Using Standards to Advance e-Referrals and Improve Patient Care

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Care Coordination Needed for Improved Health Outcomes

Hospital A

Hospital B

LTPAC Setting

Primary Care Provider

Specialist

Public Health

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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

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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

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360X Project Background

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

- Collaborative effort by HIT vendors, HISPs, 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)
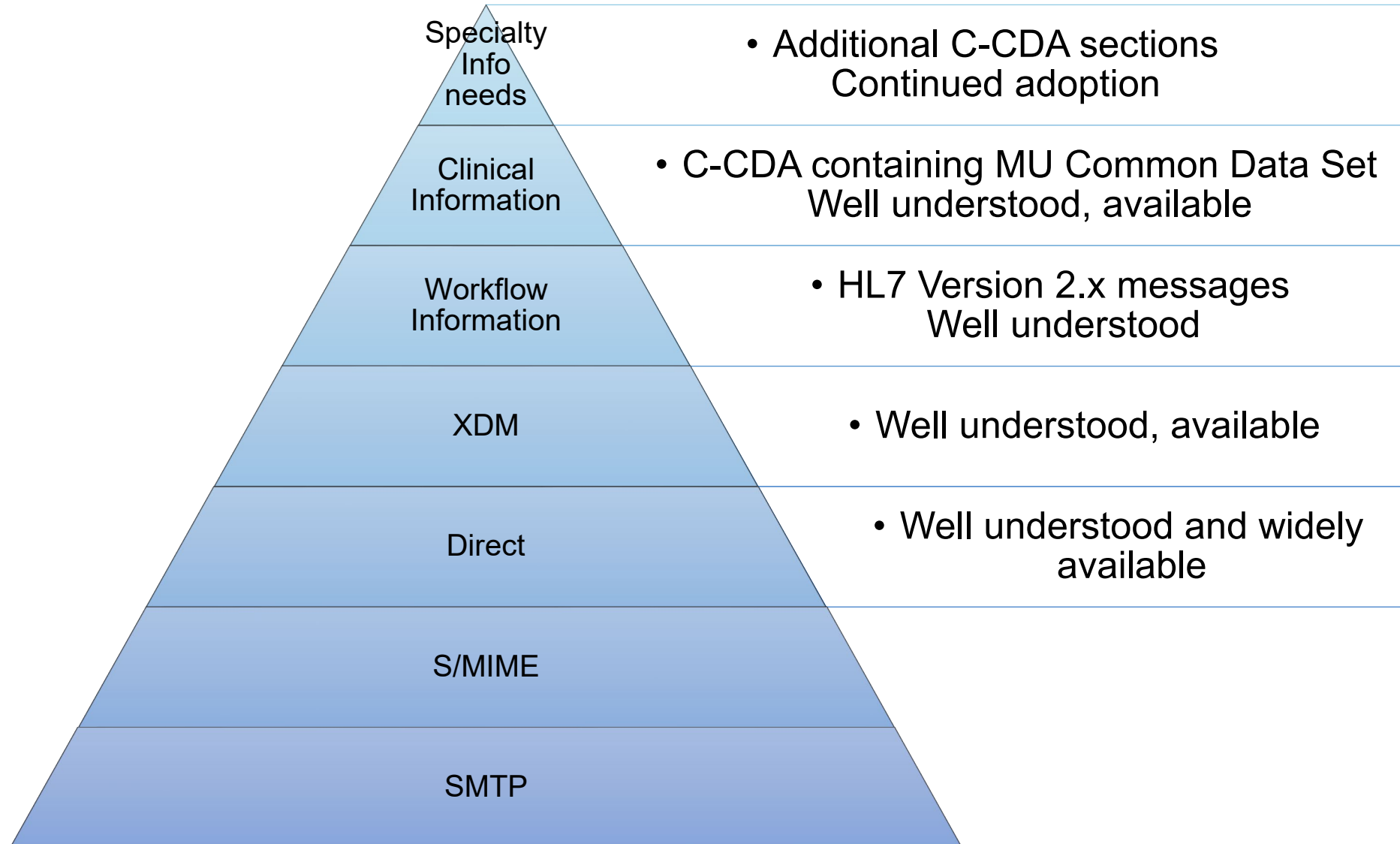
  - Hospital to SNF Transfer
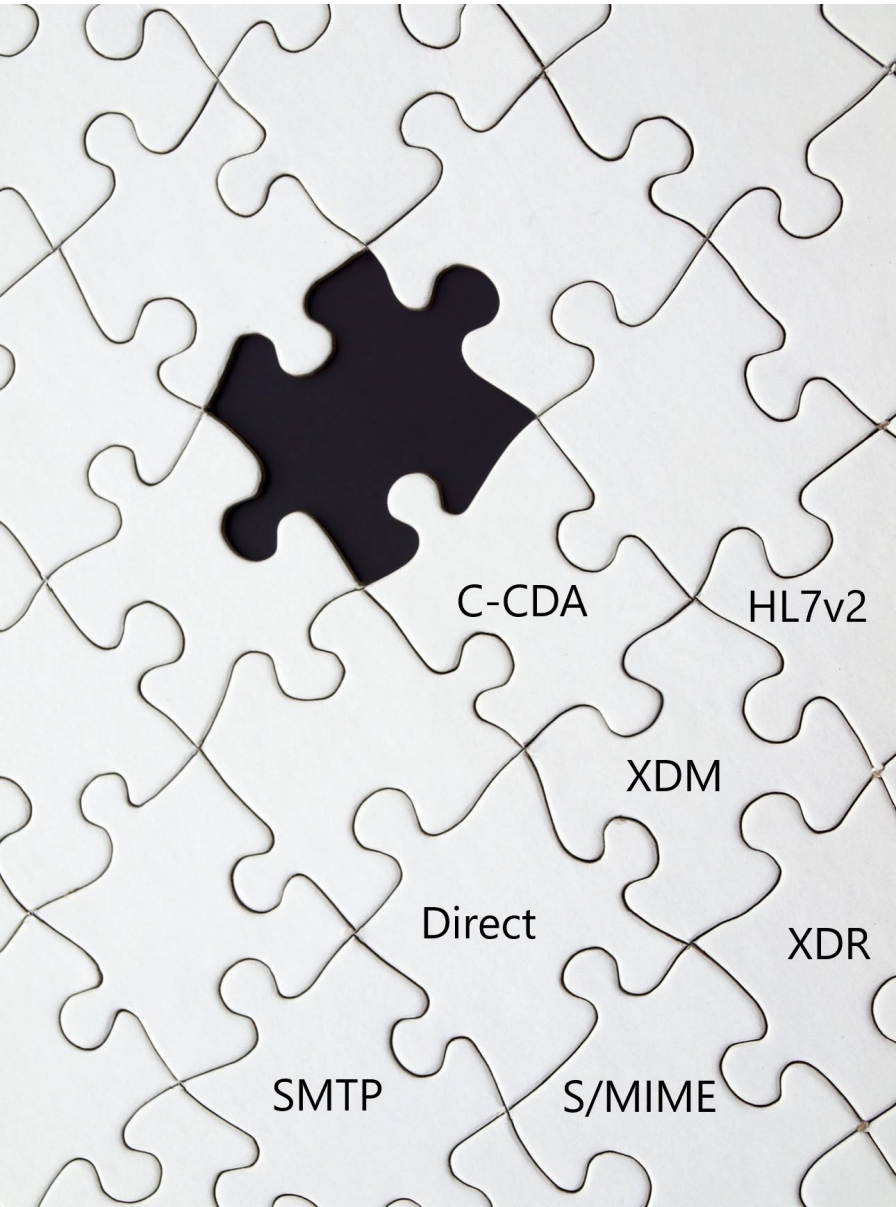
Technical Foundations

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

Pyramid Level	Description
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)
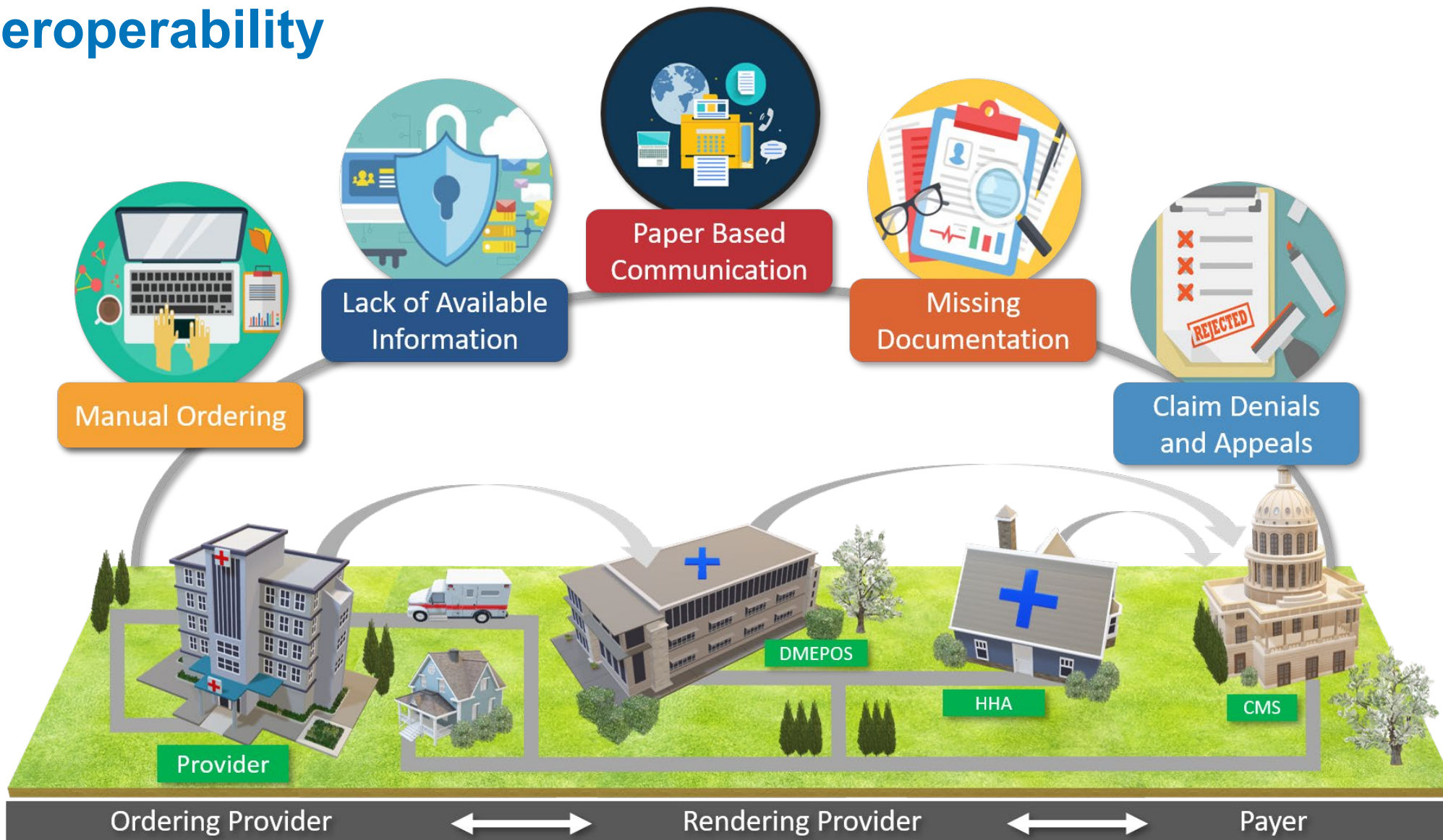
CMS' EMDI Initiative
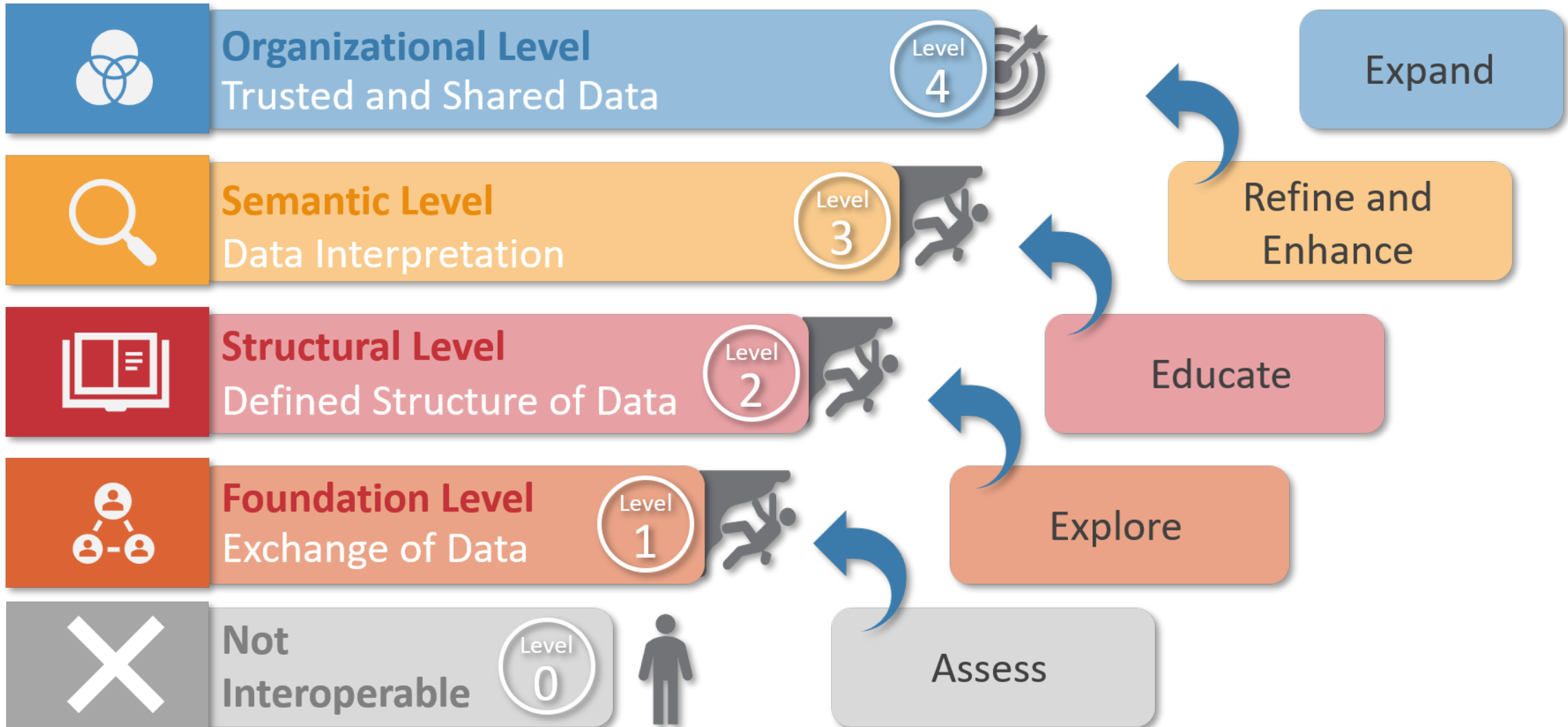

Electronic Medical Documentation Interoperability

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.

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EMDI Focuses on Provider-to-Provider Interoperability

Manual Ordering

Lack of Available Information

Paper Based Communication

Missing Documentation

Claim Denials and Appeals

Provider

DMEPOS

HHA

CMS

Ordering Provider ⟷ Rendering Provider ⟷ Payer

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EMDI Helping to Achieve Next Level of Interoperability

Organizational Level
Trusted and Shared Data — Level 4

Semantic Level
Data Interpretation — Level 3

Structural Level
Defined Structure of Data — Level 2

Foundation Level
Exchange of Data — Level 1

Not Interoperable — Level 0

Expand

Refine and Enhance

Educate

Explore

Assess

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

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EMDI Pilot Workflow

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

Ordering Provider

Rendering Provider

UC 1 — Ordering Provider sends an order/referral to the Rendering Provider

UC 1 — Rendering Provider accepts/declines the order/referral

UC 2 — Ordering Provider sends requested medical documentation to the Rendering Provider

UC 2 — Rendering Provider requests missing medical documentation from the Ordering Provider

UC 3 — Ordering Provider sends signed/dated documentation to the Rendering Provider

UC 3 — Rendering Provider requests missing physician signature from the Ordering Provider

EMDI

Email the EMDI Team at EMDI_Team@Scopeinfotechinc.com For More Information

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EMDI and MedAllies Pilot Overview

Primary Care Physician

eClinicalWorks
"Improving Healthcare Together"

DirectTrust™

MedAllies
Integrated Data **Innovative Technology**

Netsmart

Behavior Health

Referring Provider

Rendering Provider

UC 1

Referring Provider sends a referral to the 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.

UC 1

EMDI

360x Direct

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

C-CDA

C-CDA

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

*Notification Sent

C-CDA Exchange

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
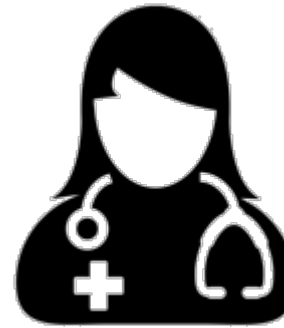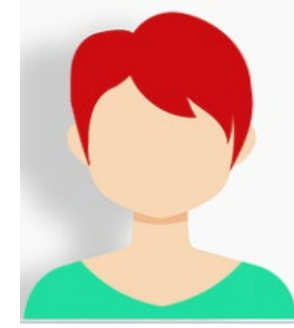
PCP **Sheryl**

- Sheryl Jacobs, suffering from depression and poly-substance abuse, and her PCP decide together that Sheryl should have a behavioral health consultation
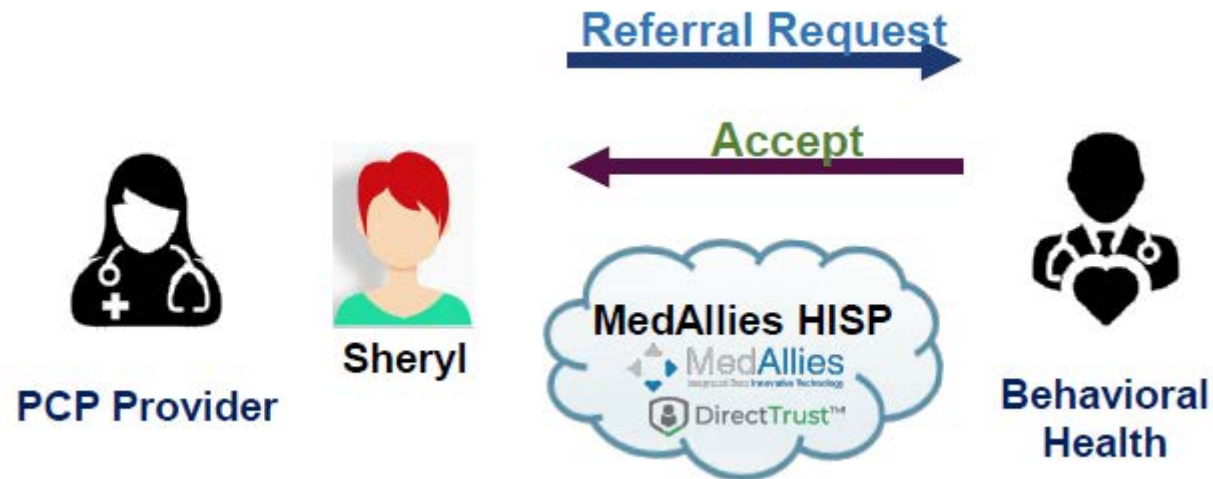 - Sheryl is given a specialist's phone number

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**

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360X Clinical Example: Referral Management

Interim consultations

- **Automatic patient match**

- **PAMI data reconciliation**

Interim Consultations

PCP Provider

MedAllies HISP
MedAllies
Integrated Data Innovative Technology

DirectTrust™

Behavioral Health

Sheryl

- **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**

- **Patient sober controlling her substance abuse**

- **Ultimate consult sent to PCP**

360X
Acute Transfer to SNF

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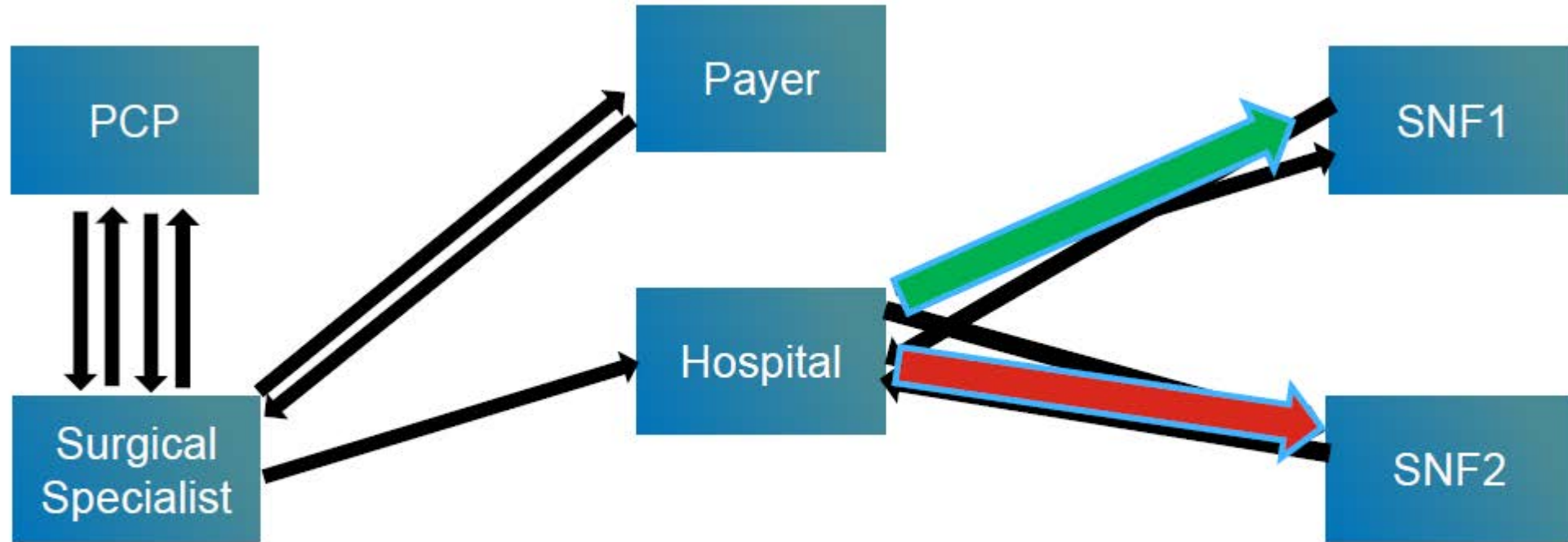
Please Join Us for the 360X HIMSS Interoperability Showcase Demo

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 work is funded by the National Center for Chronic Disease Prevention and Health Promotion
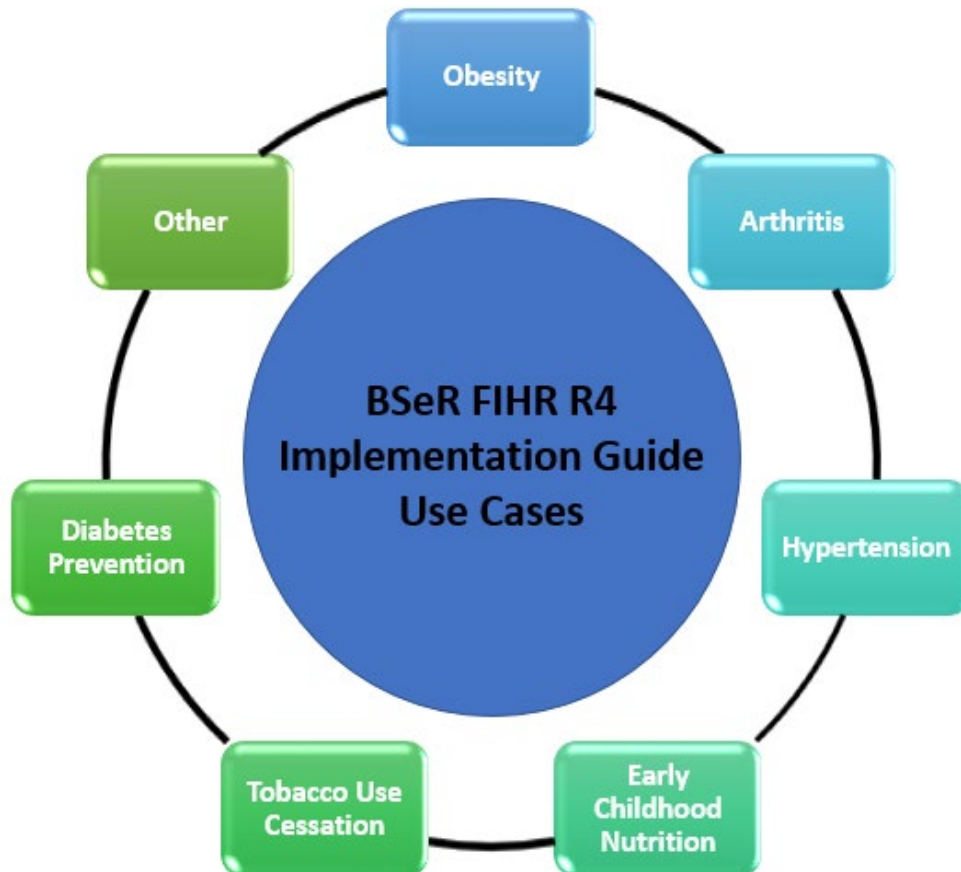
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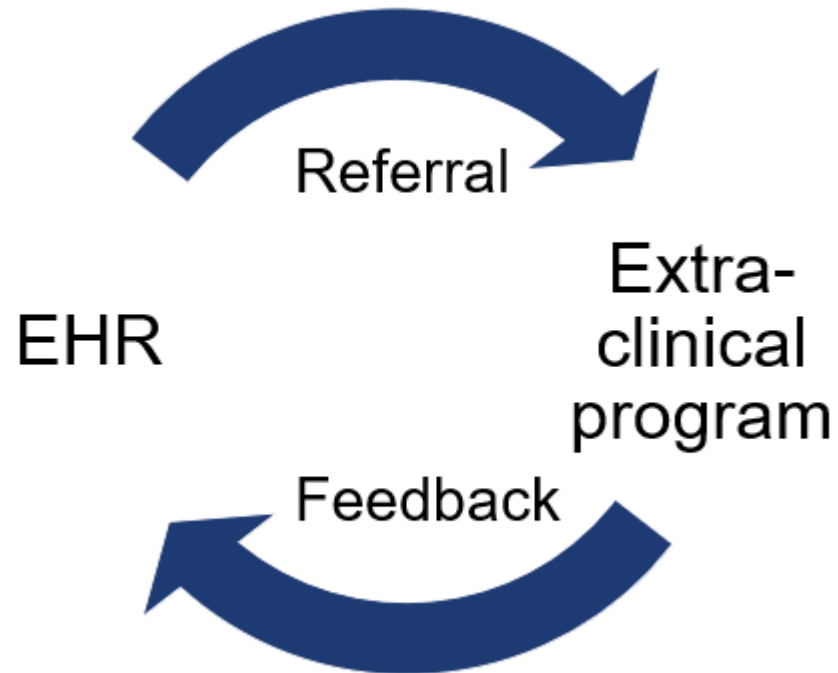
Using HL7 FHIR to meet program needs

- 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)

BSeR FIHR R4 Implementation Guide Use Cases: Obesity, Arthritis, Hypertension, Early Childhood Nutrition, Tobacco Use Cessation, Diabetes Prevention, Other

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?

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Contact ONC

Additional Questions?

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