Update and Progress in Utilizing EMRs and Immunization Information Systems to Improve Adult Immunizations

Immunization Information Systems: Measurement & Improvement

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Progress
Benefits for Adults

- Adults often need to prove immunity for a variety of reasons
  - Work
  - School
  - Travel
- Adults need their own vaccines
  - Complex schedule
- Health of the providers population
  - Quality measures
- Pandemic preparedness
  - H1N1 taught us a lot about using an IIS during a pandemic
  - More population in an IIS = greater efficiencies

Capture the vaccination status of the population

Percent of the population in an IIS

- Children <6
  - Percentage of children <6 participating in an IIS in the United States • 2015
- Adolescents 11-17
  - Percentage of adolescents 11-17 participating in an IIS in the United States • 2015
- Adults
  - Percentage of adults greater than or equal to 19 years of age participating in an IIS in the United States • 2015

Measurement & Improvement

Goal: Develop a community-driven, independent measurement process to assess and support IIS alignment with standards and best practices

Influencing Factors

- Solve a problem
- History
- Accurate
- Real Time Information
- Funding & Policy
- Interoperability MU
The Importance of Interoperability

EHR adoption more than doubled between 2008 and 2015


Influencing Factors – Immunization Programs

• Need for harmonization
• Greater need for streamlining efficiencies and managing limited resources
  • 58 different IIS
How do we get everyone to achieve the same thing?

### IIS: 25 Years of Achievement

- **1992**: RWJF, AKC Planning Grants
- **1993**: Clinton Childhood IZ Initiative
- **1994**: IIS Essential Functions defined
- **1995**: NVAC Initiative on IZ Registries launched; research projects funded
- **1996**: NVAC report released; first technical specifications
- **1997**: Technical Working Group formed
- **1998**: IIS cost study
- **1999**: NVAC report released; first technical specifications
- **2000**: IIS cost study
- **2001**: IIS: First guidelines released
- **2002**: Functional Standards approved
- **2003**: 5th AKC Conf.
- **2004**: 6th AKC Conf.
- **2005**: 4th MIROW guide
- **2006**: 5th MIROW guide
- **2007**: 6th AKC Conf.
- **2008**: 6th MIROW guide
- **2009**: 7th MIROW guide
- **2010**: 7th AKC Conf.
- **2011**: 7th MIROW guide
- **2012**: 8th AKC Conf.
- **2013**: 8th MIROW guide
- **2014**: 9th AKC Conf.
- **2015**: 9th MIROW guide
- **2016**: 10th AKC Conf.

**Key Milestones**:
- 1992: RWJF, AKC Planning Grants
- 1993: Clinton Childhood IZ Initiative
- 1994: IIS Essential Functions defined
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- 2015: 9th MIROW guide
- 2016: 10th AKC Conf.

**Projects Funded from 1992-2002**:
- RWJF All Kids Count
- Bush IAP Initiative
- Clinton Childhood IZ Initiative
- IIS Essential Functions defined
- NVAC Initiative on IZ Registries launched; research projects funded
- Functional Standards approved
- Confidentiality guidance published
- AIRA formed
- MIROW guides

**Conferences**:
- 1st AKC Conf.
- 2nd AKC Conf.
- 3rd AKC Conf.
- 4th AKC Conf.
- 5th AKC Conf.
- 6th AKC Conf.
- 7th AKC Conf.
- 8th AKC Conf.
- 9th AKC Conf.
- 10th AKC Conf.

**Guides**:
- 1st MIROW guide
- 2nd MIROW guide
- 3rd MIROW guide
- 4th MIROW guide
- 5th MIROW guide
- 6th MIROW guide
- 7th MIROW guide
- 8th MIROW guide
- 9th MIROW guide
- 10th MIROW guide

**FOA**
- PPHF11 FOA
- PPHF12 FOA
- PPHF14 FOA

**Reports**
- MIROW guide
- Functional Standards updated
- IIS Strategic Plan
- Rel. 1.5 of HL7 IG

**Other**
- IOM: Getting the Shots
- Confidentiality guidance published
Guiding Themes for IIS Measurement

1. Test-driven development
2. Transparency
3. Benefits

1. Test-Driven Development
   • Test with actual pre-production systems
   • Results assist with prioritization of enhancements

2. Transparency
   • Work of MACAW is visible, recommendations are reviewed by community and AIRA Board

3. Benefits
   • Results of process help IIS do their core work better, faster, more efficiently
   • Standards are better informed

Phases and Stages of Independent Measurement and Improvement

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<tr>
<th>Stages</th>
<th>Phases</th>
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<tr>
<td>Transport</td>
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<td>Submission/ ACK</td>
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<td>Query/ Response</td>
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<td>Policy/ Security</td>
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Measurement and Improvement

Testing and Discovery
- Transport
- Submission/Acknowledgement
- Query/Response
- Clinical Decision Support
- Data Quality Coming Soon!

Assessment
- Transport
  - Baseline, 2nd Remeasure
- Submission/ACK
  - Baseline, 1st Remeasure
- Query/Response
  - Baseline, 1st Remeasure

Voluntary Certification
- Transport – First Stage

Measurement & Improvement: Participation

43 connected ongoing
53 connected for some phase

Participating
Not participating
### Aligning with Standards: What’s the Impact?

#### Benefits
- Speeds up onboarding
- Helps to stabilize interoperability
- Improves data quality
- Allows IIS to hold EHRs more accountable
- Moves IIS community closer to its mission of making records and forecasts available at point of care
- Exposes those areas where standards are unclear or don’t yet exist

#### Challenges
- Enhancements (and even connecting with testing) may require human and financial resources
- Nation-wide or community-wide standards may be at odds with jurisdictional policies and practices
- Some standardization may “break” current interfaces

### Transport – IIS Meeting Measures

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<th>Q3 2016</th>
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Voluntary Certification

- Provide credit and recognition to those IIS achieving standardization and harmonization
- Increase credibility of IIS community/alignment of standards
- Support (and speed up) the shift to objective measures
- Leverage the same measures used in IIS Assessment

www.immregistries.org
Take away messages

• Change is hard

• Planning now will prepare us for future events
  • Using data
  • Pandemic