

Connecticut State Innovation Model Health Enhancement Community Initiative

Population Health Council Meeting

May 31, 2018

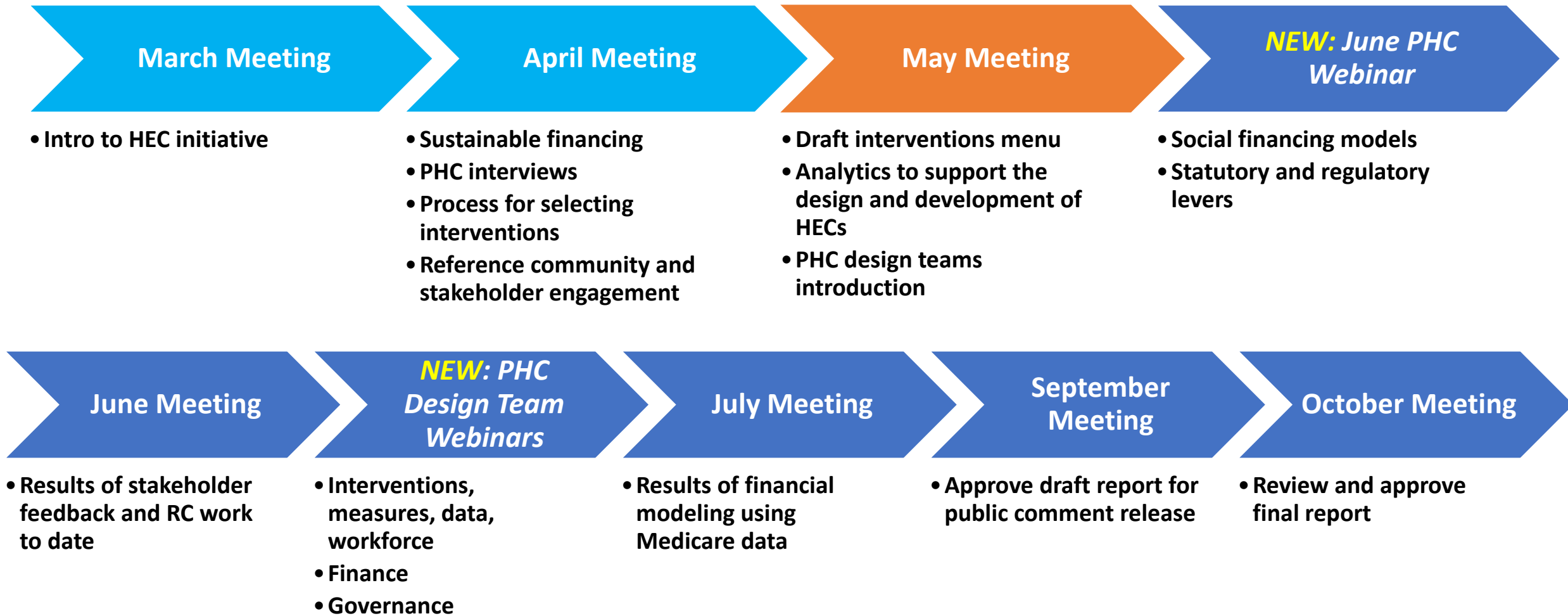
3:00 pm – 5:00 pm

 connecticut state
innovation model

Meeting Agenda

1. Introductions
2. Public Comments
3. Minutes
4. Health Enhancement Community Menu of Interventions
5. Analytics to Support the Design and Development of HECs
6. PHC Design Teams
7. Discussion
8. Closing Comments

Population Health Council HEC Timeline



More information later in the meeting about the new PHC webinars/design teams.

Today's Meeting

Meeting Objectives

- Present **menu of potential HEC interventions** and obtain PHC input
- Discuss the **analytics** to support the design and development of HECs
- Decide on an approach for **PHC design team engagement** and solicit volunteers for smaller, focused PHC design teams

Health Enhancement Community Initiative

Focuses on creating the conditions that promote and sustain cross-sector community-led strategies focused on prevention.

Provisional Definition

A Health Enhancement Community (HEC) is:

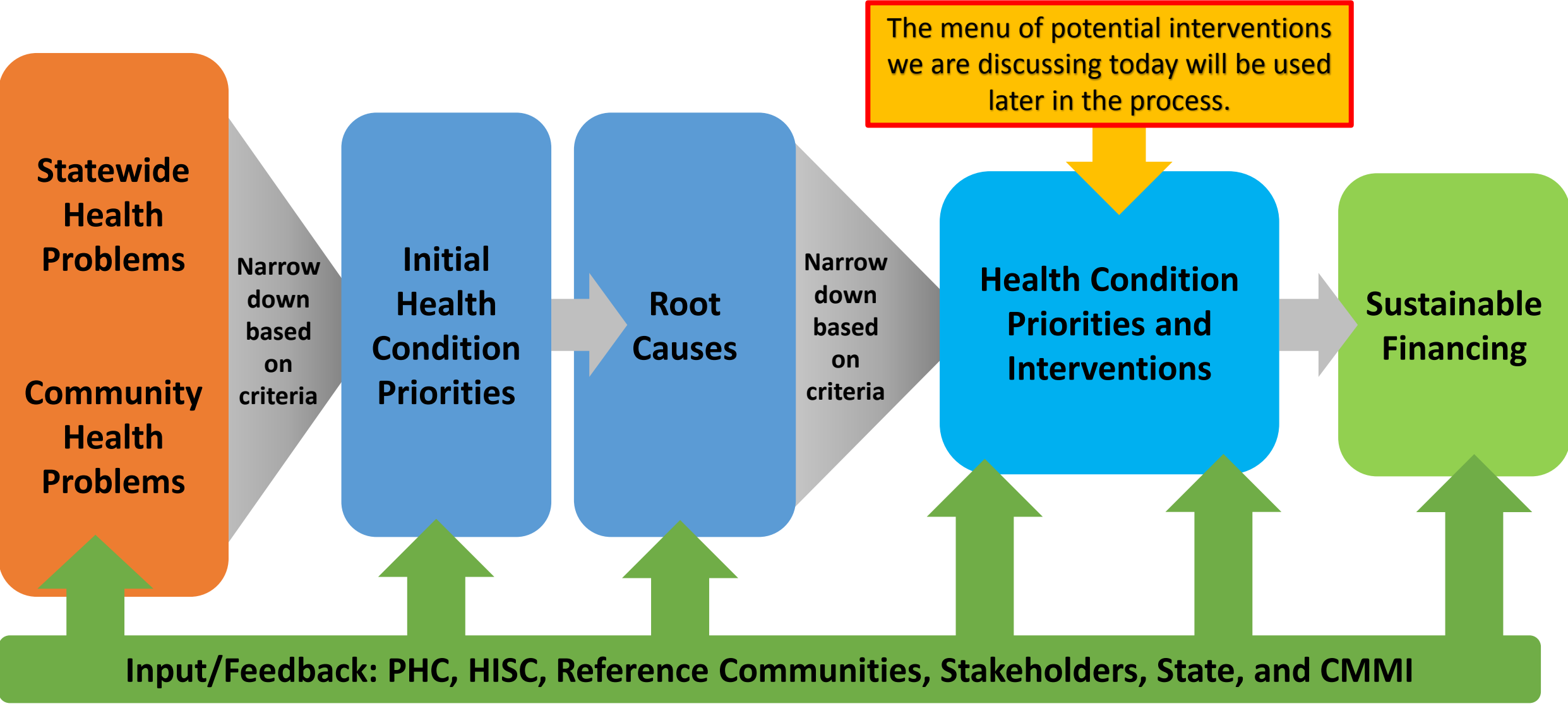
- Accountable for health, health equity, and related costs for all residents in a geographic area
- Uses data, community engagement, and cross sector activities to identify and address root causes
- Operates in an economic environment that is sustainable and rewards communities for health improvement by capturing the economic value of Improved health

Aligns with health improvement work underway in communities, previous and current SIM work, and adds sustainability and scale focus.

Many components of the HEC definition are intentionally undefined to accommodate a thoughtful, community-driven planning process.

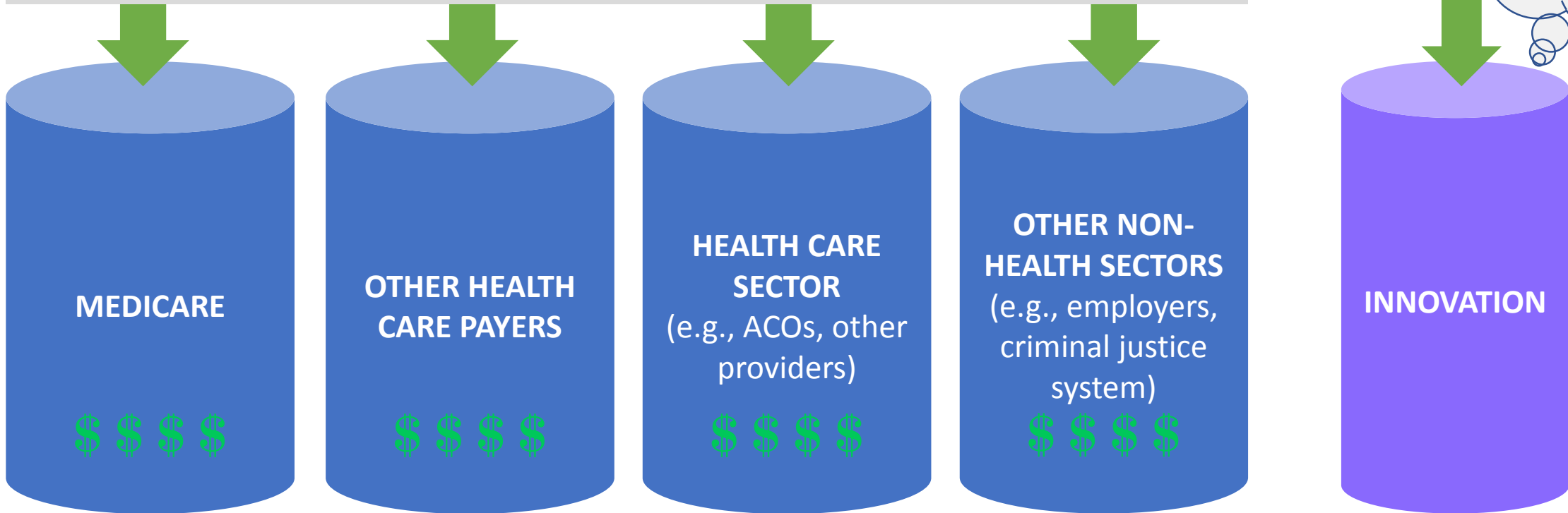
Menu of Potential HEC Interventions

Process for Selecting Interventions



To Secure Sustainable Financing...

Most INTERVENTIONS must accrue SAVINGS to at least 1 of 4 sources of sustainable financing.



Outline

- Framework
- Methodology
- Conditions – Root Causes – Interventions
- Primary Sources
- Discussion Questions and Feedback

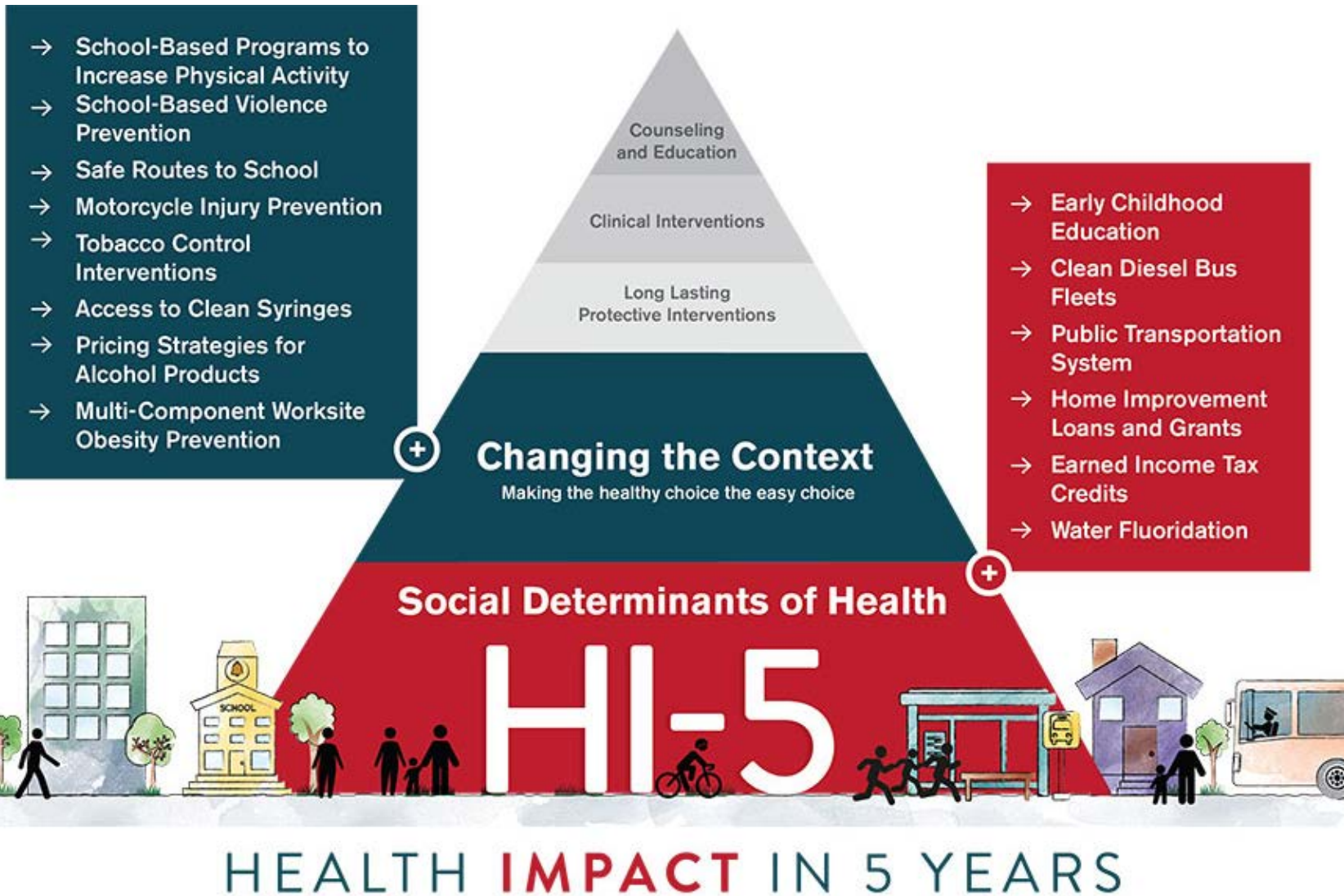
CDC Health Impact Pyramid

Factors that Affect Health



Check the Tarrant County Public Health Web site to learn more.
<http://health.tarrantcounty.com>





A Balanced Portfolio of Interventions

Health Affairs April 2018

1. An inventory of evidence-based intervention, including investments in the non-health care sectors
2. Diverse collection of financial sources
3. Selection process to address upstream interventions
4. Capability to capture and share portion of savings for reinvestment
5. Community infrastructure that can build and maintain a balanced portfolio (HEC)

Methodology

1. Used health conditions previously identified via SHIP, SIM, Reference Communities and Population Health Council;
2. Used sources in which interventions were recommended or top tier
 - The Community Guide – recommended vs. insufficient evidence or recommended against
 - Coalition for Evidence-Based Policy – Top Tier Standard vs. Near Top Tier
 - CDC HI-5 – evidence-based community-wide interventions in 5 or less years
3. Identified root causes and linked back to health condition(s)
4. Focused on community-based interventions, not clinical
5. Focused on interventions with estimated timelines for return less than 10 years

Summary of Health Conditions Identified

- Heart disease and high blood pressure
- Diabetes
- Asthma
- Obesity (child and adult)
- Tobacco use
- Colon and breast cancer
- Maternal, infant, and child health
- Oral health for children
- Childhood lead poisoning
- Substance use including opioids
- Mental health
- Developmental conditions
- Sexually transmitted infections
- Vaccine preventable diseases
- Emerging infectious diseases
- Unintentional injuries (e.g., falls)
- Injuries from violence
- Other conditions

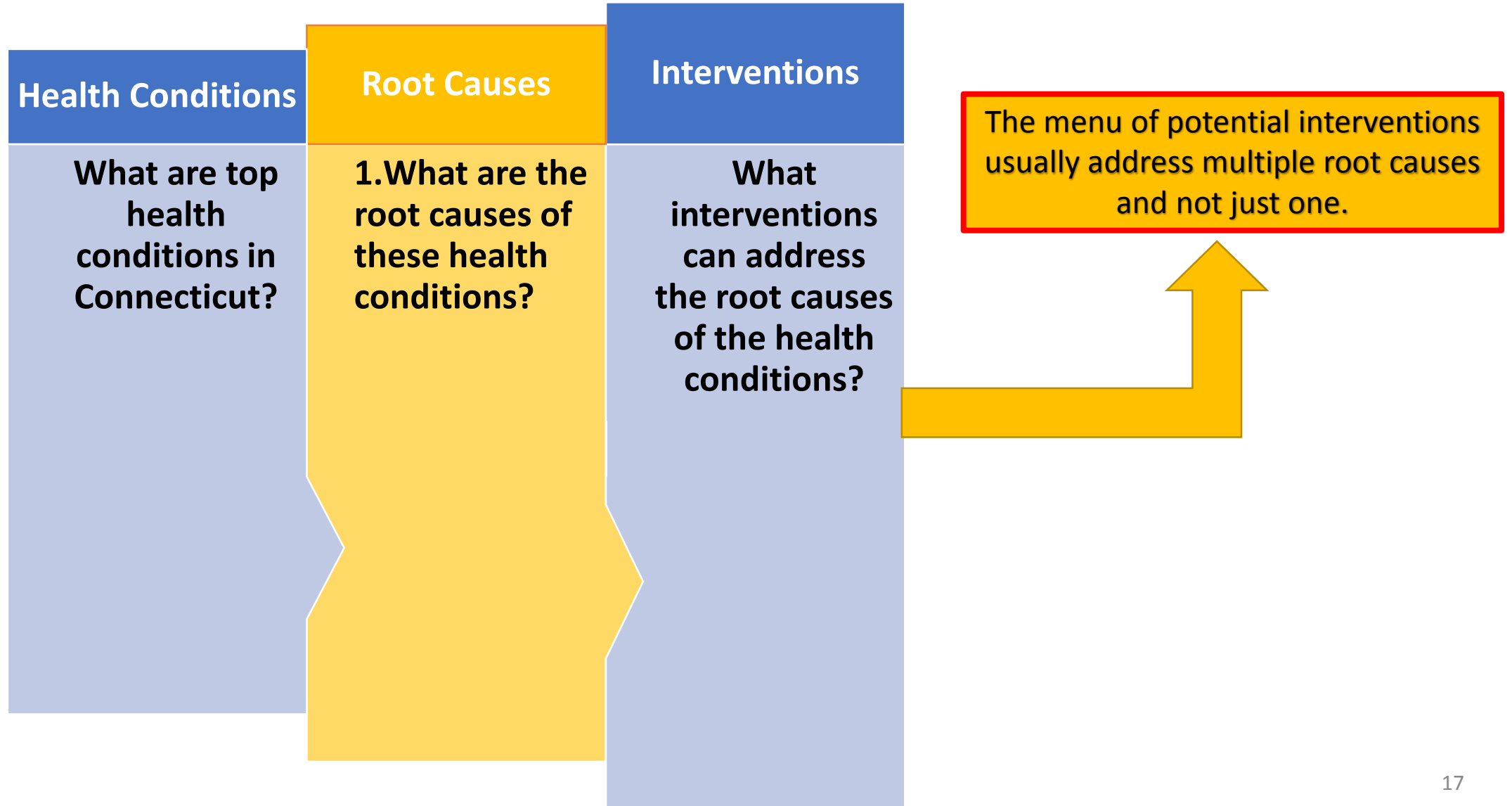
Although they are not **health conditions**, other **health priorities** identified included health care access, cost, insurance, and health care delivery system issues, as well as environmental factors.

Sources: SHIP health objectives, SIM health objectives, Reference Communities and Population Health Council initial priorities

Root Causes of Health Conditions

- Lack of education
- Economic instability/Socioeconomic position
- Built environment/Residential environment
- Food deserts
- Physical insecurity (crime, violence)
- Racial and ethnic disparities and inequities
- Inequities related to culture and language
- Poor access to care
- Lack of social and community supports
- Chronic stress and trauma

Identifying Interventions that Address the Root causes



POTENTIAL INTERVENTIONS – 1- 3 YEAR RETURN

Possible interventions that have a shorter Return on Investment and address multiple root causes.

**Short (1-3 years)
Return On
Investment
Interventions
include:**

Asthma Control: Home-Based Multi-Trigger, Multi-component Environmental Interventions (1 year)	Nutrition: Gardening Interventions to Increase Vegetable Consumption Among Children (1-3 years)	Home hazard reduction (high risk population) (1 – 3 years)
Peer Support in Mental Health (1 – 3 years)	School-Based Violence Prevention (1 -3 years)	Obesity: Behavioral Health Intervention that Aim to Reduce Recreational Screen Time Among Children (1 – 3 years)
Treatment Foster Care Oregon: Foster Care Program for Severely Delinquent Youth (1 – 3 years)	Critical Time Intervention (CTI) for Recurring Homeless (1 – 3 years)	Home visitation to address trauma – ACES (1 – 3 years)
Staying Free: Smoking Cessation Program (1 – 3 years)	Falls Prevention Programs for Seniors (1 – 3 years)	Multi-component Weight-Loss Program for Adults with Intellectual Disabilities and Obesity (1 – 3 years)

Interventions in blue represent those targeted toward adults ages 45+ and/or the population with disabilities. Interventions in orange represent interventions targeted toward other populations.

POTENTIAL INTERVENTIONS – 1- 3 YEAR RETURN

Possible interventions that have a shorter Return on Investment but address multiple root causes.

**Short (1-3 years)
Return On
Investment
Interventions
include:**

Tobacco Use and Secondhand Smoke Exposure: Quit line Interventions (1 – 3 years)	Transitional Care Model (1 – 3 years)	CHAMPS – Community Healthy Activities Model Program for Seniors (1 – 3 years)
Safe Routes to Schools (1 -3 years)	Physical Activity: Social Support Interventions in Community Settings (1 – 3 years)	Vaccination Programs: Home Visits to Increase Vaccination Rates (1 – 3 years)
Vaccination Programs: Seasonal Influenza Vaccinations (1-3 years)	Cardiovascular Disease: Interventions Engaging Community Health Workers (1- 3 years)	Diabetes Management: Interventions Engaging Community Health Workers (1 – 3 years)
Diabetes Prevention: Interventions Engaging Community Health Worker – NDPP (1 – 3 years)		

Interventions in blue represent those targeted toward adults ages 45+ and/or the population with disabilities. Interventions in orange represent interventions targeted toward other populations.

POTENTIAL INTERVENTIONS – 3- 5 YEAR RETURN

Interventions with an ROI of 3 to 5 years
Clearly not enough interventions targeted to populations 45+ and/or the population with disabilities

High School Completions Programs
(3 – 5 years)

Child FIRST: Home Intervention Program for Low-Income Families with at Risk Children
(3 -5 years)

School-Based Health Centers in Low-Income Communities
(3 -5 years)

Motorcycle Helmet Laws
(3 - 5years)

Nurse Family Partnership
(3 – 5 years)

Out-of-School Time Academic Program
(3 -5 years)

Violence: Early Childhood Home Visitation to Prevent Child Maltreatment
(3 – 5 years)

School-Based or Linked Sealant Delivery Programs
(3 – 5 years)

Interventions in blue represent those targeted toward adults ages 45+ and/or the population with disabilities. Interventions in orange represent interventions targeted toward other populations.

POTENTIAL INTERVENTIONS – 5- 10 YEAR RETURN

Interventions with an ROI of 5 - 10 years
Clearly not enough interventions with a longer ROI

Permanent Supportive Housing
(5 – 10 years)

Physical Activity:
Build Environment Approaches
Combining Transportation System Interventions with Land Use and Environmental Design
(10 years)

Water Fluoridation
(5 - 10 years)

Physical Activity:
Creating or Improving Place for Physical Activity
(10 years).

Interventions in blue represent those targeted toward adults ages 45+ and/or the population with disabilities. Interventions in orange represent interventions targeted toward other populations.

Interventions Targeted Toward Older Adults

Older
Adults

- Transitional Care Model
- Social Support Interventions in Community Settings (+ Other Adults)
- Fall Prevention Programs
- Home Hazard Reduction (High-Risk Population)
- CHAMPS - Community Healthy Activities Model Program For Seniors

Interventions Targeted Toward Children

Children

- Asthma Control: Home-Based Multi-Trigger, Multi-Component Environmental Interventions
- School-Based Health Center in Low-Income Neighborhoods
- High School Completion Programs
- Out-of-School-Time Academic Programs
- Child FIRST: Home Intervention Program for Low-Income Families with At-Risk Children
- Gardening Interventions to Increase Vegetable Consumption Among Children
- Behavioral Interventions that Aim to Reduce Recreational Sedentary Screen Time Among Children (under age 13)
- Treatment Foster Care Oregon: Foster Care Program for Severely Delinquent Youth
- Early Childhood Home Visitation to Prevent Child Maltreatment (+ Families)
- School-Based Violence Prevention
- Safe Routes to Schools
- Water Fluoridation

Interventions Targeted Toward All Ages

(Includes Interventions Targeted Toward Subsets of the Community Not Defined by Age)

All
Ages

- Diabetes Management: Interventions Engaging Community Health Workers
- Cardiovascular Disease: Interventions Engaging Community Health Workers
- Nurse Family Partnership (Pregnant Women)
- Tobacco Use and Secondhand Smoke Exposure: Quit Line Interventions
- Staying Free: Smoking Cessation Program
- Critical Time Intervention For Recurring Homeless (People with Severe Mental Illness)
- Creating or Improving Place for Physical Activity
- Built Environment Approaches Combining Transportation System Interventions with Land Use and Environmental Design
- Home Visits to Increase Vaccination Rates
- Seasonal Influenza Vaccinations Using Interventions On-Site, Reduced Cost, Actively Promoted Vaccinations
- Motorcycle Helmet Laws
- Multi-component Weight-loss Program for Adults with Intellectual Disabilities and Obesity

Health Conditions	Root Causes	Interventions
Adverse childhood events Sexually Transmitted Diseases Developmental conditions Mental Health/SUD Asthma Diabetes	Lack of Education and Inequity	School-Based Health Centers in Low-Income Communities High School Completion Programs Out of School Time Academic Programs
Adverse childhood events Maternal, infant, and child health Developmental conditions Mental health/SUD	Economic Instability	Nurse Family Partnership Child FIRST Permanent Supportive Housing
Asthma Obesity Diabetes Heart Disease Maternal, Infant and child health	Build Environment & Food Deserts	Asthma Control Physical Activity Built Environment Gardening Home Hazard Reduction
Injuries from violence Obesity Adverse childhood events Developmental conditions Mental health/SUD	Physical Insecurity (violence and Crime)	Violence – early childhood visitation School-based Violence Prevention Screen Time Reduction – Obesity

Health Conditions	Root Causes	Interventions
Diabetes Cardiovascular disease	Inequities related to Culture, Race and Ethnicity	Community Health Workers Interventions with: Diabetes Management Diabetes Prevention Cardiovascular Disease
Adverse childhood events Tobacco use	Stress and Trauma	Peer Support Treatment Foster Care Critical Time Intervention Tobacco Cessation
Vaccine preventable diseases Oral health for children Diabetes High Blood pressure Obesity	Lack of Access to Care	Vaccination Programs Physical Activity Interventions School-Based Sealants Transitional Care Model CHAMPS – Community Healthy Activities Model Program for Seniors
Unintentional injuries Obesity Diabetes Oral health for children	Other/Policy	Falls Prevention Programs Safe Routes to Schools Motorcycle Helmet Laws Water Fluoridation Multi-component Weight-loss Program for Adults with Intellectual Disabilities and Obesity

Discussion Questions: Interventions

- New interventions are being implemented and tested every day, so there are likely 100s more interventions that are not yet listed in the national evidence-based intervention databases
 - Are you aware of any evidence-based interventions that are missing?
- Are there any interventions on the menu that have been or are currently being offered in your community?
 - Were they successful?
 - If not, should we consider removing them from the menu?

Analytics to Support the Design and Development of HECs

Economic Benefits of the HECs

The Economic Benefit Model will quantify the myriad economic benefits of what the HECs do.

Key aspect of HEC Initiative is being able to measure specific economic benefits and where they accrue to assess success and to develop investment strategies

HMA will develop an *analytical model and a actuarial tool* with Airam Consulting to inform the sustainability approach of the HEC model including:

- Impact of the HECs on Medicare and other payers, which may be used to pursue a federal partnership
- Impact of the HECs on the economy, which will inform other implementation options and sustainability strategies

Nomenclature

#	Nomenclature	Definition
1	Medicare Impact Model	<ul style="list-style-type: none"> • A multi-year Excel-based financial model using Medicare data to project potential future savings associated with various HEC health improvement scenarios/ interventions. • Focus is primarily on benefits of health problems avoided (i.e., a reduction in the incidence and prevalence of acute and chronic illness and injury) as a result of primary and upstream secondary prevention.
2	HEC Financial Sustainability Strategy	<ul style="list-style-type: none"> • The source(s) of funding and methodologies by which HECs will be paid to implement population health interventions, including: <ul style="list-style-type: none"> ○ Near term: funding sources to plan and implement upfront cross-sector activities and enable investments in infrastructure ○ Medium- and long-term: funding sources and payment model(s) (e.g. payer-specific methodologies, social impact bonds, tax credits) to sustain HEC activities; will rely primarily on public and private sector investments and contributions, rather than grants; will provide rewards to HECs and other contributors/investors

Overview: Medicare Impact Model

- HMA, in partnership with Airam Actuarial Consulting, will quantify the potential **short term and long-term savings impact of the HECs on Medicare** with consideration for how to modify the analysis for other payers; and perform financial analyses to inform key PHC design decisions.
- Using publicly available Medicare data, we will build a model to examine per capita costs for the Medicare population with and without HEC interventions.
- **Phase 1 Deadline:** July 15, 2018

Questions the Medicare Impact Model will Explore

- What are the current **baseline costs** and trajectory of spending?
- How will the HECs improve the **trajectory of risk, health outcomes, and costs** over time? How is this different from what ACOs are expected to achieve?
- Which **population groups are of interest**, defined by medical and social characteristics?
- Which HEC **interventions** do we think will be most effective in driving the change in the health risk and achieving savings based on the latest research?

Primary Data Source

Medicare Geographic Variation Public Use File:

- The Centers for Medicare & Medicaid Services (CMS) has developed a public use file (PUF) that enables researchers and policymakers to evaluate variation in the utilization and quality of health care services for the Medicare fee-for-service population by geographic area.
- The file includes demographic, spending, utilization, and quality indicators at the state level, hospital referral region (HRR) level, and county level.
- 10 years of data are available (2007 - 2016).

Sample of Data File Elements

The Medicare Geographic Variation Public Use File includes the following kinds of indicators and metrics:

- Count of Medicare fee-for-service beneficiaries
- Age, gender, race/ethnicity
- Average Hierarchical Condition Category (HCC) Score
- Medicare Cost data: actual, per capita, and risk-adjusted
- Costs and utilization by category of service (e.g. inpatient, outpatient, long term care hospital, Inpatient rehabilitation facility, skilled nursing facility (SNF), home health, hospice, Part B drugs, etc.)
- Prevention quality indicators (e.g., hospital readmission rates and emergency room visits)

Data Limitations and Strengths

Limitations

- The Medicare Public Use File is **summary level data** and is not provided at the beneficiary level. This constrains the ability to “cut” the data into more granular views of narrowly-defined population segments.
- File only includes Medicare FFS data and **does not include Medicare Advantage, Medicare Part D (pharmacy) or other payers (i.e. commercial carriers, HUSKY).**
- File **does not include non-health sector spending**

Strengths

- Enables national and state comparisons and **benchmarking**

Other Supplemental Data Sources

- **MMLEADS:** CMS public use file that includes Medicare and Medicaid FFS eligibility and cost data and chronic condition prevalence rates
- **DPH Data:** Population estimates and survey data that includes disease and chronic condition prevalence rates, mortality rates for Connecticut
- **All Payer Claims Database (APCD):** Detailed claims and eligibility file at the beneficiary level that includes Medicare FFS, Medicare Advantage, and commercial payer data for Connecticut

***Note:** Time constraints will dictate ability to leverage supplemental data sources during Phase 1 of financial modeling (through July 15, 2018)

Defining the Target Population

- For the purpose of the Medicare Impact Model, should it be assumed that HECs will collectively cover the entire state?
- How will the **geographic boundaries of the HECs** be defined? (e.g., counties, groups of counties, or Hospital Referral Regions)
- Should the model attempt to estimate costs for **all Medicare beneficiaries or one or more subsets**? What other stratifications are important to the financial model?
 - FFS vs Medicare Advantage
 - By age (under 65 and over 65)
 - By major diagnosis category
 - By dual status

Quantifying Baseline Conditions

- Medicare Impact Model will begin by quantifying baseline conditions (without HEC interventions).
- Using the Medicare Public Use File and spending growth projections informed by the CMS Office of the Actuary, we will model future Connecticut Medicare spending
- This can be done by statewide, by county/Hospital Referral Region, age group (under 65 and 65+), and by other variables.

Modeling Interventions

- Working from an estimated Medicare baseline trend, the Medicare Impact Model will **apply adjustments to future spending estimates—relying upon evidence-based population health interventions, as recommended by the Population Health Council.**
- We will turn to the evidence base, and evolving practice, to model assumptions about the degree and nature of impacts on Medicare spending and population health outcomes.
 - For example, evidence may suggest a particular population health intervention may ultimately reduce the prevalence of certain disease conditions (e.g., diabetes). The financial model will attempt to quantify the impacts over time.

Discussion Questions

- Does the PHC have any questions regarding the scope or timing of the Medicare Impact Model?
- What specific areas of the Medicare Impact Model would you like additional information on and/or want to explore in the design team focused discussions?

PHC Design Team Engagement

Population Health Council Charter / Objectives

Recommend strategies to the Healthcare Innovation Steering Committee to improve total population health under SIM.

- “The PHC is charged by the **Healthcare Innovation Steering Committee (HISC)** with *recommending strategies* to *improve Total Population Health* in the context of SIM implementation.”

Recommend a strategy to the HISC to support/enable Health Enhancement Communities.

- “The Council will *recommend an innovative and actionable strategy to support and enable Health Enhancement Communities (HECs)* in Connecticut.”

Ensure that the HEC strategy is designed through a community-driven, cross-sector planning process.

- “The Council will *ensure that the HEC strategy is designed through a community-driven, cross-sector planning process* that involves the participation of a diverse set of stakeholders. The HEC strategy recommendation should also be informed by *problem solving partnerships with selected reference communities...*”

Monitor progress and advise on all aspects of the Prevention Services Initiative.

- “In addition, the Council will continuously monitor progress and advise on all aspects of the **Prevention Services Initiative (PSI)**, including technical assistance and progress towards increasing the number of new financial agreements between healthcare organizations and community-based organizations.”

HEC Planning Challenges to Address

Key areas for the PHC to provide recommendations on include:

- Accountability:** Define the appropriate expectation for an HECs
- Boundaries:** Define the best criteria to set geographic limits.
- Indicators:** Define appropriate measures of health improvement.
- State Role:** Define the level of planning flexibility.
- Health Disparities:** Define approaches to address disparities across communities.
- Sustainability:** Define financial solution for long term impact.
- Regulations:** Define regulatory levers to advance HECs.
- Engagement:** Define how to gain buy-in and participation from stakeholders.

PHC Design Team Engagement

- In consideration of the PHC charter, **the goal of forming PHC design teams** is to ensure that the PHC:
 - Has ample opportunity to weigh options for the HEC design, taking into account input from the Reference Communities and other cross-sector stakeholders
 - Can recommend to the Health Improvement Steering Committee (HISC) an innovative and actionable strategy to support and enable HECs
- We are proposing:
 - **June webinar:** Adding a June webinar (to be scheduled) with the full PHC to review options for social financing models and statutory and regulatory levers
 - **July design team webinars:** Forming three (3) smaller PHC design teams to focus on specific topic areas. Each design team will meet twice in July for 90 minutes via webinar.

Design Teams

Design teams:

- 1. Interventions, Measures, Data, Workforce**
- 2. Financing**
- 3. Governance / Decision-Making**

Time Commitment: Two 90-minute lunch webinars in July in addition to the regularly scheduled PHC meeting

Key Milestones: HEC Report proposed to be released for public comment in mid-September, with final report complete by mid-November.

- PCH can expect report for review/comment **late August/early September**, and then again in **late October**

Design Team #1: Interventions, Measures, Data, Workforce

- Proposed webinar topics:
 - Review proposed/narrowed down list of priority health conditions, root causes, and interventions
 - To which population and community-wide measures will HECs be accountable?
 - What IT and data infrastructure does each HEC need to support obtaining and sharing of data? What are the current capabilities?
 - What workforce and other implementation infrastructure is needed to support interventions?

Design Team #2: Financing

- Proposed webinar topics:
 - What financing sources will support the implementation costs of HECs? Where will the upfront investments come from?
 - Funds distribution: When HECs receive funding, how will it be distributed among the HEC partners?
 - Once HECs are implemented, what economic benefits will accrue and where will they accrue?
 - Review and provide input on the analytic model
 - Review and provide input on financial model results to date

Design Team #3: Governance / Decision-Making

- Proposed webinar topics:
 - Review and refine HEC mission and vision based on work to date
 - Review HEC governance structure options
 - What are the core elements of governance that each HEC will implement and for what purpose (e.g., decision-making, performance management, funds flow)?
 - How will variation in non-core aspects of governance models benefit HECs?
 - How will HECs be accountable for outcomes and how will they manage their accountability?

Discussion Questions: PHC Design Team Engagement

- Does this approach meet the need to develop recommendations for the HEC design?
- How feasible is this approach considering time limitations/constraints?
- Who would like to participate in each of the following design teams?
 1. Interventions, Measures, Data, and Workforce
 2. Financing
 3. Governance / Decision-Making

Discussion and Closing Comments

APPENDIX

Interventions Sources

- The Community Guide – Community Preventive Services Task Force Findings <https://www.thecommunityguide.org/task-force-findings>
- Evidence Based Programs – Social Programs that Work <http://evidencebasedprograms.org/>
- Top Tier Evidence – Coalition for Evidence-Based Policy <http://toptierevidence.org/>
- NCOA Evidence Based Interventions <https://www.ncoa.org/center-for-healthy-aging/basics-of-evidence-based-programs/about-evidence-based-programs/>
- CDC HI-5 <https://www.cdc.gov/policy/hst/hi5/interventions/index.html>
- ASTHO Evidence-based public health <http://www.astho.org/Programs/Evidence-Based-Public-Health/>
- Mental Health America <http://www.mentalhealthamerica.net/positions/evidence-based-healthcare>