



# An overview of the Clinical Data Repository (CDR)

Health Care Authority  
Health Information Technology Section

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# Agenda

- Fun fact!
- History
- Health Information Exchange (HIE) background
- CDR explanation
- CDR web portal view
- Costs
- Fun fact review!
- Next steps



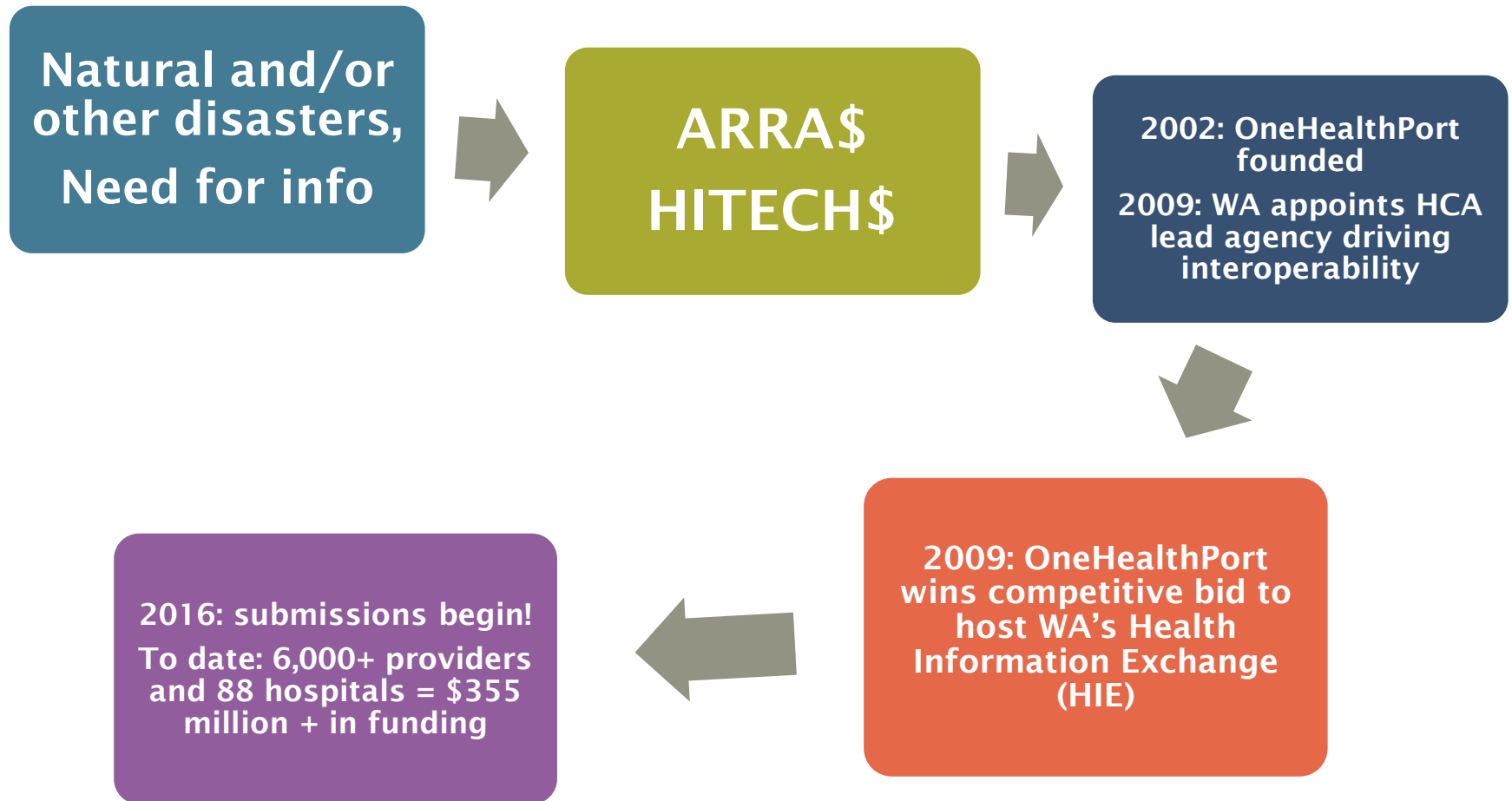
## Who said this...and when?

“I need to bring attention to the urgent need to adopt... some uniform publication system of hospital statistic records...”

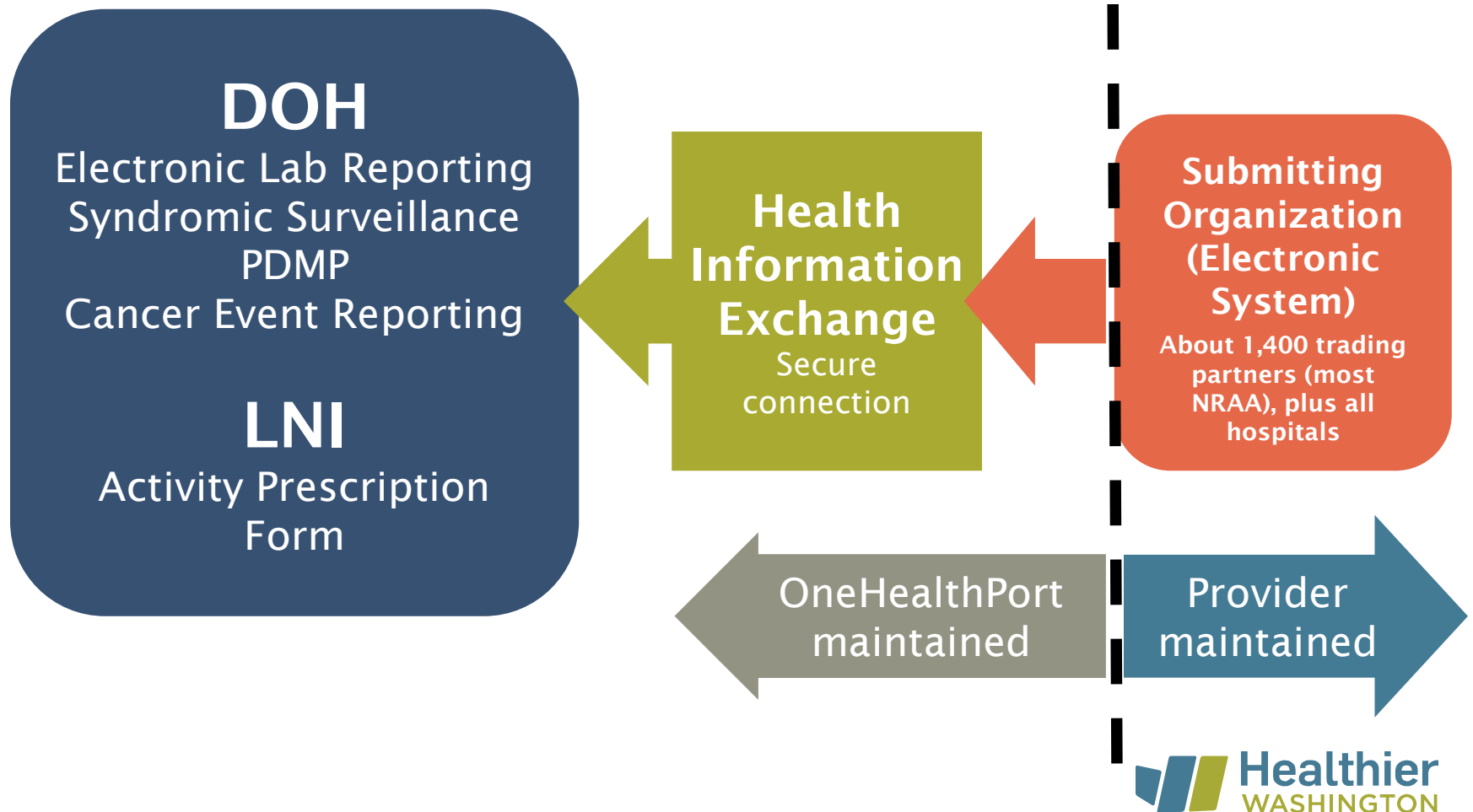


“If used smartly, these statistics will tell us the actual relative value of some current measures and forms of treatment.”

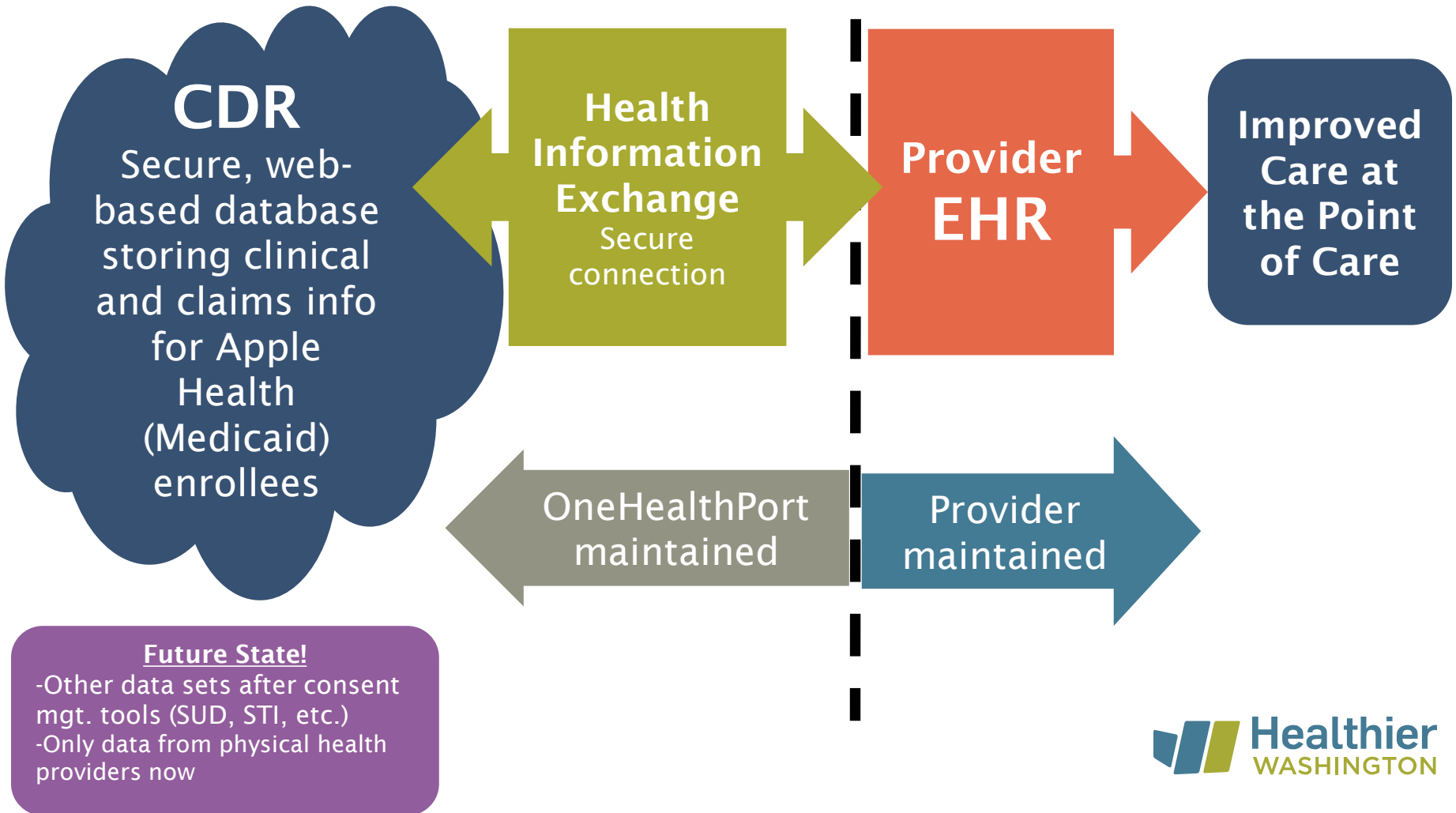
# How did we get here?



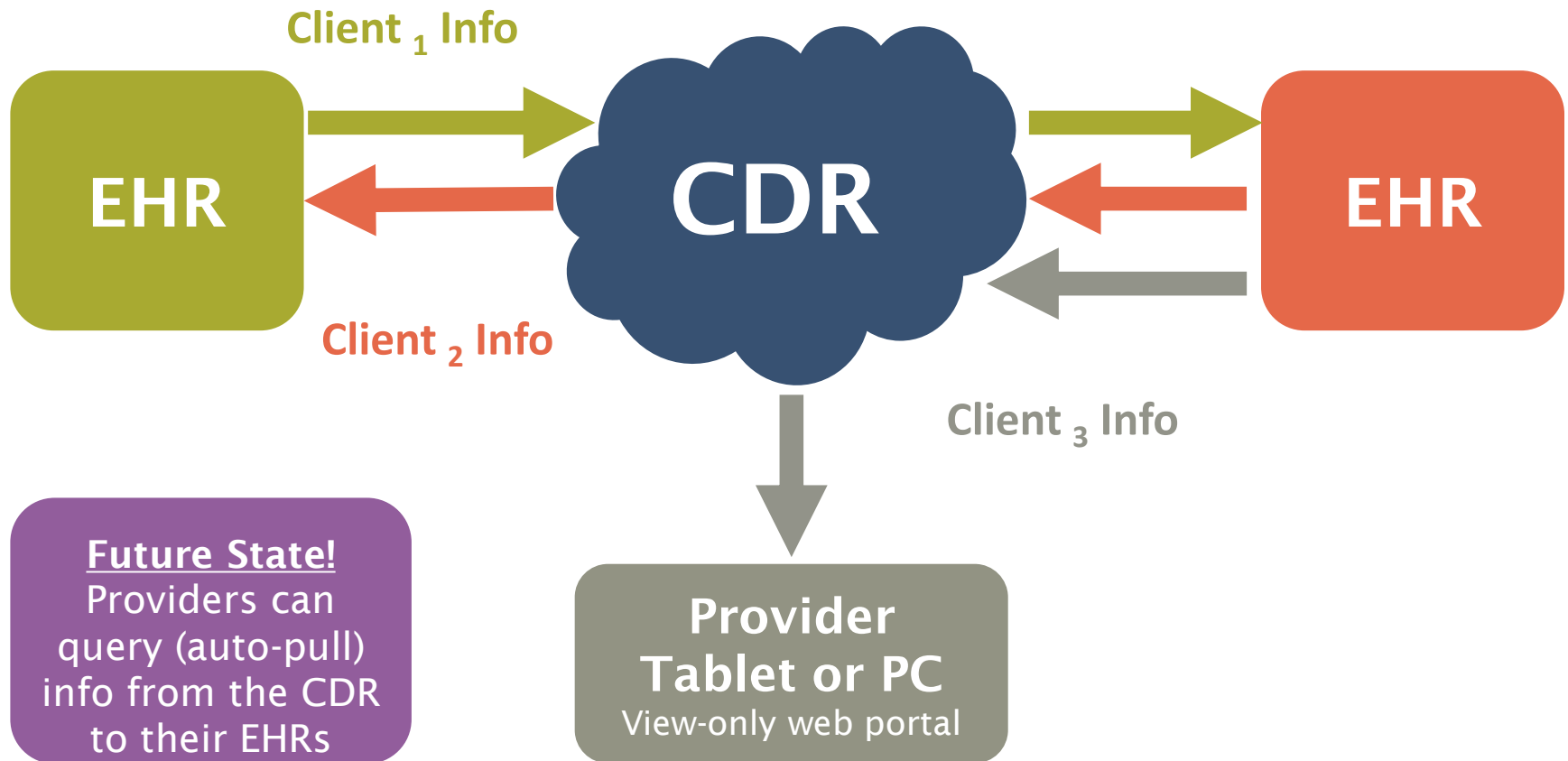
# What is OneHealthPort's HIE?



# What is the Clinical Data Repository?



# How to access CDR data.



# What's in the CDR?

Clients in system:  
2.2 million  
(active & inactive)

Active client  
coverage:  
about 50% as of  
November 2018

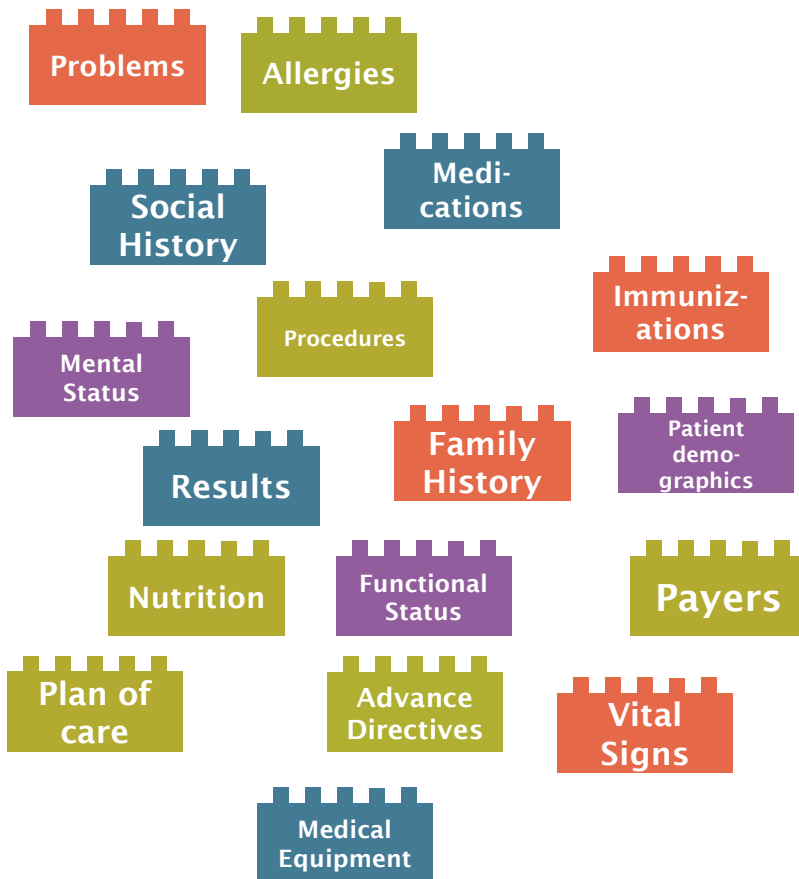
Clients with  
Claims Data:  
over 94%

CDR

Future State!  
-Mental health data  
- SUD data (incl.  
methadone) with  
CFR42 part 2  
consent mgt.  
solution



# What Info gets in the CDR?



# What is a Continuity of Care Document? (CCD)

```
<entry typeCode="DRIV">
  <act classCode="ACT" moodCode="EVN">
    <templateId root="2.16.840.1.113883.10.20.22.4.30" extension="2015-08-01"/>
    <templateId root="2.16.840.1.113883.10.20.22.4.30"/>
    <id root="36e3e930-7b14-11db-9fe1-0800200c9a66"/>
    <code code="CONC" codeSystem="2.16.840.1.113883.5.6"/>
    <statusCode code="active"/>
    <effectiveTime>
      <low value="19800501"/>
    </effectiveTime>
    <entryRelationship typeCode="SUBJ">
      <observation classCode="OBS" moodCode="EVN">
        <templateId root="2.16.840.1.113883.10.20.22.4.7" extension="2014-06-09"/>
        <templateId root="2.16.840.1.113883.10.20.22.4.7"/>
        <id root="4adc1020-7b14-11db-9fe1-0800200c9a66"/>
        <code code="ASSERTION" codeSystem="2.16.840.1.113883.5.4"/>
        <statusCode code="completed"/>
        <effectiveTime>
          <low value="19800501"/>
        </effectiveTime>
        <value xsi:type="CD" code="419511003"
          displayName="Propensity to adverse reactions to drug"
          codeSystem="2.16.840.1.113883.6.96"
          codeSystemName="SNOMED-CT"/>
      </observation>
      <participant typeCode="CSM">
        <participantRole classCode="MANU">
          <playingEntity classCode="MMAT">
            <code code="7980"
              displayName="Penicillin G"
              codeSystem="2.16.840.1.113883.6.88"
              codeSystemName="RxNorm"/>
          </playingEntity>
        </participantRole>
      </participant>
    </entryRelationship>
  </act>
</entry>
```

# Human-readable CCD

## Patient Clinical Summary For Encounter Date:

Created On: August 12, 2016

**Patient:** Test Test  
123 Fake St  
Centralia, WA, 98531  
tel:+1-123-456-7890

**MRN:** 314145

**Birthdate:** September 1, 1987

**Sex:** Female

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- [Medications Administered](#)
- [Medications - Prescription and Non-Prescription](#)
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- [Reason for Referral](#)
- [Procedures](#)
- [History of Immunizations](#)
- [Vital Signs](#)
- [Relevant Diagnostic Tests and/or Laboratory Data](#)
- [Plan of Care](#)
- [Instructions](#)
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### Allergies, adverse reactions, alerts

Allergy Name	Reaction	Severity	Status	Date Recorded
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Penicillins			Active	08/06/2014
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Grass			Active	08/06/2014
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# Web Portal: Summary View



Johnny B Danger (07/04/1976)

ID 2087113



**Address** 455 Rocket Lane, Touchet, Washington 99360  
**Home Phone** (425) 555-1200  
**Work Phone**  
**Mobile**  
**BMI** 25.5

**Gender** Male  
**Marital Status** Unknown  
**Date of Birth** 07/04/1976  
**Age** 42 Years  
**Language** English  
**Primary Care Physician**

**Insurance** HCA  
**Data**



Add



Claims...

Summary History 420 Documents 10 Problems 110 Medications 108 Allergies 19 Vitals 46 Procedures 29 Immunizat... 18 Results 79

Documents

5/10

04/20/2017	09:57 PM	Summarization of Episode by Puget Sound Kidney Centers: "Summarization of episode note - N"	
04/20/2017	09:57 PM	Summarization of Episode by Puget Sound Kidney Centers: "Summarization of episode note - N"	
04/17/2017	05:34 AM	Summarization of Episode by OneHealthPort HIE TESTING: "Summarization of episode note - V"	
04/16/2017	05:34 AM	Summarization of Episode by OneHealthPort HIE TESTING:	

Medications

5/108

04/16/2017	12:34 PM	clarithromycin 500 mg (administered)
04/16/2017	12:34 PM	metoprolol 25 mg (administered)
04/16/2017	12:34 PM	albuterol 90 mcg/inh (administered)
03/29/2017		ARANESP 60 MCG PFS (prescribed)
03/29/2017		ARANESP 10 MCG PFS (prescribed)

Vital Signs

5/46

03/29/2017	11:54 AM	Body Temperature : 97.7 [degF]
03/29/2017	11:54 AM	Weight Measured : 89.4 kg
03/29/2017	11:54 AM	Height : 187 cm
03/29/2017	11:54 AM	Heart Rate : 90 /min
03/29/2017	11:54 AM	Respiratory Rate : 0 /min

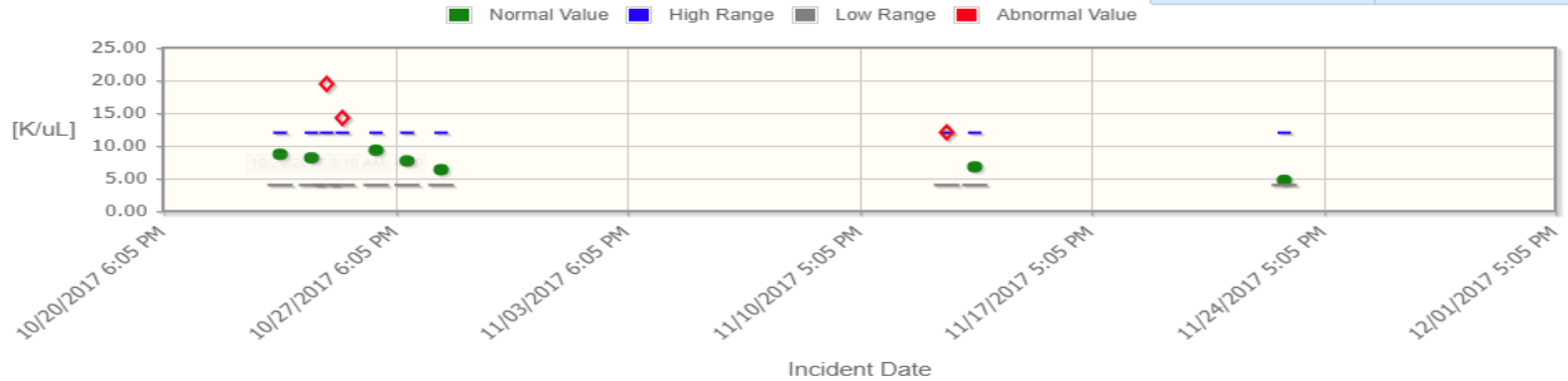
Immunizations

5/18

03/18/2016		PREVNAR 13 (PCV13) 0.5ML (administered)
10/05/2015		SEASONAL INFLUENZA VACCINE (administered)
01/15/2015		ENGERIX-B 20 MCG (administered)
09/04/2014		ENGERIX-B 20 MCG (administered)
09/04/2014		ENGERIX-B 20 MCG (administered)

# Web portal results graph

WBC



Abn.	Sta.	Result	Range	Graphical Range	Panel Name	Lab Name	Incident Date	Documentation Date
	comp	4.73 K/uL	4.00 - 12.00		O CBC WITH DIFF		11/23/2017 12:45 PM ⓘ	11/23/2017 12:45 PM
	comp	6.78 K/uL	4.00 - 12.00		O CBC WITH DIFF		11/14/2017 04:42 AM ⓘ	11/14/2017 04:42 AM
△ H	comp	12.05 K/uL	4.00 - 12.00		O CBC WITH DIFF		11/13/2017 08:20 AM ⓘ	11/13/2017 08:20 AM
	comp	6.35 K/uL	4.00 - 12.00		O CBC WITH DIFF		10/29/2017 03:18 AM ⓘ	10/29/2017 03:18 AM
	comp	7.70 K/uL	4.00 - 12.00		O CBC WITH DIFF		10/28/2017 02:40 AM ⓘ	10/28/2017 02:40 AM
	comp	9.32 K/uL	4.00 - 12.00		O CBC WITH DIFF		10/27/2017 04:14 AM ⓘ	10/27/2017 04:14 AM
△ H	comp	14.26 K/uL	4.00 - 12.00		O CBC WITH DIFF		10/26/2017 03:53 AM ⓘ	10/26/2017 03:53 AM
△ H	comp	19.45 K/uL	4.00 - 12.00		O CBC WITH DIFF		10/25/2017 04:27 PM ⓘ	10/25/2017 04:27 PM
	comp	8.16 K/uL	4.00 - 12.00		O CBC WITH DIFF		10/25/2017 05:30 AM ⓘ	10/25/2017 05:30 AM
	comp	8.71 K/uL	4.00 - 12.00		O CBC WITH DIFF		10/24/2017 06:47 AM ⓘ	10/24/2017 06:47 AM

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# CDR supports role based access (RBA)

Normal	<ul style="list-style-type: none"><li>• Stitches, set limb, office visit</li><li>• Front office?</li></ul>
Restricted	<ul style="list-style-type: none"><li>• Stigmatizing info</li><li>• MD, RN, MA?</li></ul>
Very restricted	<ul style="list-style-type: none"><li>• Stigmatizing info: STI info, BH or SUD diagnosis</li><li>• MD, RN, MA?</li></ul>

Sending provider sets restriction level



# Alternatives

## Do Nothing ??

- Not really an option...

## Wait ??

- Hope vendors create interfaces between disparate Electronic Health Records Systems

## Take the Lead!

- Create Data Base
- Vendor-neutral
- Standards-based
- Supports national certification standard
- CMS & ONC



# Summary of current & future benefits

Standards-based

Vendor-neutral

Common place, providers working with many MCOs

Aggregates data

No EHR? Web portal!

Additional sponsors (DSHS, PEB, private)

Patient history

Future reporting (HEDIS?)

New features: PMP link+ more!



# Costs

**CDR use?**  
Join HIE, sign trust framework

**Cost?**  
Annual  
Based on annual net patient revenue


**Connecting?**  
Work with your EHR vendor and OHP on connecting

Organization level	Annual Net Patient Revenue	Annual Subscription fee
Entry	\$0 - \$10 Million	\$600
Small	\$10 Million - \$100 Million	\$6,000
Mid-size	\$100 Million - \$500 Million	\$12,000
Large	\$500 Million - \$1 Billion	\$24,000
Leadership	\$1 Billion Plus	\$48,000



## Who said this...and when?

“I need to bring attention to the urgent need to adopt... some uniform publication system of hospital statistic records...”



“If used smartly, these statistics will tell us the actual relative value of some current measures and forms of treatment.”



# Next Steps

- Find more about the CDR initiative at:  
[www.onehealthport.com/hca-cdr](http://www.onehealthport.com/hca-cdr)
- Contact HCA's Health IT team to
  - Schedule presentations and deeper dives with HCA or OneHealthPort's technical team
  - Suggest ideas for use cases:
- [healthit@hca.wa.gov](mailto:healthit@hca.wa.gov), 360-725-1514



# Appendices

# What is a HIPAA covered entity?

## Health care provider

- Doctors, clinics, psychologists, dentists, nursing homes, pharmacies
- ...if they transmit electronic info  
HHS has a standard for

## Health plan

- Health ins companies, HMOs, company health plans
- Government paid-for health care (Medicaid, Medicare, etc.)

## Health care clearinghouse

- Entities processing nonstandard health info  
standard health info

As defined by HHS



# Incentive for Providers to participate?

MCO contracts with providers:  
If an organization answers yes  
to all three, it is required to  
participate in the CDR.

Can't say yes to all three?  
Participation is not  
required...*at this time*

Part of MCO  
provider network  
serving Apple  
Health Clients?

Have a  
“Certified EHR”?

Received Medicaid  
or Medicare EHR  
Incentive Payment  
Funding