TUESDAY, AUGUST 8:
IHIN and Pharmacist-Based Services within an HIE
WELCOME

Anthony Pudlo, PharmD, MBA, BCACP
Vice President of Professional Affairs
Iowa Pharmacy Association
PRESENTERS

Samm Anderegg, PharmD, MS, BCPS
CEO
DocStation

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CEO
Hielix
Introduction

• Vision - Connecting the Iowa Healthcare Ecosystem by 2021
• IHIN is an Independent, Neutral Third Party
• Nearly All Iowa Hospitals are Participants
• Working with Medicaid to Secure 90/10 Funding
• Working with Medicaid, IDPH and IHC on Multiple Projects
• Working with the Pharmacy Association on the CPESN
Iowa Healthcare Ecosystem

The IHIN 2020-21 Eco System
Social Determinants of Healthcare

- Family Planning
- Medical Supplies
- Screening Centers
- Dieticians
- Genetic Counseling
- Ambulance
- Physical Therapy
- Department of Aging
- School Nurses
- Education Centers
- Meals on Wheels
- Substance Abuse
- Smoking Cessation
- Department of Corrections

Who IHIN will add in 2018-19

- ACO
- MCO
- Home Health
- Assisted Living
- LTPAC
- Adult Rehab
- IHS
- Dentists
- FQHC
- Birthing Centers
- C3-Organizations
- Behavioral Health
- Hospice
- Audiology
- Optometrists
- Chiropractors
- Labs
- Pharmacies

IHIN Today

- Hospital/systems
- Clinics
- Physicians
- Payors
- IDPH
- Surgical Centers
IHIN Proposed Architecture
IHIN Functionality

• Current Capability
  • Electronic Lab Reporting
  • Records Query
  • Statewide Alert Network (SWAN)
  • Direct Secure Messaging

• Planned Capability
  • All of the Above Plus:
    • Bi-directional C-CDA Exchange
    • Quality Measure Reporting
    • Eligibility and Claims for Payors
    • Data Analytics, Informatics and Population Health Capability
    • Patient Portal
    • Provider Directory
    • Interstate Connectivity
    • Telehealth
    • Numerous Bi-directional Registries Including:
      • Substance Abuse
      • Electronic Case Reporting
      • Cancer
      • Trauma
      • PDMP
  • API Functionality and Support for Numerous New Applications
Medicaid Support – 90/10 Funding

- Medicaid 90/10 IAPD Process Funds the Following:
  - Platform Replacement
    - RFP Process
    - Selection By October 1, 2017
  - Environmental Scan of Medicaid Providers
    - Clinical Survey of Providers
    - Interviews with Stakeholders
    - EHR/EMR Technology Survey
  - Public Health Registry Development
  - Raising Matching Funds
Contact US

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Title

Samm Anderegg, Pharm.D., MS, BCPS
CEO, DocStation
Consultant, Pharmacy HIT Collaborative
Learning Objectives

1. Characterize the goals and mission of the Pharmacy HIT Collaborative
2. Describe methods for documenting pharmacy services using standard clinical terminologies
3. Examine strategies for normalizing data for exchange via Consolidated-Clinical Documentation Architecture (cCDA)
Represents over 250,000+ members in all pharmacy practice settings

**Founding Members**

**Associate Members**
- Surescripts – NCPDP – Amgen – Pfizer – Cardinal Health/Fuse – Updox
Goals

1. **Access** – ensure HIT supports pharmacists in health care service delivery
2. **Connectivity** – achieve pharmacists’ integration within health information exchange
3. **Quality** – support national quality initiatives enabled by HIT

Interoperability
Health Information Exchange (HIE)

• Federal initiative to exchange patient information between EHR systems & report quality measures

• Pharmacy software vendors do not participate in Meaningful Use
  • No incentive for pharmacy software vendors to adopt technical requirements
  • No financial incentive for pharmacists to adopt compliant software
Current Landscape

• Data stored in many software systems that don’t talk to each other
  • Clinical Data – EHRs
  • Medication Data – pharmacy software
  • Labs/Genomic Data – lab software, EHRs

• Communication standards exist, but no standard data set to facilitate interoperability and unified data reporting
Goal

1. *Develop standard data set for clinical documentation*
   - All software systems and providers use same data points
   - Data points are recognized when exchanged

2. *Align pharmacy software functionality with EHRs*
   - Leverage interoperability to gain accountability
   - Maintain medication list, allergy list, ADRs
   - Manage treatment regimens, optimize outcomes
Health IT Standards

• **Standard Development Organizations (SDOs)**
  • HL7 – healthcare communication
  • NCPDP – pharmacy communication

• **Health Information Exchange (HIE)**
  • Consolidated Clinical Document Architecture (C-CDA)
  • SCRIPT Standard – ePrescribing

• **Clinical Vocabularies (e.g. codes)**
  • SNOMED CT – diagnoses/diseases, findings, procedures
  • RxNorm – medications
  • LOINC – laboratories
  • CVX – vaccines
Standard Data

- Federal standard for clinical documentation
- Common “language” that allows software systems to talk to each other
- Detailed coding
  - 330,000+ terms/codes
  - Diagnoses, symptoms, findings, procedures, interventions, statuses, outcomes

JAHIMA. 2012 Mar; 83(10): 72-75.
### Pharmacy Codes

<table>
<thead>
<tr>
<th>SNOMED CT Concept</th>
<th>SNOMED CT ID</th>
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<tr>
<td>Needs additional medication</td>
<td>428981000124101</td>
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<tr>
<td>Dose too low</td>
<td>448152000</td>
</tr>
<tr>
<td>Patient unable to obtain medication</td>
<td>429611000124105</td>
</tr>
<tr>
<td>Recommendation to increase dose</td>
<td>428811000124101</td>
</tr>
<tr>
<td>Rheumatologic disorder education</td>
<td>413084000</td>
</tr>
<tr>
<td>Medication reconciliation</td>
<td>428701000124107</td>
</tr>
<tr>
<td>Hemoglobin A1c &lt;7%</td>
<td>165679005</td>
</tr>
<tr>
<td>Adverse reaction to drug</td>
<td>62014003</td>
</tr>
</tbody>
</table>
Value Sets

• A group of codes documented in a specific data field
• Guides implementation of standardized codes within software systems
Referral Source Value Set

<table>
<thead>
<tr>
<th>Referral Source</th>
<th>SNOMED CT ID</th>
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<tbody>
<tr>
<td>Referred by health care professional</td>
<td>2011000124105</td>
</tr>
<tr>
<td>Referred by physician</td>
<td>309014007</td>
</tr>
<tr>
<td>Referred by primary care physician</td>
<td>2021000124102</td>
</tr>
<tr>
<td>Referred by specialist physician</td>
<td>2031000124104</td>
</tr>
<tr>
<td>Referred by nurse practitioner</td>
<td>2041000124109</td>
</tr>
<tr>
<td>Referred by self</td>
<td>1991000124105</td>
</tr>
<tr>
<td>Referred by payer</td>
<td>2001000124107</td>
</tr>
</tbody>
</table>

Exchanging Pharmacy Information

• **Clinical Document Architecture (C-CDA)**
  • Standard developed by Health Level 7 (HL7)
  • Provides a common framework for development of electronic clinical documents
  • Capture, store, access, display, and transmit clinical data elements

http://www.healthit.gov/policy-researchers-implementers/consolidated-cda-overview
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Interoperability

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http://www.healthit.gov/policy-researchers-implementers/consolidated-cda-overview
Work With Vendors

• What can we document in our current software?
• Are these data points coded? (e.g. SNOMED CT)
• Can we send C-CDA documents? (e.g. Pharmacist eCare Plan)
• Is our software connected to a health information exchange (HIE)?
• Are other software systems connected to the HIE?

• Let’s test it out!
Pharmacist eCare Plan

• Funding provided by CMS Innovation Center
• Pilot program to test interoperability between payers and pharmacies
  • Collaboration between payer, software vendors, and community pharmacy enhanced service network (CPESN)

• SNOMED CT data requirement***

https://www.healthit.gov/techlab/ipg/node/4/submission/1376
Pharmacist eCare Plan

Description
This is a joint project between NCPDP and HL7 http://dms.ncpdp.org/index.php/ncpdp-work-groups?view=category&id=64 and is linked to this project is linked to the "Pharmacist eCare Plan" will serve as a standardized, interoperable document for exchange of consensus-driven prioritized medication-related activities, plans, and environments (community, hospital, long term care, clinics, etc.) and increasingly participate in patient-centered care teams providing essential clinically oriented care (medication, allergies and problems), patient immunization management, disease state monitoring, and therapy adherence programs. The Pharmacist eCare Plan will address the team’s concerns and goals related to medication optimization. The care plan may also contain information related to individual health and social risks that may impact providers or for additional services e.g., nutrition consultation or diagnostic laboratory studies. Four (4) organizations have agreed to implement the Pharmacist eCare Plan: PioneerRX, Rx30, Computer-RX, Creative Pharmacist and VIP. The FHIR resources will be used for this project.

http://www.hl7.org/Special/committees/structure/projects.cfm?action=edit&ProjectNumber=1232

Start Date 12/21/2015 Projected End Date 09/30/2020

Project Tags
• C-CDA
• care plan
• drug therapy problem
• FHIR
• HL7
• medication management
• medication reconciliation
• NCPDP
• Pharmacist
• Pharmacy
ONC High Impact Pilot

Phase 1
Sept 2016 – Feb 2017
Project Launch
Standards Development
Training

Phase 2
Dec – Apr 2017
Initial Implementation
Refinement
Testing

Phase 3
Mar – Aug 2017
Controlled Roll Out
Full Implementation
Data Collection

Phase 4
Aug – Sept 2017
Data Analysis
Reporting

Gather Input for Draft Ballot
Submit Draft PhCP for Ballot
Questions?

Samm Anderegg, Pharm.D., MS, BCPS
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QUESTIONS?
JOIN US TUESDAY, SEPTEMBER 12, 2017

Questions? Contact David Schaaf at dschaaf@iarx.org or 515-270-0713