



Immunization Registry Reporting in Community Health Centers

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Agenda

- Introduction
- About OCHIN
- Vaccination support in EHR
- Immunization Information Systems (IIS) Integration
- Technical Challenges
- Next Steps
- Pearls of Wisdom

Introduction – Current State of IIS Data Exchange

- IIS are capable of receiving immunization information directly from immunization healthcare providers
- Ability to transmit data from IIS to other information systems is not as widely available
- Bidirectional connections between IIS and the EHR helps providers consolidate records, ensure timely immunizations by providing information to clinical decision support tools, and allow them to operate more efficiently

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Introduction – Problem

- Vaccines are among the most cost-effective clinical preventive services
- Significant progress has been made in improving pediatric immunization rates, adult immunizations have received comparatively less attention
 - Access to vaccine supply, immunization insurance coverage and reimbursement, data integrity, and policies around reporting and consent
- Adult immunization rates in the United States remain well below Healthy People 2020 goals with substantial racial and ethnic disparities
 - Adults accounted for 99% of vaccine-preventable deaths with over 50,000 adults dying each year in the United States from vaccine-preventable diseases (National Foundation for Infectious Diseases, 2012)

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Introduction – Opportunity

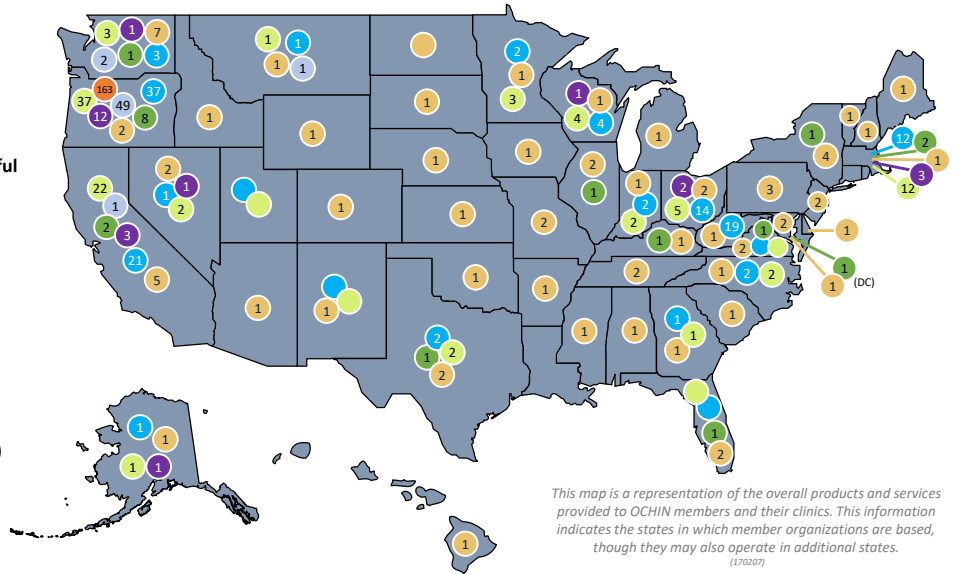
- Bidirectional IIS connections...
 - Benefit the medically underserved patient populations that are...
 - less likely to have continuity in provider/care;
 - more likely to have language and health literacy barriers; and
 - more likely to suffer from poor health overall
 - Reduce the challenges and time spent for primary care providers to receive information about patient immunization history and status

About OCHIN

- One of the nation's largest Health Center Controlled Networks
- Supporting 451 organizations located in all 50 states with 10,000 clinicians serving 20+ million patients
- Provide EHR/IT, analytics, billing, quality improvement, and consulting services
- Customers primarily include Federally Qualified Health Centers (FQHCs), Rural Health Centers, County Health Depts, and nonprofit clinics

About OCHIN

- OCHIN Epic (97 Organizations)
- OCHIN NextGen (72 Organizations)
- Oregon Medicaid Meaningful Use Technical Assistance Program (OMMUTAP) (163 Clinics)
- OCHIN Billing Services (24 Organizations)
- OCHIN Broadband Network Services (53 Organizations)
- Acucere QOL (Organizations in 19 States)
- OCHIN Research (20 Active Partnerships)

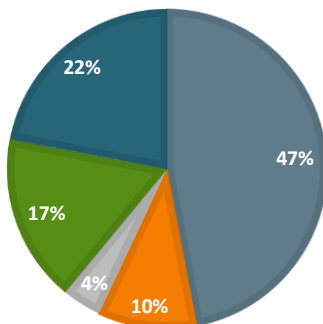


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Patient Profile (CY2016)

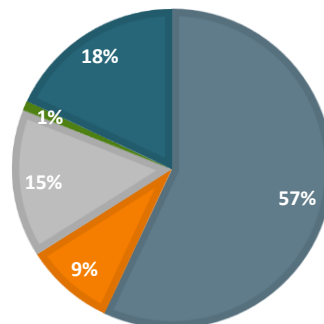
Federal Poverty Level

- 100% and below
- 101-150%
- 151-200%
- Over 200%
- Unknown



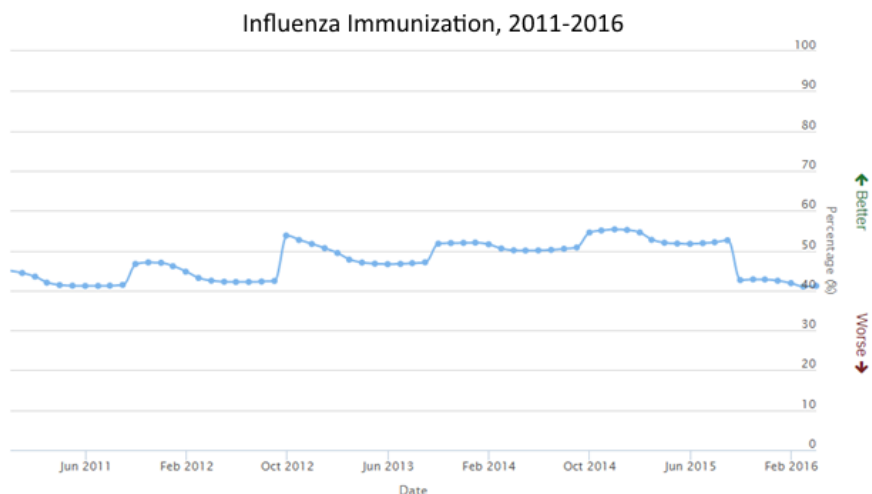
Insurance Status

- Medicaid
- Medicare
- Private
- Grant/Other Public
- Uninsured



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Influenza Immunization Performance Across OCHIN



- US Average
2013-14: 46.2%

2014-15: 47.1%

2015-16: 45.6%

Per www.cdc.gov/flu/

- Healthy People
2020 Goal: 70%

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Vaccination Support in EHR

- Decision support at Point of Care
 - Health Maintenance Topics
 - Best Practice Alerts
- Monitoring/Reporting Performance
 - Provider, location, organization levels
- Communication with state registries
 - Automatic submission of administration information
 - *Bidirectional querying for previous administration information*



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IIS Integration

16 states live with immunization interfaces:

- Alaska
- California
- Florida
- Georgia (bidirectional)
- Indiana
- Massachusetts
- Minnesota
- Montana
- Nevada
- New Mexico
- Ohio
- Oregon (bidirectional)
- Texas
- Utah
- Washington (bidirectional)
- Wisconsin



- Upcoming bidirectional enhancements (Summer 2017):
 - California
 - Massachusetts
- Bidirectional scoping in Progress
 - Montana
 - Wisconsin

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IIS Integration – Why Bidirectional?

- Considerations for medically underserved patient populations:
 - Improve continuity of care with more complete documentation
 - Minimize need for patient to remember/communicate medical history
 - Improve health through administration of all necessary immunizations
- Considerations for resource use and cost:
 - Duplication of administration
 - Waste of provider and staff time



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IIS Integration – Moving to Bidirectional

- Decreasing time spent by primary care providers to receive information about the large number of immunizations happening in other settings
 - Employer, pharmacy, school, church, etc.
- OCHIN working with CDC and National Association of Community Health Centers (NACHC) to address challenges and improve bidirectional IIS exchange

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Technical Challenges – Industry

- Variation in capability among IIS systems
- Variation in format/process among capable IIS systems
- Backlogs to enroll for connection and testing
- Complex to implement
- Costs associated to develop (and license) interfaces



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Technical Challenges – OCHIN’s Experience

- Query and response processing
 - How to display in the EHR
 - Mapping to internal codes, registry codes, and CDC codes had to be standardized
- Patient matching
 - IIS does not return result if single patient is not identified
- Chart reconciliation
 - User must follow appropriate workflow to bring IIS record of immunization into the EHR or the process will be repeated at each visit

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Technical Challenges – Querying Multiple Registries

- Filtering logic to query IIS systems based on various locations pertaining to the patient
 - point of care
 - patient’s address
 - place of birth
 - prior known addresses
- Becomes more important as bidirectional interfaces proliferate
- May create greater challenge for patient matching

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Looking to the Future

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Next Steps for OCHIN

- Continue to build out bidirectional query/result IIS interfaces with new states
- Ensure reconciliation process works with new interfaces
- Work with Epic to test and validate filtering logic
- Work with IIS that are newly implementing bidirectional exchange
 - Leverage testing and workflow experience with other IIS

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Pearls of Wisdom

- A national IIS must be implemented; or uniform standards for bidirectional IIS interfaces are necessary to streamline adoption and improve patient and population health
- Patient charts are only as accurate as the end user makes them; automatic versus manual IIS query
- Accurate mapping is critical for success and must be done in advance of implementing query functionality



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Thank You!

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