in my health status, such as: Close to death Advance progressive illness Improved condition Permanently unconscious Extraordinary suffering Surgical procedures	
Brief summary of medical condition and brief explanation of treatment choice: _____ _____ _____		
Signature of person preparing form (if not patient's physician)	Print name and phone number	Date prepared:
Signature of physician or other licensed practitioner	Print name and license number	Date signed:
Signature of second physician or other licensed practitioner (required for minor patients only)	Print name and license number	Date signed:
Patient, Parent, or Surrogate signature	Print name and phone number	Date signed:

Paper POLST form: Disadvantages

- No systematic processes for version control
 - Paper form at home may not be most current
- May be inaccessible at time of need or lost
- Cannot be accessed by multiple users at the same time (EMTs, ED providers, etc.)

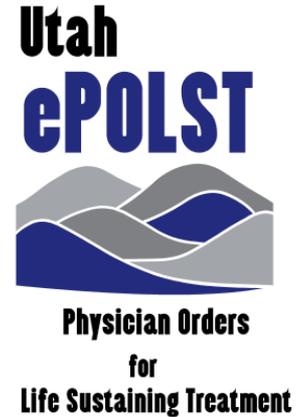


Electronic POLST

- Utah Improving Care through Connectivity, and Collaboration (IC³) Beacon grant awarded by ONC
 - Funded in 2010
 - Collaboration between UDOH and HealthInsight to:
 - Improve consistency between patient wishes and care provided during the last six months of life
 - Create an electronic POLST registry for use in Utah



ePOLST Development



- Why Vital Records?
 - Electronic Death Entry Network (EDEN)
 - ~300 physicians certify 70% of all deaths
- Oregon ePOLST experience
 - Paper POLST forms
 - 24/7 call center



Steering Committee

- Representatives from
 - Office of Vital Records and Statistics (UDOH)
 - Bureau of Emergency Medical Services (UDOH)
 - Utah Commission on Aging
 - Physicians and staff (palliative care, EMS, hospice care, geriatrics)
- Meetings between 2010-present to develop requirements

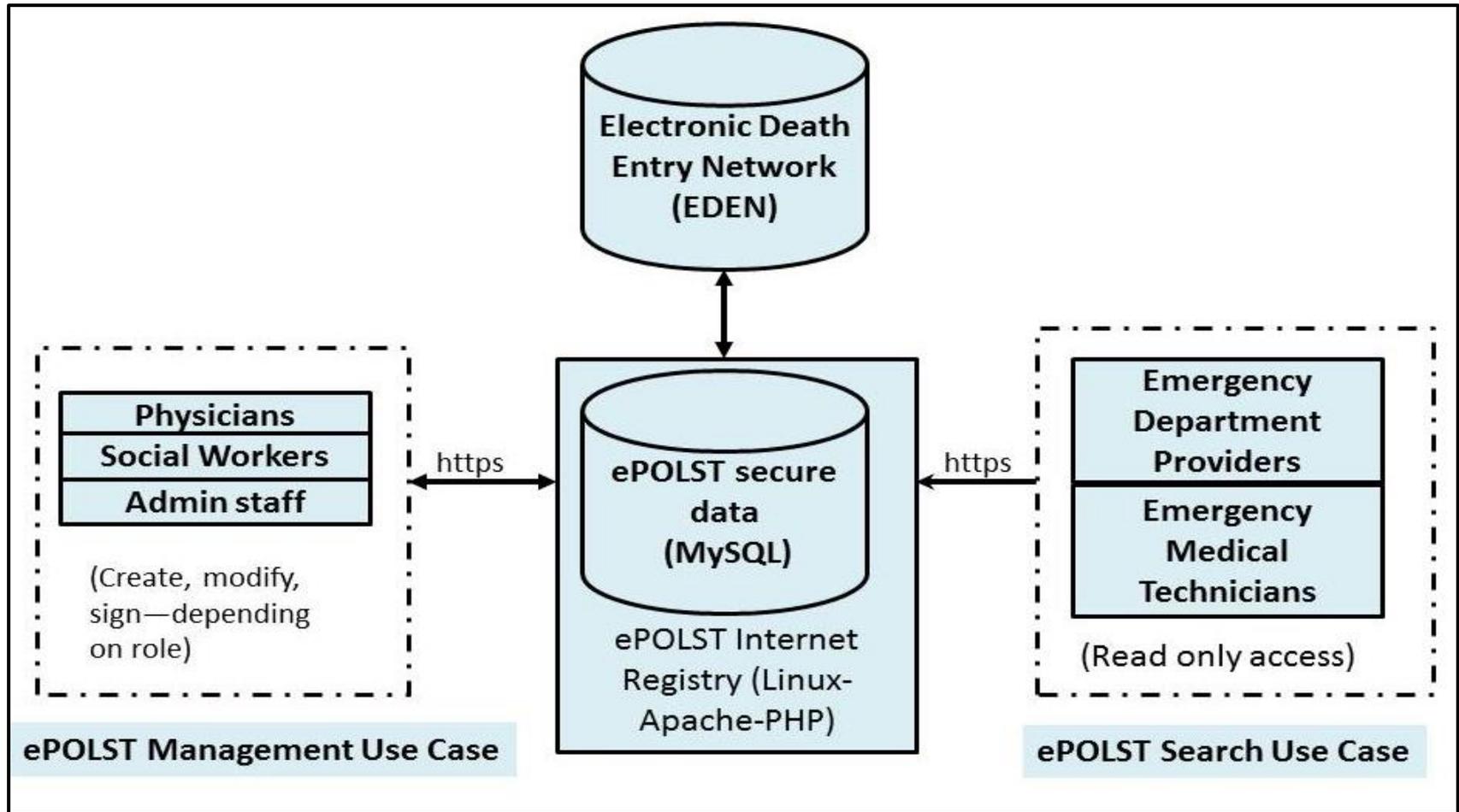


System Development

- Contextual Interviews
 - Nursing homes, palliative care, hospice care, hospital ER, fire station
- Agile, iterative development process
 - Prototypes to test ideas, usability



ePOLST Architecture



Current Status and Next Steps

- Operational in pilot testing (2 nursing homes, > 100 POLST forms)
- Training nursing home and EMS personnel
- Expanding use to Salt Lake metropolitan area and beyond...

Next Steps

- Interoperability with EHRs, HIE
 - Need to develop standards



Acknowledgements

- IC³ Beacon Community, grant #90BC00006
- HealthInsight
 - Christie North
 - Heidi Smith
- Utah Commission on Aging
 - Maureen Henry
- Utah Department of Health
 - Peter Taillac
 - Barry Nangle
 - Wu Xu
 - Leisa Finch
 - Janice Houston
- Physician Advisory Group
 - Cherie Bruncker, MD
 - Carole Baraldi, MD
 - Shaida Talebreza, MD



Questions?

- Jeff Duncan—jduncan@utah.gov
- Deepthi Rajeev—drajeev@healthinsight.org



OneHealthPort | HIE

Washington's Statewide Health Information Exchange

Presented to:

eHI

July 23, 2013

Rick Rubin, Sue Merk

<http://www.onehealthport.com/hieindex.php>

It's Not Really About Us...

“The work we are about is improvement of patient and population health...the key players in bringing this change about are those who deliver, receive and pay for health services...HIE is a necessary-but-not-sufficient condition to bring about this desired future state.”

Washington State HIE Strategic Plan

- OneHealthPort is a health information technology management company based in Seattle
 - Founded in 2002 by leading NW health care companies
- OneHealthPort operates the WA Statewide HIE
 - Partnership with State HCA under SSB 5501, ARRA/HITECH
 - Run it like a business in the public interest
- An Exchange: transform data, secure messaging, routing
 - No repository or EHR
 - Lower cost
- Strategic objective: **Fill the Gaps**
 - “An” HIE not “the” HIE

Filling the Gaps Today

- Transacting admission/discharge notices between health plans and providers
- Exchanging ADT information between hospitals and other trading partners
- Moving very limited amounts of lab data
- In process
 - Public health gateway for reportable labs
 - Epic to non-Epic CCDs using web services
 - Providing access to Prescription Monitoring Program
- Focus for today, National Renal Administrators Association (NRAA) HIE

NRAA HIE Background

1

NRAA represents national renal dialysis providers

2

CROWNWeb is the Quality Reporting dataset for CMS End Stage Renal Disease providers

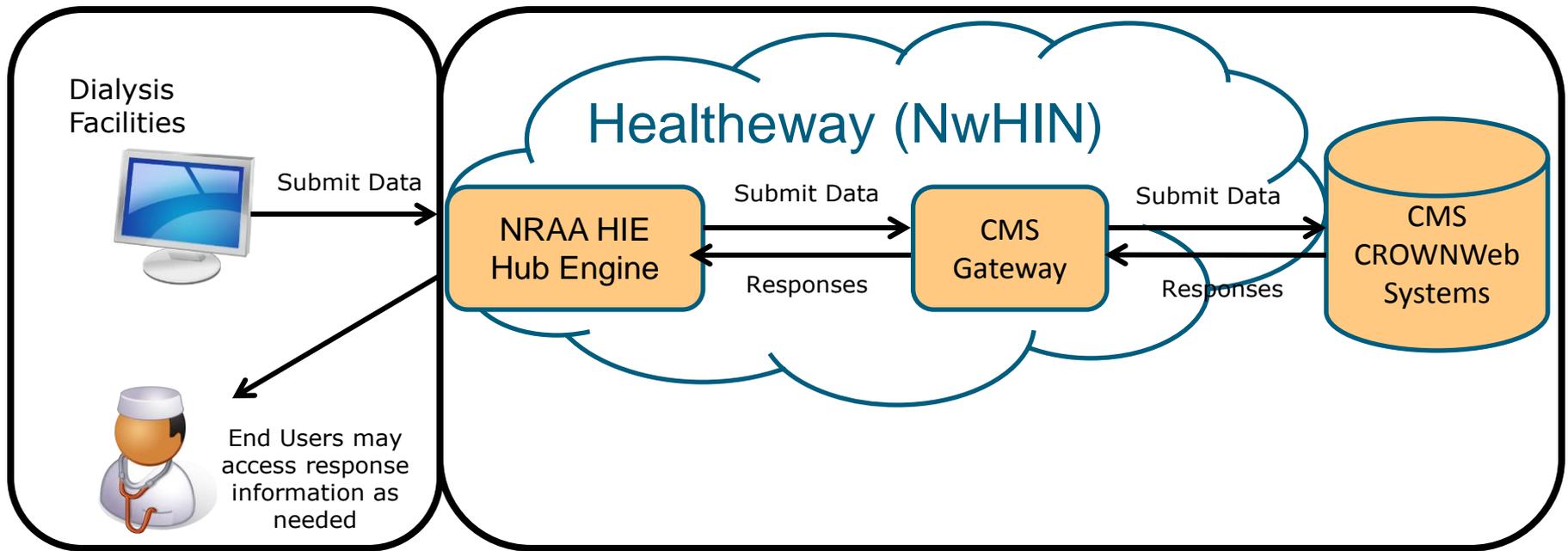
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NRAA and CMS agreed to use the HIE to exchange CROWNWeb data

4

OneHealthPort operates the HIE for NRAA

How the NRAA HIE Works



- NRAA HIE serves as the intermediary to electronically submit data to CMS for the ESRD Program
- NRAA HIE certifies EHR vendors for CROWNWeb with CMS
- Bi-directional exchange of data
- HIE does not store or aggregate data

Key NRAA HIE Features

NRAA HIE

Validates files conform with CROWNWeb schema

Adds SOAP and SAML to CROWNWeb files

Uses xds.b Message Protocol

Meters and manages data flow to CROWNWeb

Distributes responses and reports from CMS

NRAA HIE Volume: Jan '13 – June '13

Metrics	Results
Connected Organizations	179
Registered Facilities	794
Patient Lives Served	70,319
Total Transactions	17,975,706

Q&A





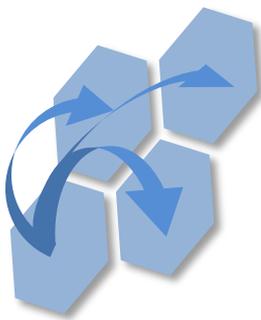
2013

HEALTH DATA EXCHANGE SUMMIT

OCTOBER 30-31, 2013

Grand Hyatt Washington DC





2013

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Thank you!

