Population Health Information Technology

Session 3: Using Technology to Translate Population Insights Into Excellent Patient-Level Care

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Objectives

- Discuss care coordination through the lens of Health IT (HIT)
- Identify technologies that support population health in value-based care models
- Explain how population health data within these technologies is translated into actionable knowledge to drive care

Terminology

- Accountable Care Organization (ACO)
- Admission, Discharge, and Transfer (ADT)
- Centers for Medicare & Medicaid Services (CMS)
- Clinical Decision Support (CDS)
- Community Information Exchange (CIE)
- Continuity of Care Document (CCD)
- Electronic Health Record (EHR)
- Health Information Exchange (HIE) and Health Information Technology (HIT)
- Hierarchical Condition Category (HCC)
- Merit-Based Incentive Payment System (MIPS)
- Population Health (PH) and Population Health Management (PHM)
- Social Determinants of Health (SDOH)
- Value-Based Payment (VBP) and Value-Based Care (VBC)

Overview of Sessions 1 and 2

- Session 1: Reviewed the broader context of how technology is used to support Population Health Management in value-based care payment models
- Session 2: Learned about the components of PHM and risk identification: data collection, analysis, stratification, and utilization

Care Management HIT Tools

- Patient Engagement Tools
  - Patient Portal
    - Communication
    - Education
    - Resources
  - Lab results
  - Scheduling/Reminders
- Clinical and Care Management Tools
  - ADT
  - CDS
  - Telehealth
  - Patient Monitoring
  - Registries
- Data Exchange
  - HIE
    - Clinicians, Specialists
    - Alternative providers
  - CIE
    - Community Resources
    - SDOH
    - Housing

Health Information Technology at the Point of Care

Tools for Proactive Workflows

- Team-based care plans with patient goals
  - Nurse-led (could be other team members)
  - Emphasis on patient and SDOH
- Alerts
  - ADT (Admission, Discharge, and Transfer)
- Clinical Decision Support
  - Chronic care management
  - General care management

Uses for Telehealth in Value-Based Care

- Acute care: illnesses and injuries
- Chronic disease management
- Behavioral health
- Substance use disorder treatment
- Follow-up visits: medication management, post-hospitalization discharge

Uses for Telehealth in Value-Based Care cont.

- Medication management
- Dental consultations/education
- Triage
- Second opinions
- Referral advice/consultations

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Remote Patient Monitoring

- Use of digital technologies to collect medical and other forms of health data from individuals
- Electronically transmit information securely for assessment and recommendations
- Includes vital signs, weight, blood pressure, blood sugar, blood oxygen levels, heart rate, and electrocardiograms

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Remote Patient Monitoring Uses

- Chronic disease management
- Behavioral health services
- Home-based dialysis
- Managing mild COVID-19 cases

Mobile Health Uses

- Monitoring of chronic disease
- Prevention for addiction services
- Depression management
- Daily reminders
- Automated hospital discharge summaries
- Health care surveys

Care Coordination

Care coordination involves deliberately organizing patient care activities and sharing information with all members of a patient's care team to achieve safer and more effective care.

- Value-based care offers solutions to common rural challenges:
  - Financial strain due to limited payer mix
  - Health workforce shortages
  - Duplication of services
  - Social determinants of health

Public Health (PH) and Merit-Based Incentive Payment System (MIPS) Registries

PH Registries

- Enable knowledge generation in order to inform and improve processes/outcomes, e.g., birth defect registries, chronic disease registries, cancer registries, immunization registries

MIPS Registries

- Organizations that report MIPS measure data to the Center for Medicare and Medicaid Services (CMS) on behalf of a clinician or organization
- Costs associated with selecting a registry

Patient Engagement Tools: Patient Portals

- Proactive outreach
  - Reminders for preventive screenings due
  - Reminders for upcoming appointments
  - Lab results
  - Visit summaries
  - Communication directly with care team
  - Provider locator
  - Visibility to EHR chart info/data

Health Information Exchange and Community Information Exchange

Health Information Exchange Overview

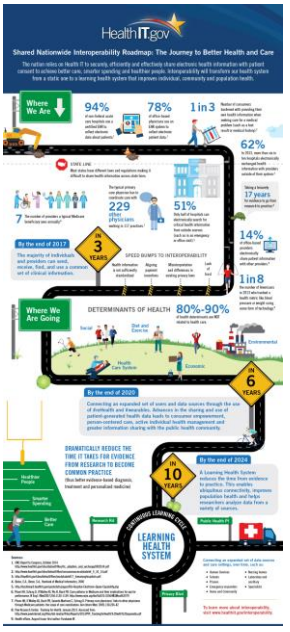
- What does HIE enable us to do?
  - Avoid readmissions
  - Avoid medication errors
  - Improve diagnoses
  - Decrease duplicate testing
- Example of travel industry data exchange
- Goal is to assemble a full, longitudinal health record

HIE Overview cont.

- Types of information we can mobilize
  - CCD (meds, problems, lab results)
  - Immunization registries
  - EHR data (labs, diagnostic, history)
- HIE is a quickly evolving capability: Fast Health Interoperability Resources (FHIR), Application Programing Interfaces (APIs)

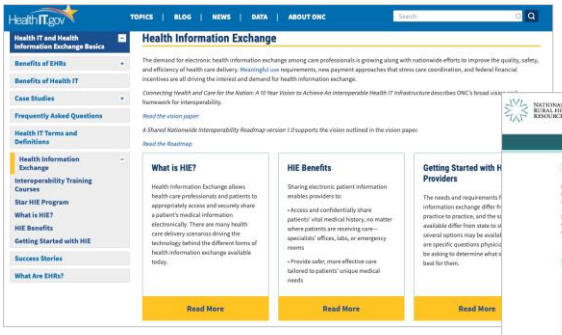
Health Information Exchange

- HIT Roadmap
- HIE varies from state to state
- States combining HIE efforts
- Barriers exist, especially for rural providers
- More exchange is the goal for value-based care

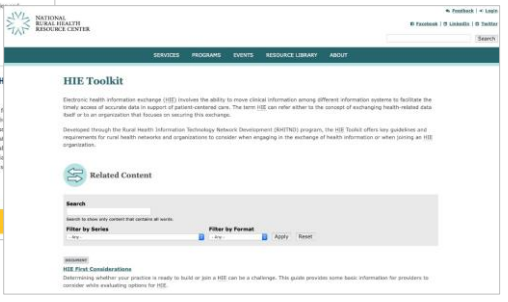


HIE Opportunities and Resources

HealthIT.gov



National Rural Health Resource Center



Community Information Exchange

Healthcare + Behavioral Health + Social/Community Data

- Collect and share data at a population level
  - Identify and analyze groups of patients where social factors are creating risk for their health
  - Consider local, state, and federal requirements for data sharing
- Longitudinal Care Coordination
  - Closed-loop referrals to community and other care settings:
    - Schools
    - Corrections
    - Alternative Care Practices
    - Housing
    - Food Programs
- San Diego Community Information Exchange
- Grand Junction, Colorado Community Resource Network

Social Determinants of Health (SDOH) Screening and Tools

- Longitudinal Care Coordination
  - Broader, longitudinal picture of patients' health
  - Social risks to supplement clinical data
- SDOH screening helps detect disparities and inequities in patient populations
- Collecting SDOH data and aggregating it helps inform local and state policy
- SDOH information is key to Community Information Exchange

SDOH Screening and Tools cont.

- 'Gravity' project facilitated by the HL7 standards organization is seeking SDOH data standards
- Understanding and Addressing Social Determinants of Health: Opportunities to Improve Health Outcomes – A Guide for Rural Health Care Leaders
- A Guide for Rural Health Care Leaders on Understanding and Addressing Social Determinants of Health
- SDOH vendor solutions: web-based community resources and electronic referrals

Summary

- Review of Population Health Management and the handoff to Care Management and Care Coordination
- Next session (4) covers two specific use cases to assemble the learning of the first 3 sessions
- Reference and Resource slides follow this final slide
- A PDF of this session is available with hyperlinks to easily access resources and references

References

Slide 18: Health Information Exchange

HealthIT.gov

Shared Nationwide Interoperability Roadmap: The Journey to Better Health and Care (healthit.gov)

Slide 19: HealthIT.gov (HIE)

https://www.healthit.gov/topic/health-it-and-health-information-exchange-basics/health-information-exchange

Slide 19: National Rural Health Resource Center (HIE Toolkit)

https://www.ruralcenter.org/resource-library/hie-toolkit

Slide 20: Community Information Exchange

San Diego Community Information Exchange

https://ciesandiego.org

Grand Junction, Colorado Community Resource Network

https://communityresourcenet.org

References cont.

Slide 21: SDOH Screening and Tools

The Gravity Project: Consensus Driven Standards on SDOH

https://confluence.hl7.org/display/GRAV/The+Gravity+Project

Slide 22: SDOH Screening and Tools

Understanding and Addressing Social Determinants of Health: Opportunities to Improve Health Outcomes, A Guide for Rural Health Care Leaders.

Rural Health Value

https://ruralhealthvalue.public-health.uiowa.edu/files/Understanding%20the%20Social%20Determinants%20of%20Health.pdf

County Health Rankings Model

https://www.countyhealthrankings.org/explore-health-rankings/measures-data-sources/county-health-rankings-model

Funding Sources for HIT

- Small Rural Hospital Improvement Program (SHIP) https://www.hrsa.gov/grants/find-funding/hrsa-19-020
- Approximately $12,000 for allowable investments
  - Purchase HIT (hardware and software)
  - Training

Funding Sources for HIT cont.

- Agency for Health Research and Quality (AHRQ)
- Health Resources and Services Administration (HRSA), including the Federal Office of Rural Health Policy and Bureau of Primary Health Care
- The U.S. Department of Agriculture (USDA) has loan and grant programs including:
- Community Facilities Direct Loan and Grant Program
- Distance Learning and Telemedicine Program Grants
- Rural Economic Development Loan and Grant Program
- Other funding opportunities supporting rural providers and HIT exist. For example, the Universal Service Administration Company (USAC) Healthcare Connect Fund aids health care providers for eligible expenses related to broadband connectivity at a flat discounted rate of 65%.

Health Information Technology in Rural Healthcare Overview - Rural Health Information Hub

Telehealth Resources

- Critical Access Hospital Telehealth Guide
  https://nrtrc.org/resources/downloads/CAHTelehealthGuide.pdf
- Center for Connected Health Policy
  https://www.cchpca.org
- Telehealth Federal Policies
  https://www.cchpca.org/resources/covid19-telehealth-coverage-policies
- CMS Telehealth Toolkit
  https://www.cms.gov/files/document/telehealth-toolkit-providers.pdf

SDOH Resources: Screening Tools

Three screening tools can aid physicians in addressing multiple social determinants of health in a primary care setting.

Screening tool	Number of questions	Source
The Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences (PRAPARE)	15 core, 5 supplemental	http://www.nachc.org/research-and-data/prapare/toolkit/
The American Academy of Family Physicians Social Needs Screening Tool	11 (short form) 15 (long form)	Short: https://www.aafp.org/dam/AAFP/documents/patient_care/everyone_project/patient-short-print.pdf Long: https://www.aafp.org/dam/AAFP/documents/patient_care/everyone_project/patient-long-print.pdf
The Accountable Health Communities Health-Related Social Needs (AHC-HRSN) Screening Tool	10 core, 13 supplemental	https://innovation.cms.gov/Files/worksheets/ahcm-screeningtool.pdf

The AHC-HRSN tool draws on evidence from several need-specific assessments, below, which can provide valuable background.

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