Using Standards to Advance e-Referrals and Improve Patient Care

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Care Coordination Needed for Improved Health Outcomes
Dysfunctional Care Coordination

• **50%** of professional referrals never result in a doctor’s visit

• **70%** of specialty practices say referral info from providers is fair to poor

• **33%** of patients do not follow-up with the specialist when referred

• **20%** of patients discharged from acute to home experience an adverse event

• **20%** of high risk patients experience an adverse event following a specialty consultation
Elements of Care Coordination

• Patient/Designated Caregiver Engagement
  • Shared decision making
  • Informed choice

• Interoperable Private and Secure Information Flow
  • Across the continuum of care

• Transitions of Care Use Cases
  • Real-time Push
  • Curated information based on training and experience
Direct Project Background

• Direct Project: a community, consensus-based development effort, launched in 2010 as part of NwHIN portfolio.

• Goal: create simple, secure, scalable standards-based approach for sending authenticated, encrypted health information directly to known, trusted recipients via the internet.

• Following successful pilots and deployment more widely, inclusion in 2014 edition certification criteria and required for use in MU Stage 2 for transitions of care/care summary exchange requirements.

• HISPs accredited through DirectTrust represent more than:
  • 2.2M Direct Addresses, across 232,000+ organizations
  • 197M Direct messages in Q3 2019
360X Project Background

• 360X launched in 2012 as part of ONC State HIE Program (HITECH)

• Collaborative effort by HIT vendors, HISPks, other industry partners

• Uses existing proven industry standards only:
  • C-CDA - clinical content
  • Direct protocols - transport
  • XDM - establishing context (Metadata)
  • HL7 V2 messages - referral workflow

• Use Cases to date:
  • Closed Loop Referral (PCP/Specialist)
  • Hospital to SNF Transfer
Technical Foundations

Building upon multiple specifications

- Transport
  - SMTP
  - S/MIME
  - Direct

- Workflow
  - XDM - Document Exchange Metadata (XD* Metadata)
  - HL7v2 Messages

- Clinical Information
  - C-CDA Document Types
  - Additional Section-level Content
Technical Foundations

- **Specialty Info needs**
  - Additional C-CDA sections
  - Continued adoption

- **Clinical Information**
  - C-CDA containing MU Common Data Set
  - Well understood, available

- **Workflow Information**
  - HL7 Version 2.x messages
  - Well understood

- **XDM**
  - Well understood, available

- **Direct**
  - Well understood and widely available

- **S/MIME**

- **SMTP**
Necessary Capabilities

• Patient Identity management capabilities
  • The Referral Initiator sends basic demographics information and a patient identifier known to them
  • The Referral Recipient must send back the same patient identifier
  • The same patient identifier must be used by both sides in any exchanges related to the referral

• Referral Identifier
  • The Referral Initiator assigns a unique referral identifier with the referral request
  • The Referral Recipient must send back the same referral identifier
  • The same referral identifier must be used by both sides in any exchange related to the referral
360X Next Steps

• Reporting for eCQM CMS Measure CMS50v7 Closing the Referral Loop: Receipt of Specialist Report

• Additional Capabilities
  • Ability to share insurance information and pre-authorization number
  • 360X in combination with additional technologies
    • FHIR Scheduling (Argonaut Scheduling Profile)
    • FHIR Pre-Authorization (Da Vinci PAS profile)

• New use cases
  • Acute Care to SNF transfer (in progress, IHE profile to be balloted in 2020)
  • LTPAC to ED transfer (future)
  • Procedure referrals (future)
  • Referrals to home health (future)
CMS’ EMDI Initiative

Electronic Medical Documentation Interoperability

To expand the use of health IT standards with a goal to reduce provider burden by identifying and assembling a robust network of stakeholders willing to pilot test use cases, participate in gap analysis, publish measures, and contribute to documentation for new adopters.
EMDI Focuses on Provider-to-Provider Interoperability
EMDI Helping to Achieve Next Level of Interoperability

- **Organizational Level**
  - Trusted and Shared Data
  - Level 4
  - Expand

- **Semantic Level**
  - Data Interpretation
  - Level 3
  - Refine and Enhance

- **Structural Level**
  - Defined Structure of Data
  - Level 2
  - Educate

- **Foundation Level**
  - Exchange of Data
  - Level 1
  - Explore

- **Not Interoperable**
  - Level 0
  - Assess

EMDI takes a tiered approach that navigates pilot participants through all levels of interoperability.
EMDI Pilot Workflow

**UC1:** Order/Referral, with attached medical records
**UC2:** Request for Medical Documentation
**UC3:** Request for Signature

Email the EMDI Team at EMDI_Team@Scopeinfotechinc.com For More Information
EMDI and MedAllies Pilot Overview

Primary Care Physician

Referring Provider

Referring Provider sends a referral to the Rendering Provider.

Referring Provider Receives updated patient information for patient care and closes the referral loop.

Rendering Provider

*Rendering Provider declines the referral, rejecting access to the patient record, and closing the referral loop.

*Rendering Provider accepts the referral and patient records.

Rendering Provider conducts the initial, the treatment, and the ultimate consultations.

C-CDA

*Notification Sent C-CDA Exchange

UC1

EMDI

360x Direct

Email the EMDI Team at EMDI_Team@Scopeinfotechinc.com For More Information
360X EMDI Pilot
Referral Management

- eClinical Works and Netsmart
- Ambulatory Referral: primary care to behavioral health
- Early 2020
- Interested?
  - Ask your vendor
A Patient Story

• Sheryl Jacobs, suffering from depression and poly-substance abuse, and her PCP decide together that Sheryl should have a behavioral health consultation
  • Sheryl is given a specialist’s phone number
360X Clinical Example: Referral Management

Referral request, behavioral health Dr. Carlyle
360X Clinical Example: Referral Management

Request accepted

- Review availability, send “Accept” message
- Accept
- Sends appointment
- Creates new patient chart with discrete data received
360X Clinical Example: Referral Management

Interim consultations

- Automatic patient match
- PAMI data reconciliation

- Patient treatment with specialist, several consultations
- Interim consultations sent to PCP
360X Clinical Example: Referral Management

Close the referral loop

- Automatic patient match
- PAMI data reconciliation
- Close the referral loop

Final Consult

PCP Provider

MedAllies HISP

Behavioral Health

Sheryl

- Patient sober controlling her substance abuse
- Ultimate consult sent to PCP
360X
Acute Transfer to SNF
Please Join Us for the 360X HIMSS Interoperability Showcase Demo
Bidirectional Services eReferrals (BSeR)

Facilitating extra-clinical aspects of continuity of care

- Enable healthcare provider referrals to community programs
  - Leverage referring provider “stickiness”
  - Send only necessary referral data
  - Receive feedback from extra-clinical program progress
  - Teaming with Gravity project to help make social determinants actionable

BSeR FIHR R4 Implementation Guide Use Cases

BSeR work is funded by the National Center for Chronic Disease Prevention and Health Promotion
Bidirectional Services eReferrals (BSeR)

Using HL7 FHIR to meet program needs

- HL7 FHIR referral and feedback standard
- FHIR enabled data segmentation
- Fully harmonized with 360x transactions
- Pushing referrals
  - FHIR Submit
  - And / or FHIR Messaging
    - Supports FHIR over legacy transport (Direct, XDR, other)
Bidirectional Services eReferrals (BSeR)

Moving Forward

- More programs in standard and through use by others
- Looking at program locator functions
- Testing in HL7 Connectathons, demonstrations in HIMSS Showcases, initial implementations at production sites
  - CDC Division for Diabetes Translation
  - Y-USA and regional YMCAs
  - Alliance of Chicago
Questions?
Contact ONC

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