

# Population Health Information Technology

## Session 4: Bringing it All Together

April 2022



This project is supported by the Health Resources and Service Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number U5ERH39345 as part of a financial assistance award totaling \$800,000 (0% financed with nongovernmental sources). The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA/HHS, or the U.S. Government.

0

## Objectives

- Summarize lessons learned from the first three sessions of this course
- Examine two end-to-end use cases of how population health technologies work together to improve outcomes in Value-Based Care
- Identify next steps to move forward with population health information technology

1



1

## Terminology

- Accountable Care Organization (ACO)
- Admission, Discharge, and Transfer (ADT)
- 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)
- Population Health Management (PHM)
- Social Determinants of Health (SDOH)
- Value-Based Payment (VBP) and Value-Based Care (VBC)

## Overview of Previous Sessions

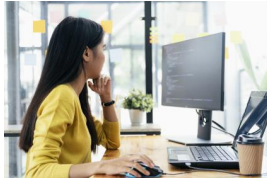
- Session 1: Reviewed the broader context of how technology is used to support Population Health Management in value-based care payment models
- Session 2: Learned about the components of data collection, analytics, stratification, and utilization used in PHM
- Session 3: Discussed how population health data within those technologies is translated into actionable knowledge to drive care

## Successful Workflows

- IT Systems and Tools to Support Them
  - Data Collection
  - Analysis
  - Stratification
  - Utilization
- Standard Operating Procedures (SOPs) in Place
- Community Referral Resources
- Local and Regional Partnerships
  - Clinical
  - Non-clinical



## Use Case #1: Using Health IT to Improve Clinical Processes



6

6

## Mountain Peak Clinic QI Process SMART Goal

Number of patients completing Medicare annual wellness visits (AWV) will increase from 38% to 70% by December 31, 2022

- Collect, Analyze, Stratify and Utilize data from their EHR to drive this change

7

7

## Step 1: Data Collection

### Data Collection

- EHR-generated Patient Report
  - No annual wellness visit in past 24 months (stratified)
  - Date of last recorded wellness exam

## Step 2: Data Analysis and Stratification

- EHR content
  - Determine accuracy, current
- Health Information Exchange
  - Was AWW done elsewhere? Did patient move?
- Use risk stratification tools to group by diagnosis, etc.
  - Stratify by payer, age, race, diagnoses, other data
  - Identify target population and interventions

## Step 3: Implement Updated Workflows

- Identify current and desired workflows for Medicare annual wellness visits
  - Process mapping
  - Plan, Do, Study, Act (PDSA)

Resource: Stratis Health Quality Improvement (QI) Basics

## Step 4: Monitor Progress and Modify Workflows as Needed

- Annual wellness visit rate by Medicare-eligible patients
- EHR dashboards for providers, nurses
  - Percent of assigned patients due for AWV
  - Alerts clinician if patient is due for AWV
- Reports: Initially weekly, then monthly
  - Monitor progress with tracking tools

## Use Case #2

# Helping Harlow Access, Use, and Navigate the Health Care System

## Mountain Peak Clinic RN Receives List of Patients at Risk

FOCUS AREA Patients with HA1c >9

- Collect
  - Data entered in EHR, output in list
- Analyze
  - Identify
- Stratify
  - Prioritize
- Utilize
  - Harlow identified as high risk



## Step 1: Nurse Reviews Clinical Records

### EHR Registry List Patients with HA1c >9.0

- MEDICARE patients with lab results of HA1c >9.0 anytime in the past 3 years
- Lab - HA1c
- Dates of visits
- Diagnoses
- Provider

HARLOW IS ON THE LIST

### EHR

- Dx: Type 2 Diabetes, hypertension
- Obesity: BMI 35
- Visit history:
  - Last seen in October 2019 for annual wellness exam
  - Several missed appointments – lack of transportation and Covid restrictions
- Notes: Medication refills by phone over the past 2 years

14



14

## Step 2: Nurse Calls Harlow

- No current Covid symptoms
- No transportation to clinic for appointment
- Diabetes: Last FBS 155 ~ 1 week ago
  - usually 130-180s
- During call, nurse alerted to several social issues that may affect healthy outcome
  - Nurse asks more socio-economic and holistic questions (SDOH)



15



15



## Step 2 cont.: Nurse Identifies Barriers to Positive Outcomes

### Nurse Interview:

- Retired construction worker
- Lives alone in rural area
- Car is not working, no transportation
- No financial issues



### Nurse interventions:

- Arranges call with care coordinator/social worker
- Requests refill from provider - pharmacy to mail

16



16

## Step 3: Care Coordinator Completes SDOH Screening via Telehealth

### Zoom meeting via cell phone

- 68-year-old widower, retired, rural, transportation challenges, diabetes
- Limited family support; 4 adult children
  - Daughter gets groceries weekly
- General diet
  - Limited access to fresh produce
- Limited exercise
- Intelligent, low literacy
- Anxiety – post traumatic stress
- Occasional alcohol and marijuana use
- Safe, stable housing, running water
- Feels safe in his home



17



17

## Step 4: Care Coordinator Interventions

- Schedules visit with nurse practitioner in 3 days
- Locates transportation options
  - CIE (Community Information Exchange), or community resource list
  - Review options with Harlow
  - Arranges transportation
- Adds Harlow to Care Coordination Program
  - Schedules 2-week follow up call with Harlow
  - Adds Harlow to weekly team meeting agenda
  - Use every opportunity for SDOH assessment
    - it is ongoing and everchanging



18

18

## Information Technology Supports for Improved Care Coordination

### • Health Information Exchange

- Need CCD
- Certified HIT and HIE vendors

### • Community Information Exchange

- SDOH tool and platform

### • Telehealth

- Internet or phone

### • Telemonitoring

- Internet or phone

### Care Coordination

- Team meetings
- Regular contact
- Referrals (dietitian)
- Care Plan

### Services and Resources

- Homecare
- Homemaking
- Community Health Workers
- Meals on Wheels
- Home-delivered groceries and goods
- Local Community organizations

19

19

# Wrapping It Up

## Next Steps to Utilize HIT for Population Health Management

- Guide to Selecting Population Health Management Technologies for Rural Care Delivery
  - Six-step process and supporting tools to help your organization identify goals and needs and select IT resources to help manage the health of patient populations.

### How to Use This Guide

This guide walks you through a six-step process to plan for and implement technology to manage the health of your existing patient populations.

1. [Form a Team](#)
2. [Set Goals](#)
3. [Plan for Financing](#)
4. [Develop Requirements](#)
5. [Compare Products](#)
6. [Select Vendor and Negotiate Contract](#)

**Note:** Before taking action with this guide, your organization should have already assessed whether to affiliate with a larger organization or network to achieve the goals of an accountable care organization (ACO) or other value-based contracting entity. These organizations may provide access to population health management technologies as part of the affiliation or networking process.

## Summary

- Reviewed two use cases focusing on the use of technology to support population health strategies
- This is the conclusion of the 4-session course focusing on technology for Value-Based Care Models
- Resource slides follow this final slide
- A PDF of this session is available with hyperlinks to easily access resources and references

## Resources

- Quality Improvement (QI) Basics  
<https://stratishealth.org/quality-improvement-basics/>
- Guide to Selecting Population Health Management Technologies for Rural Care Delivery  
<https://ruralhealthvalue.public-health.uiowa.edu/TnR/PHMT/PHMT.php>



NATIONAL  
RURAL HEALTH  
RESOURCE CENTER

**Developed by Stratis Health, in partnership  
with the National Rural Health Resource Center**

Stratis Health is an independent, nonprofit organization founded in 1971 and based in Minnesota. Its mission is to lead collaboration and innovation in health care quality and safety and serve as a trusted expert in facilitating improvement for people and communities.