Whole Health for Whole Populations:
Clinical, Community, and Public Health Partnerships

Nina B. Vinson, MPH – Director of Population Health Outcomes

Course Description

Have you ever felt frustrated tackling issues one member or care team at a time? Did you ever wish you could "work upstream" and prevent things from happening? If so, this is a great time to learn more about community-wide, public health-type approaches.

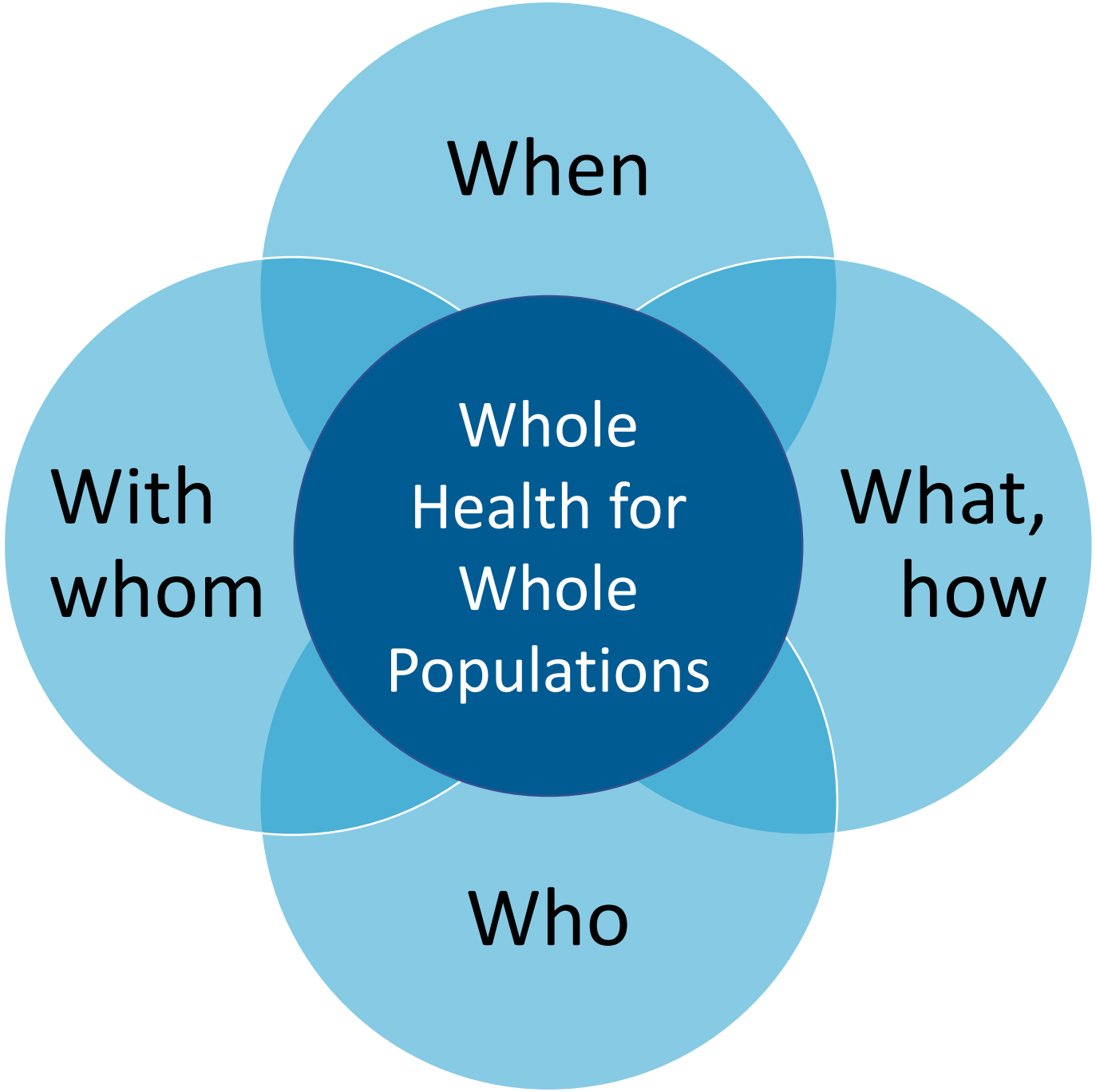
Learn about "true" population health, including:

- Top health priorities for Tailored Plan
- Vaya's planned interventions to address these health domains at member, provider, and community levels

Learning Objectives

Following this presentation, learners will be able to:

- Recognize and recall the key health domains prioritized under the Tailored Plan: opioid misuse, tobacco cessation, pregnancy intendedness, birth outcomes, early childhood interventions, diabetes prevention, hypertension (high blood pressure), etc.
- Describe and contrast the different levels or types of planned interventions: individual (member, recipient), clinical (provider, practitioner) and system (community, public)
- Give examples of Vaya/WNC efforts that relate to the Tailored Plan health domain priorities


When
With whom
What, how
Who
Whole Health for Whole Populations

When you hear
“whole health”
what do you think of?

Whole Health is:

- Beyond the Body
  - Integrated Care: Body and Mind, Physical and MH/SU/IDD
- Beyond/Before Illness and Disease - *When*
  - Wellness, Health Promotion
  - Prevention (Primary, Secondary, Tertiary)
  - Intervening Upstream, Root Causes (e.g., Adverse Childhood Events, ACEs)
- Beyond Clinical Care and Treatment – *What and How*
  - Barriers and Needs
    - Unmet Health Related Resource Needs (Social Determinants of Health), CBO Partners, Etc.
  - Facilitating Factors and Strengths
    - Natural & Peer Supports, Community Resiliency, Life Engagement and Purpose

What do you think when you hear "whole population"?

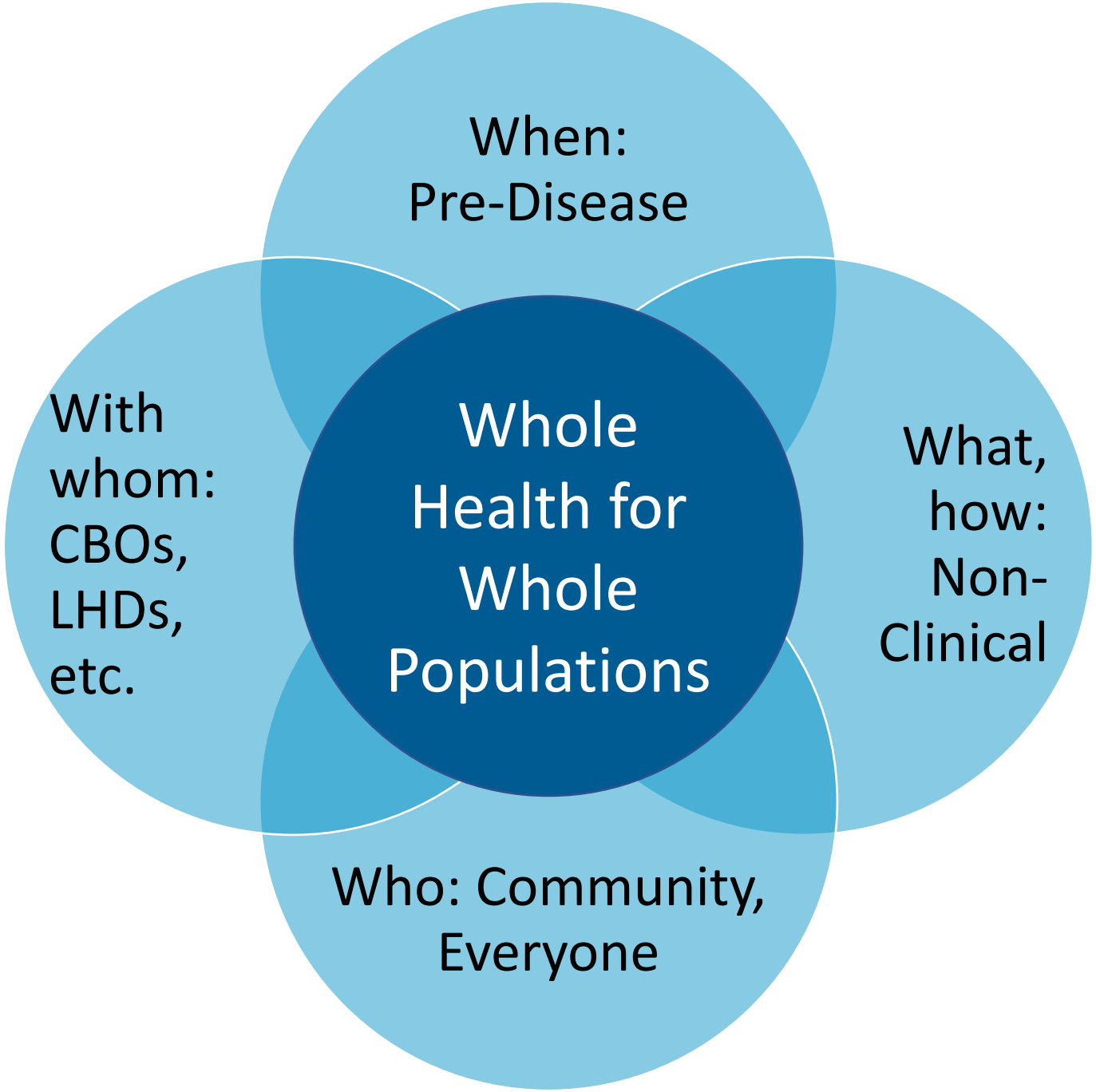
Individual versus group strategies?

What about population health, community health and public health—are they the same thing or different?

Whole Population Approaches are:

- Beyond the Individual – *Who*
  - Individual, family, neighborhood, community, city, state, nation, world
  - All of us/everyone - all residents/all people, potentially payer blind/agnostic
  - Public Health, Community Health, Collective Health

- Beyond What Vaya/Providers Can Do Alone – *With Whom*
  - Based on deep, wide, and diverse partnerships
  - More than MCOs/PHPs **or** associated networks of providers and practitioners
  - Non-clinical partners, such as community based organizations (CBOs)
  - Different methods of communication, collaboration, coordination
  - New or changed relationships, interdependence and trust
    - Some needed partners may not be “within our network” (no formal leverage or contract)


When:
Pre-Disease
With whom:
CBOs,
LHDs,
etc.
Whole
Health for
Whole
Populations
What,
how:
Non-
Clinical
Who: Community,
Everyone

Background and Context

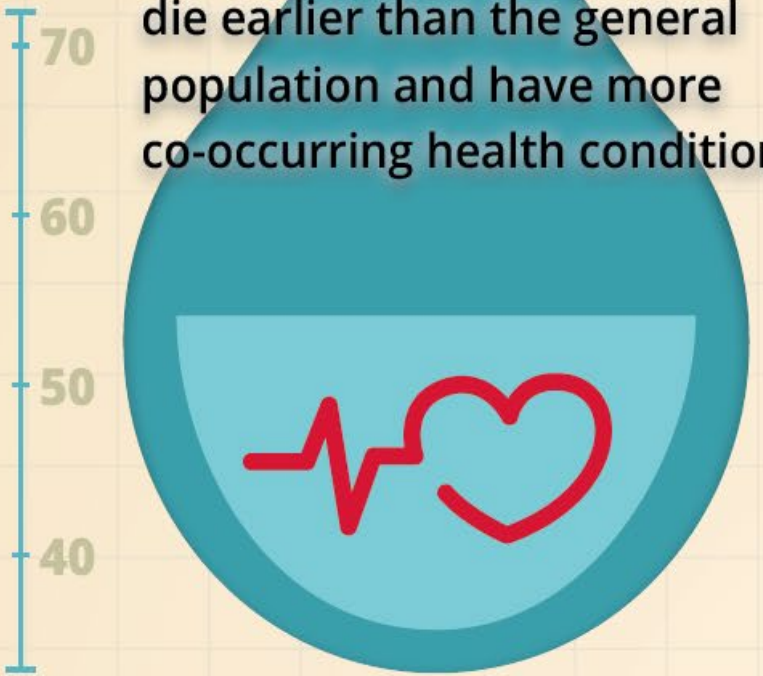
Comorbidities and Disease Prevalence for Tailored Plan Members

What Drives Health/Illness – Social Determinants, ACEs, etc.

“What We’re Up Against, The Challenge”

The PROBLEM

People with mental illness die earlier than the general population and have more co-occurring health conditions.



68%

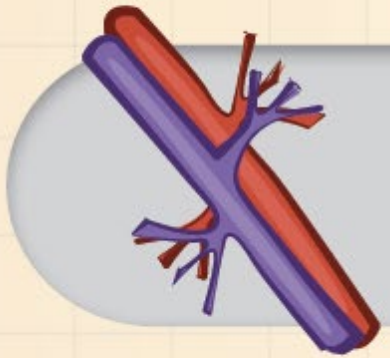
of adults with a mental illness have one or more chronic physical conditions

more than

1 in 5

adults with mental illness have a co-occurring substance use disorder

Co-occurrence between mental illness and other chronic health conditions:



Mental Illness 21.9%
No Mental Illness 18.8%

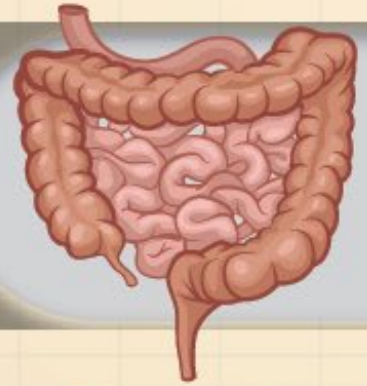
High Blood Pressure

Mental Illness 36%
No Mental Illness 21%

Smoking

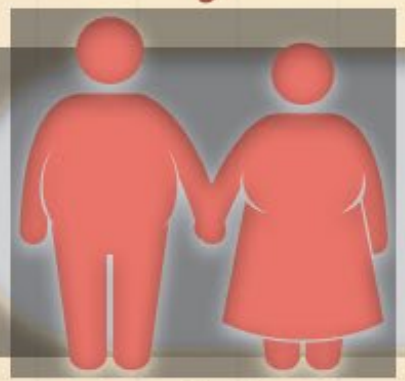
Mental Illness 5.9%
No Mental Illness 4.2%

Heart Disease



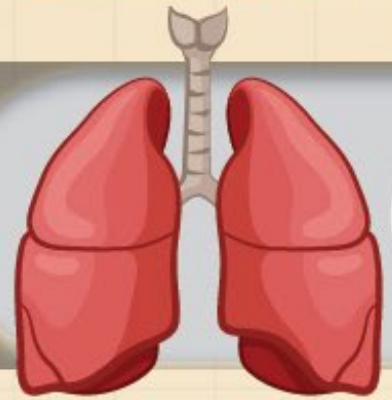
Mental Illness 7.9%
No Mental Illness 6.6%

Diabetes



Mental Illness 42%
No Mental Illness 35%

Obesity



Mental Illness 15.7%
No Mental Illness 10.6%

Asthma

In North Carolina…

Housing

- More than 1.2 million without affordable housing
- One in 28 children under 6 are homeless

Diabetes

- **Seventh** highest rate in U.S. for diabetes related deaths (3000 deaths per year)
- In 2020, 35% of us have prediabetes and 13% are living with diabetes

Food Insecurity

- **Eighth** highest rate in U.S.
- More than one in five children (20%); in some counties, one in three children (33%)

Safety and Interpersonal Violence

- 47% of women experienced intimate partner violence
- 25% of children with ACEs (e.g., abuse, other adverse childhood events)

2019 Outcome Performance NC Medicaid versus U.S. Median Rates

- Comparative data source: HEDIS measures (NCQA)
  - HEDIS = Healthcare Effectiveness Data and Information Set (used to measure the quality of health plans)
- Combined/full Medicaid population (SP+TP)
- Pediatric measures: NC generally at/above U.S. median
- Adult measures: NC at/below U.S. median
- Disparities: some age, race, geography differences
- SP rates versus TP rates: some differences
  - e.g., A1c (Diabetes) with TP members faring worse (not a surprise)

Okay, I understand about disease statistics, but I keep hearing about social determinants of health, ACEs, health disparities.

What's the deal?

Figure 1

Social Determinants of Health

Economic Stability	Neighborhood and Physical Environment	Education	Food	Community and Social Context	Health Care System
Employment	Housing	Literacy	Hunger	Social integration	Health coverage
Income	Transportation	Language	Access to healthy options	Support systems	Provider availability
Expenses	Safety	Early childhood education		Community engagement	Provider linguistic and cultural competency
Debt	Parks	Vocational training		Discrimination	Quality of care
Medical bills	Playgrounds	Higher education		Stress	
Support	Walkability				
	Zip code / geography				

Health Outcomes

Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations

KFF
HENRY J KAISER FAMILY FOUNDATION

The Opportunity for Everyone to Have Good Health

Source: Office of Minority Health and Health Disparities North Carolina Equity Report 2018


Black Lives Matter
when breathing.
Black children die from asthma at 3 times the rate of white children.
NO COAL IN OAKLAND
Don't wanna breathe that coal dust

Buncombe County

- Overall infant mortality 5:1
  - For every 1000 babies born, five will die within a year
- Between 2010 and 2018, (overall) infant mortality decreased
- (But) mortality for Black babies increased—from 11.7 to 15.1

RACIAL AND ETHNIC HEALTH DISPARITIES IN NORTH CAROLINA

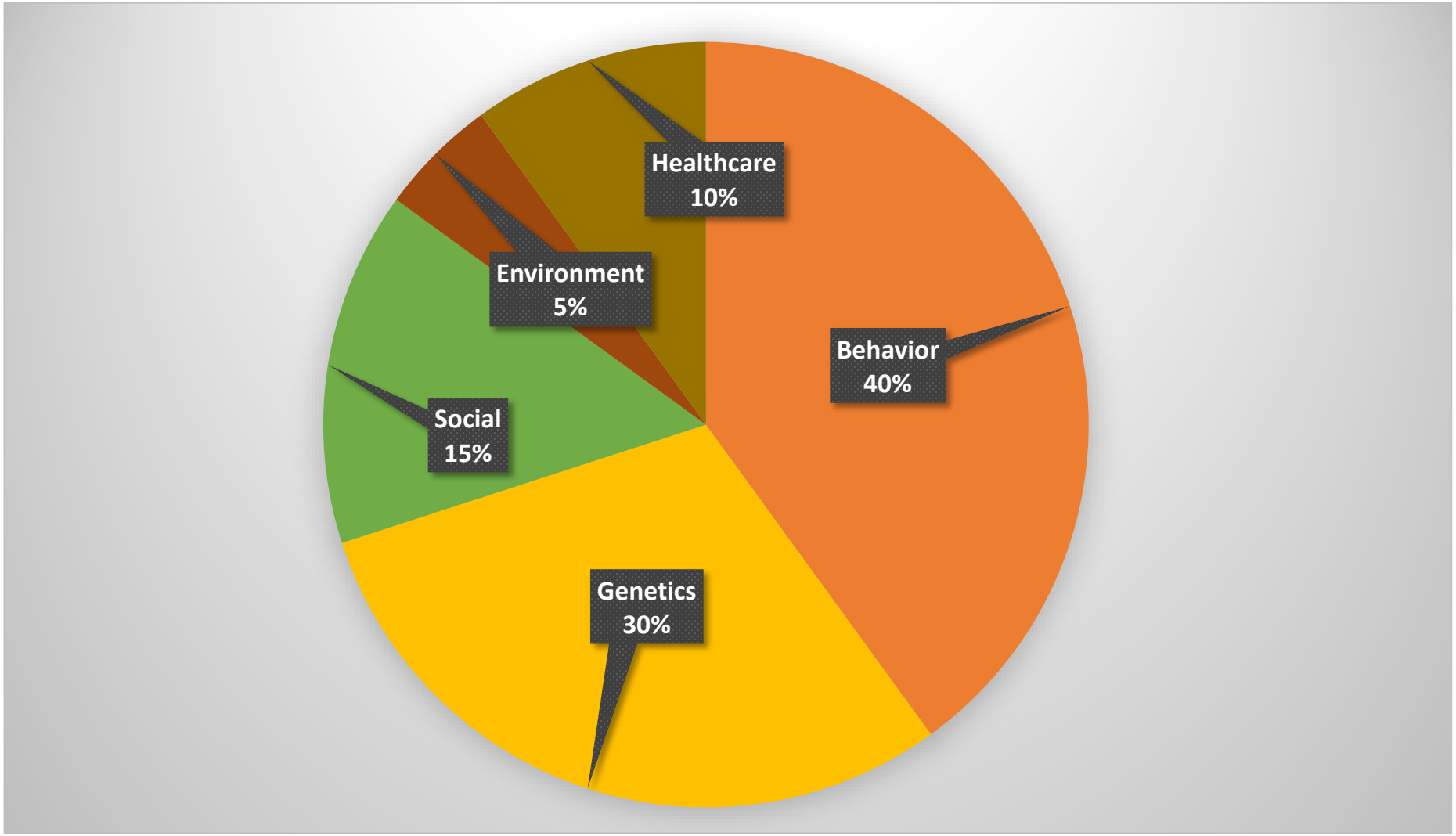
NORTH CAROLINA HEALTH EQUITY REPORT 2018

NC DEPARTMENT OF
HEALTH AND
HUMAN SERVICES
Office of Minority Health
and Health Disparities

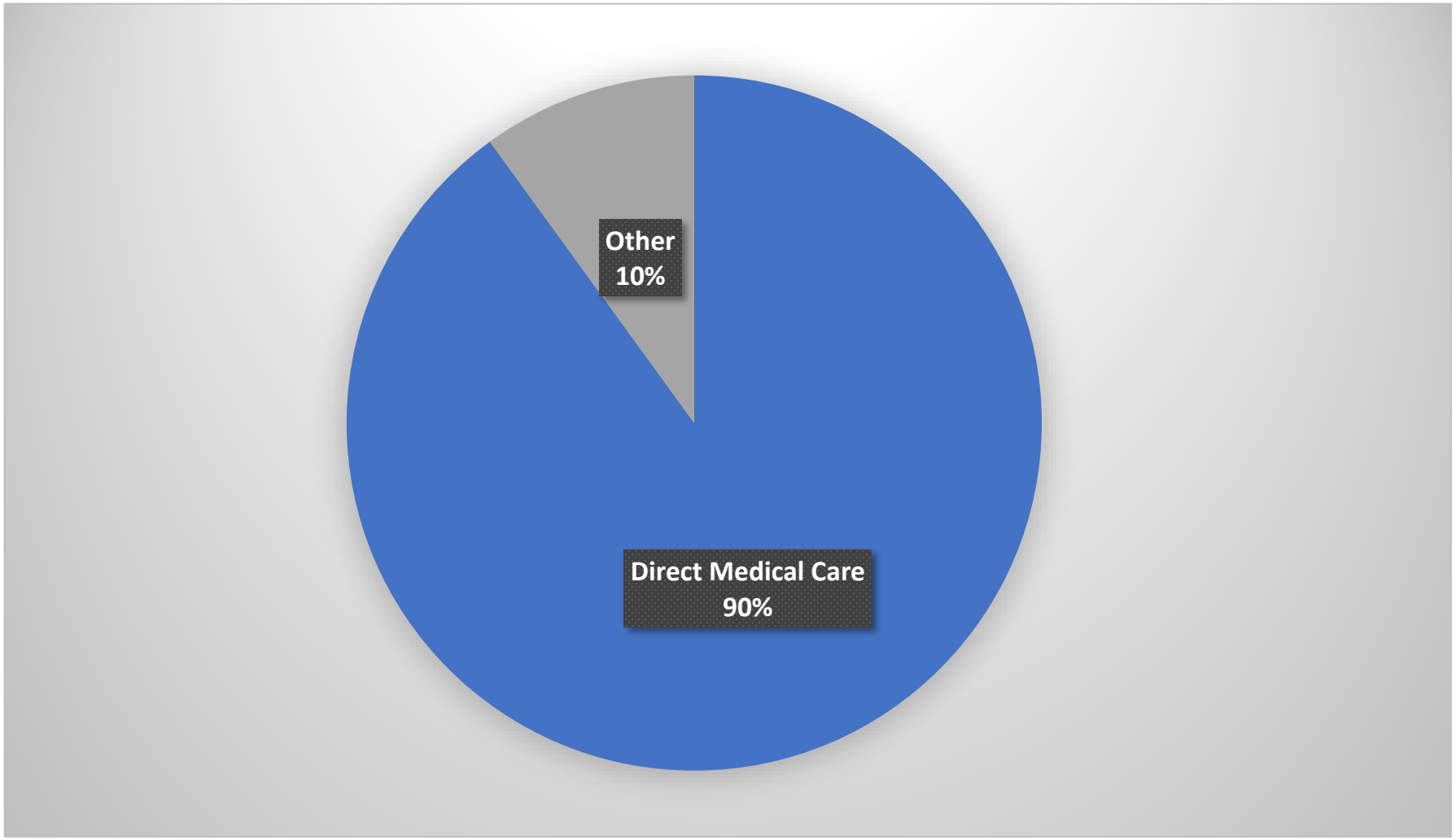
Association of ACEs with Leading Causes Deaths in the US

Leading causes of deaths in the U.S. (2017)	Odds ratios for ≥ 4 ACEs (relative to no ACEs)
1. Heart Disease	2.1
10. Suicide (attempts)	37.5
2. Cancer	2.3
3. Accidents (unintentional injuries)	2.6
4. Chronic lower respiratory disease	3.1
5. Stroke	2.0
6. Alzheimer's disease or dementia	11.2
7. Diabetes	1.4
8. Influenza and pneumonia	unknown
9. Kidney disease	1.7

What Drives Health



(And) What We Spend



Got it. So, our efforts (clinical, mostly acute) and spending (health care) don't match causes of poor health.

But what does NC DHHS think about all of this?

This is a mismatch.

We want to buy health.

Not healthcare.

- Erika Ferguson, Director, Healthy Opportunities, NCDHHS
5/22/2019 "New Opportunities through State Initiatives: Bringing it Home"

Take Home Messages

- Our members (Tailored Plan) experience more illness, early death and years of life lost than most
  - And there are differences/disparities within our TP member population
- Preventing disease—and addressing opportunities for health (SDOH)—may do *MORE* than clinical treatment services to improve health outcomes and manage costs
- The state wants to purchase health (outcomes) not purchase health (care)
- WNC's success in Tailored Plan is contingent on improved health outcomes and managed costs

NC Medicaid Transformation

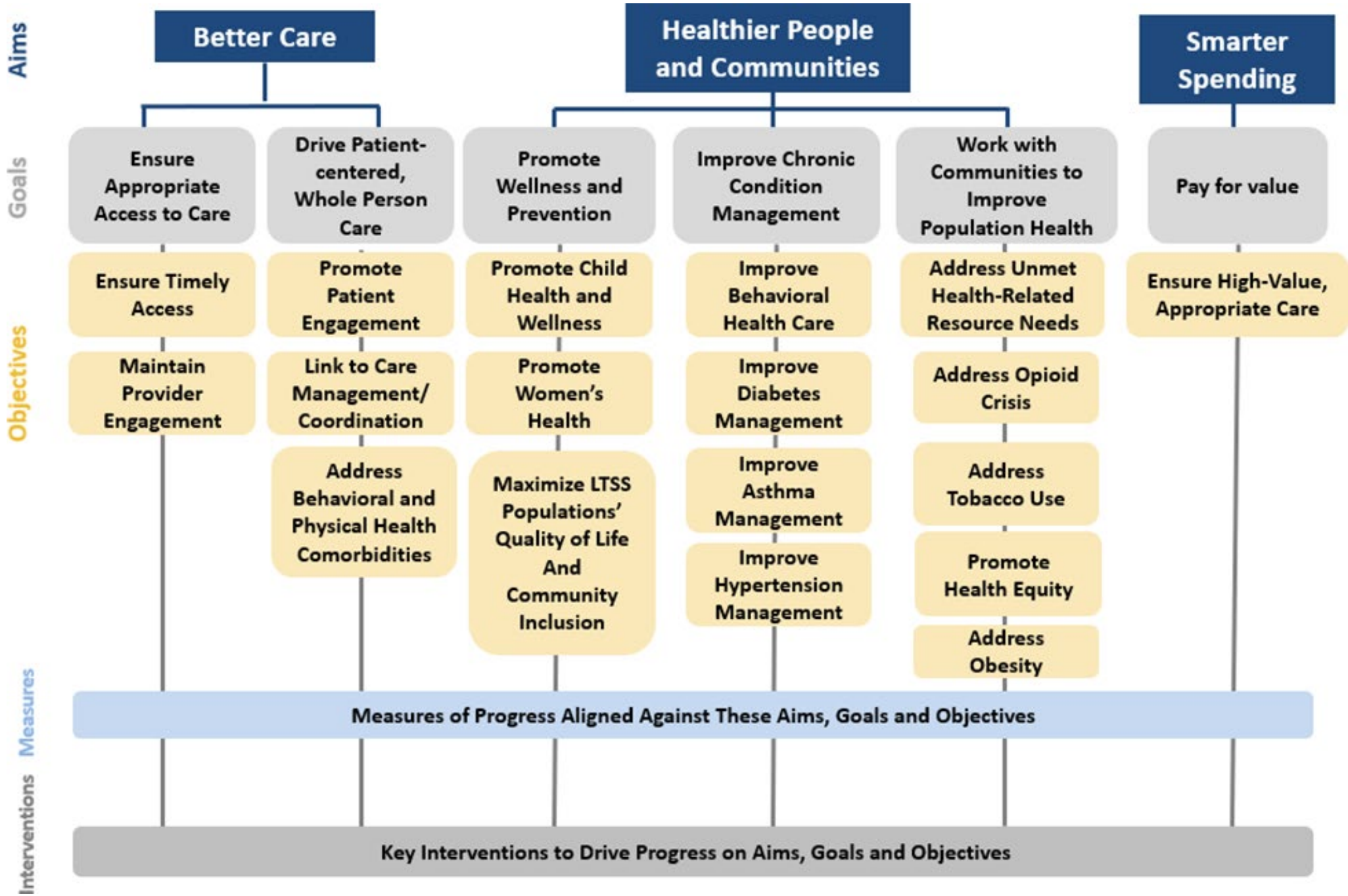
Quality Strategy (Aims, Goals, Objectives)

Tailored Plan Success Indicators and Outcome Measures

Quadruple Aim

Top Health Priorities (TP/1115)

- Opioid misuse
- Tobacco cessation
- Diabetes
- Hypertension (high BP)
- Pregnancy intendedness
- Birth outcomes
- Early childhood
- Etc.


Aims
Goals
Objectives
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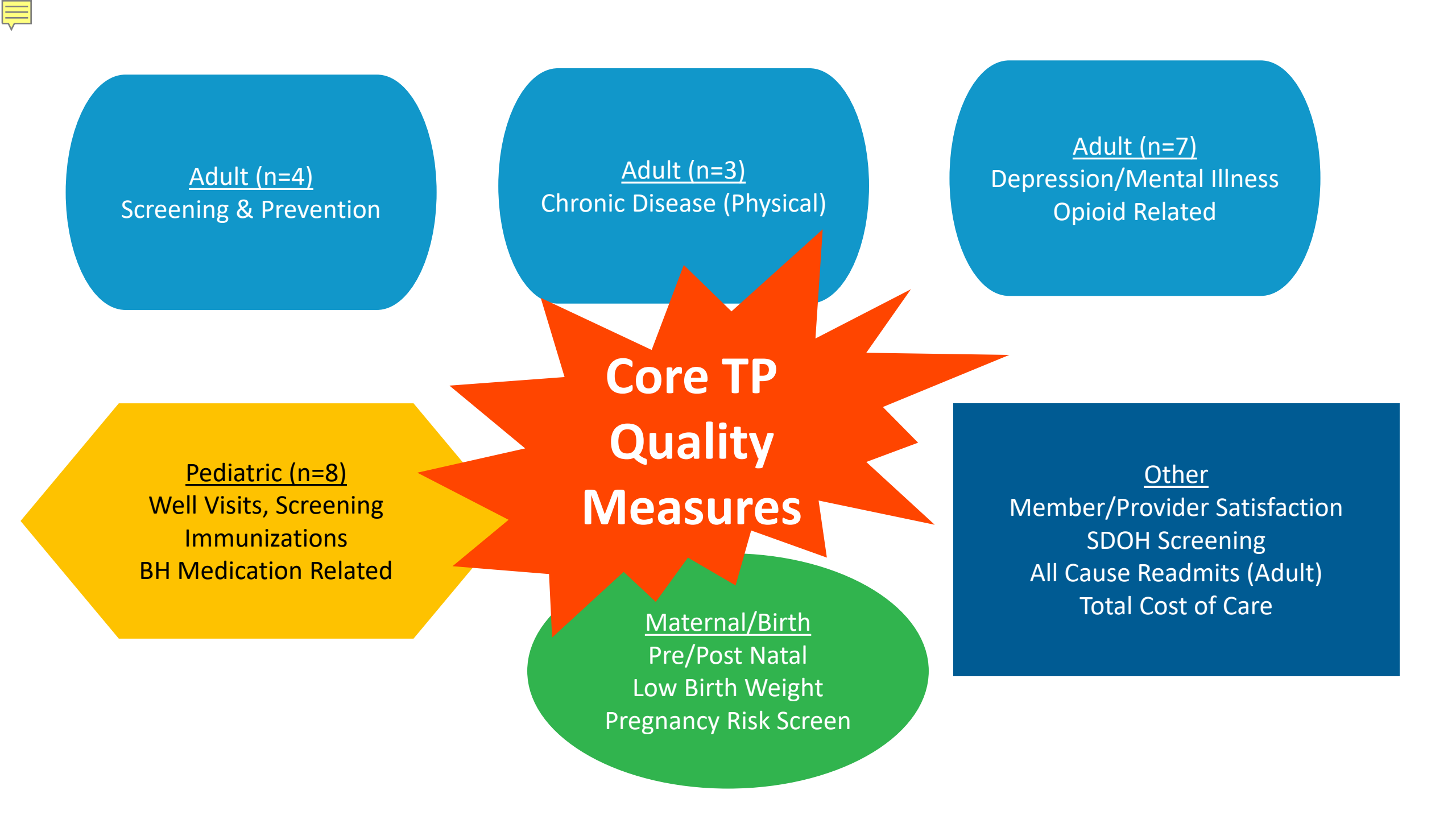
Interventions
Better Care
Healthier People and Communities
Smarter Spending
Ensure Appropriate Access to Care
Drive Patient-centered, Whole Person Care
Promote Wellness and Prevention
Improve Chronic Condition Management
Work with Communities to Improve Population Health
Pay for value
Ensure Timely Access
Promote Patient Engagement
Promote Child Health and Wellness
Improve Behavioral Health Care
Address Unmet Health-Related Resource Needs
Ensure High-Value, Appropriate Care
Maintain Provider Engagement
Link to Care Management/ Coordination
Promote Women's Health
Improve Diabetes Management
Address Opioid Crisis
Address Behavioral and Physical Health Comorbidities
Maximize LTSS Populations' Quality of Life And Community Inclusion
Improve Asthma Management
Address Tobacco Use
Improve Hypertension Management
Promote Health Equity
Address Obesity
Measures of Progress Aligned Against These Aims, Goals and Objectives
Key Interventions to Drive Progress on Aims, Goals and Objectives

The Quadruple Aim


Adult (n=4)
Screening & Prevention
Adult (n=3)
Chronic Disease (Physical)
Adult (n=7)
Depression/Mental Illness
Opioid Related
Core TP Quality Measures
Pediatric (n=8)
Well Visits, Screening
Immunizations
BH Medication Related
Other
Member/Provider Satisfaction
SDOH Screening
All Cause Readmits (Adult)
Total Cost of Care
Maternal/Birth
Pre/Post Natal
Low Birth Weight
Pregnancy Risk Screen

Adult Measures

SCREENING AND PREVENTIVE CARE

- Cervical cancer screening
- Chlamydia screening in women
- Flu vaccinations for adults
- Diabetes screening for people with schizophrenia or bipolar disorder who are using antipsychotic medications

CHRONIC CONDITION RELATED

- Controlling high blood pressure
- HbA1c poor control (>9.0%)
- Medical assistance with smoking and tobacco use cessation

Adult Measures (continued)

- Plan all cause readmissions

DEPRESSION AND MENTAL ILLNESS RELATED

- Antidepressant medication management
- Screening for depression and follow-up plan
- Follow-up after hospitalization for mental illness

OPIOID RELATED

- Concurrent use of prescription opioids and benzodiazepines
- Continuation of pharmacotherapy for opioid use disorder
- Use of opioids at high dosage in-persons without cancer
- Use of opioids from multiple providers in-persons without cancer

Pediatric Measures

WELL CARE AND PREVENTIVE

- Child and adolescent well-care visit
- Well-child visits in the first 30 months of life
  (likely to be combined/merged with well child measure above)
- Immunizations for adolescents
- Percentage of eligibles who received EPSDT screening
- Childhood immunization status (Combo 10)

MEDICATION RELATED

- Follow-up for children prescribed ADHD medication
- Use of multiple concurrent antipsychotics in children and adolescents (APC-CH)
- Metabolic monitoring for children and adolescents on antipsychotics

Maternal and Other Measures

MATERNAL

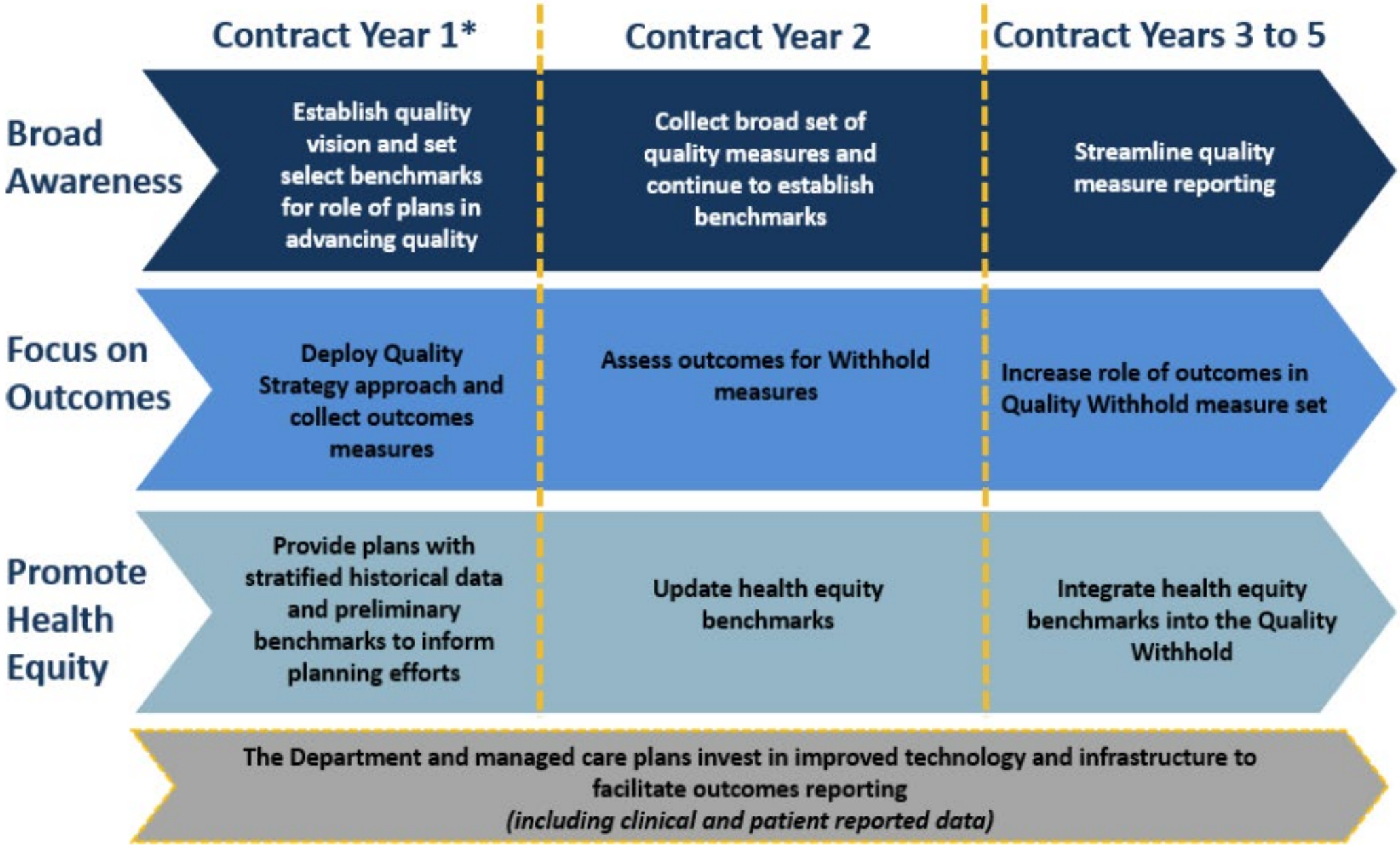
- Percentage of low birthweight births (live births weighing less than 2500 grams)
- Prenatal and postpartum care
- Rate of screening for pregnancy risk

PATIENT AND PROVIDER SATISFACTION

- CAHPs Survey (administered by NC DHHS vendor)
    - Composite with multiple items, including member and provider experience

SOCIAL DETERMINANTS OF HEALTH

- Rate of screening for unmet resource needs


Contract Year 1*
Contract Year 2
Contract Years 3 to 5
Broad Awareness
Establish quality vision and set select benchmarks for role of plans in advancing quality
Collect broad set of quality measures and continue to establish benchmarks
Streamline quality measure reporting
Focus on Outcomes
Deploy Quality Strategy approach and collect outcomes measures
Assess outcomes for Withhold measures
Increase role of outcomes in Quality Withhold measure set
Promote Health Equity
Provide plans with stratified historical data and preliminary benchmarks to inform planning efforts
Update health equity benchmarks
Integrate health equity benchmarks into the Quality Withhold
The Department and managed care plans invest in improved technology and infrastructure to facilitate outcomes reporting
(including clinical and patient reported data)

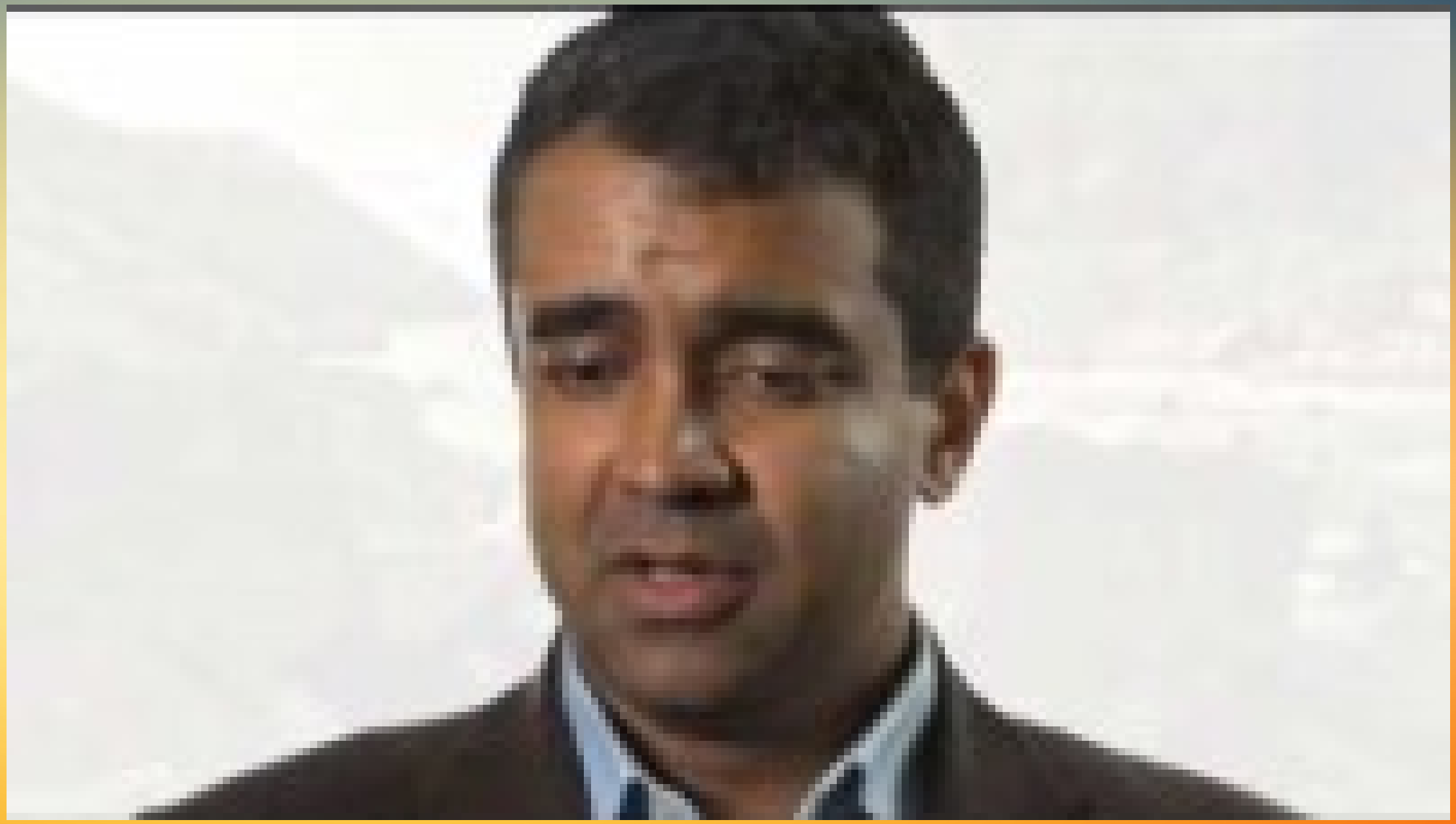
Take Home Messages

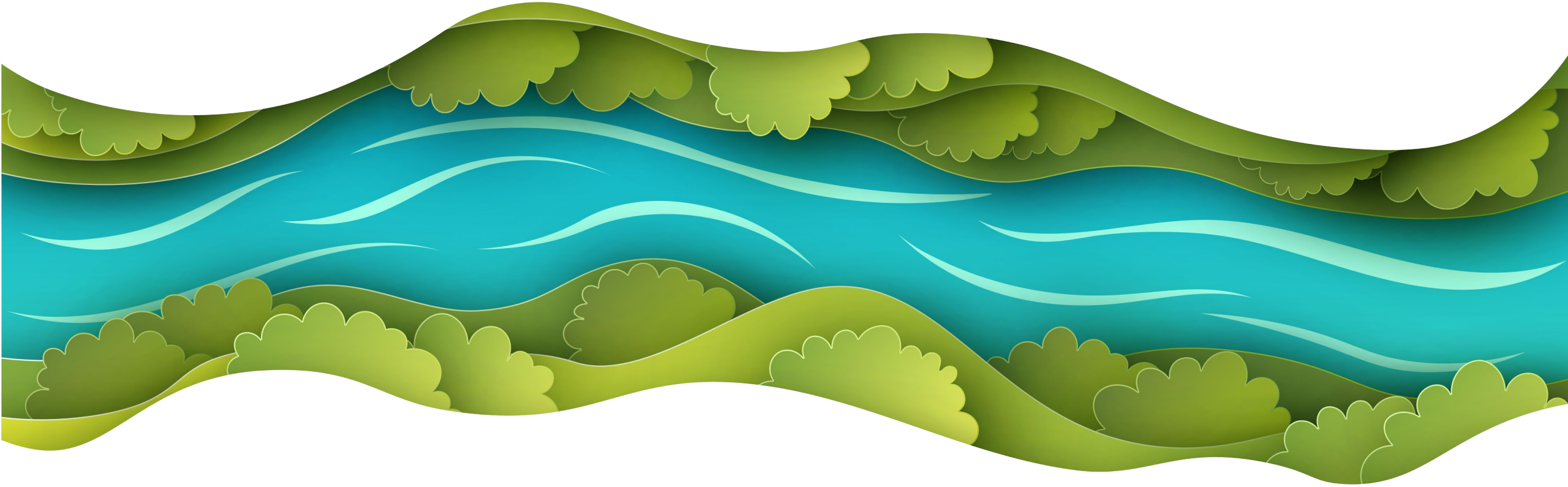
- TP quality based on formal, nationally endorsed outcome measures
- Focus on health outcomes (endpoints) not health services (process)
- Combination of prevention—and mitigation—of chronic disease
- Not just behavioral health—heavily “physical” health
  - *Dorothy, we’re not in Kansas anymore*

Whole Health is….

Beyond/Before Illness - When

Beyond Clinical Treatment for Diagnosed Illness – What/How





PRIMARY PREVENTION

Repair the bridge

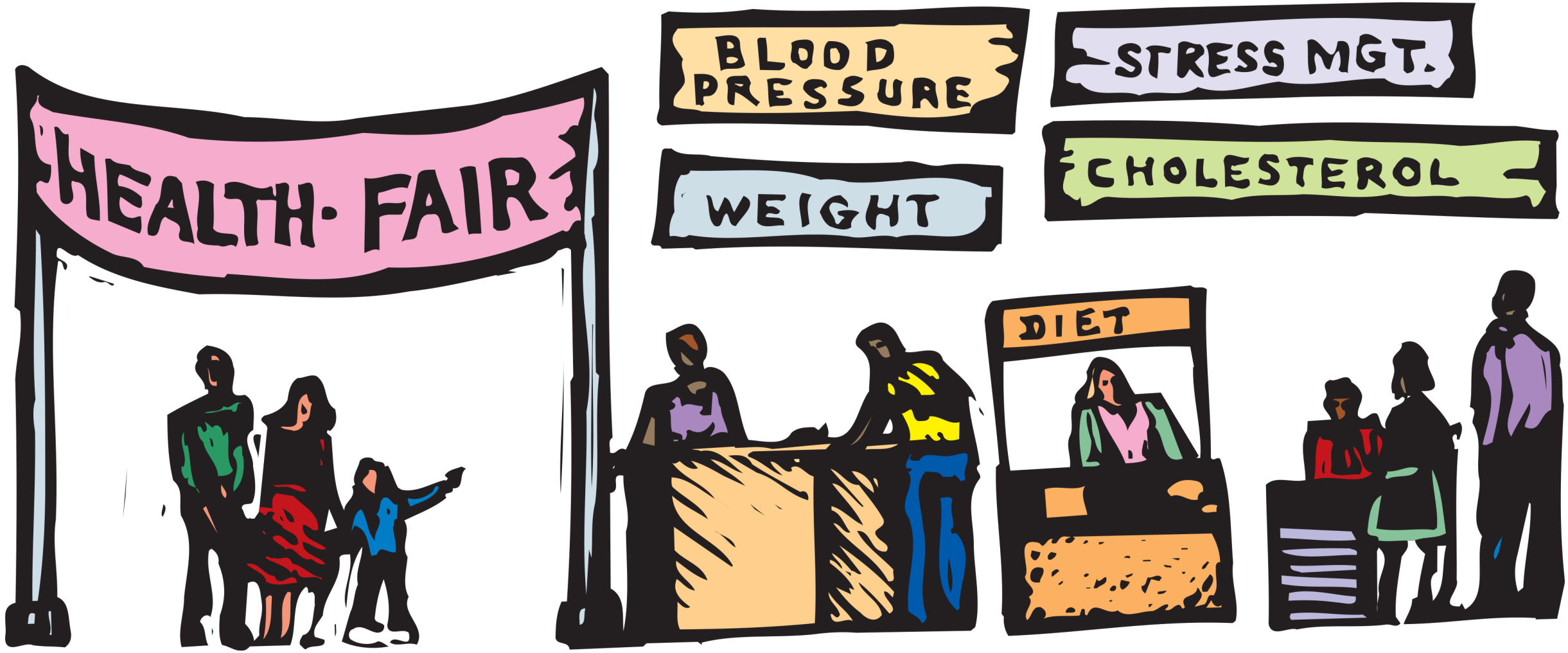
SECONDARY PREVENTION

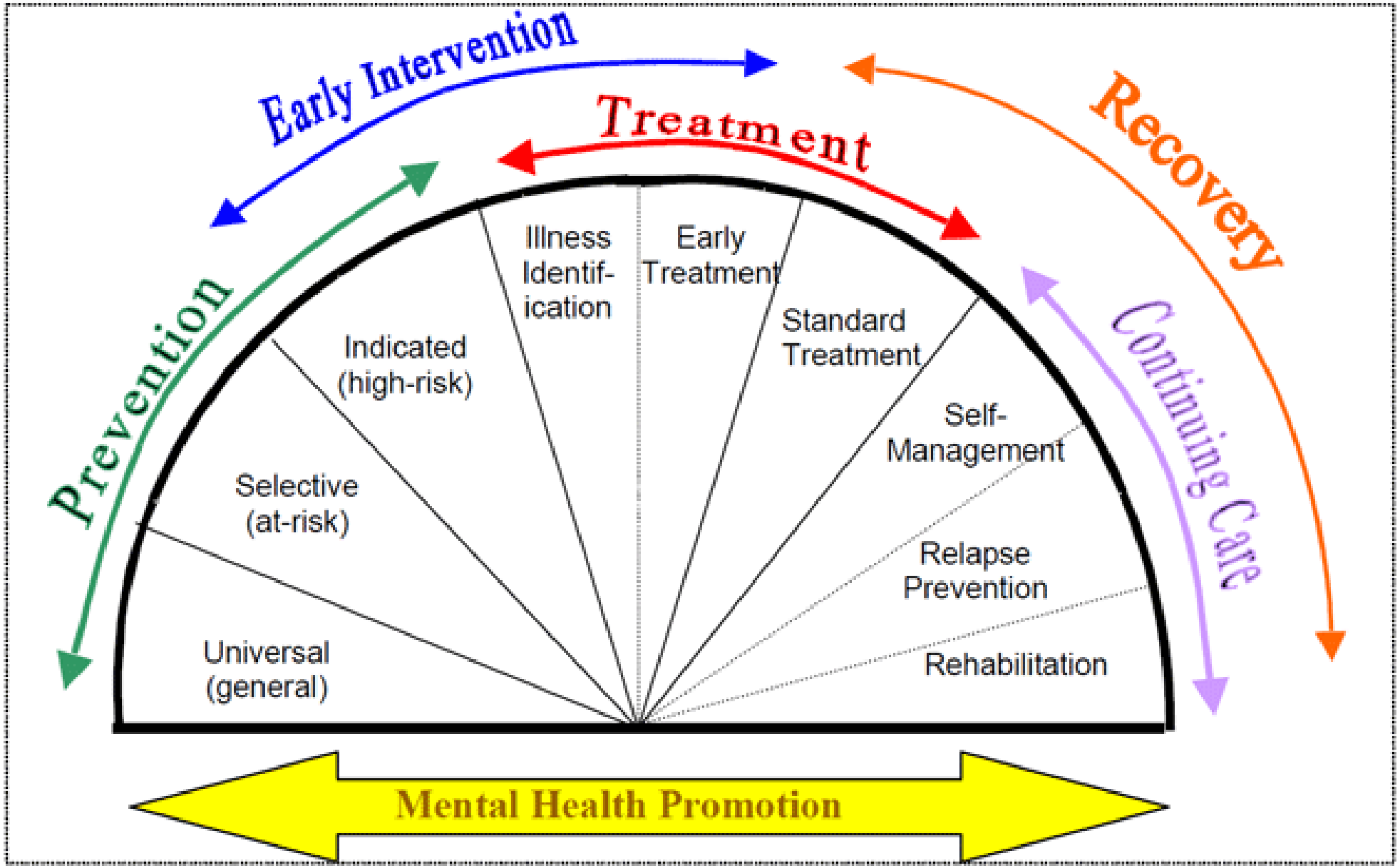
Build a raft,
prevent drowning

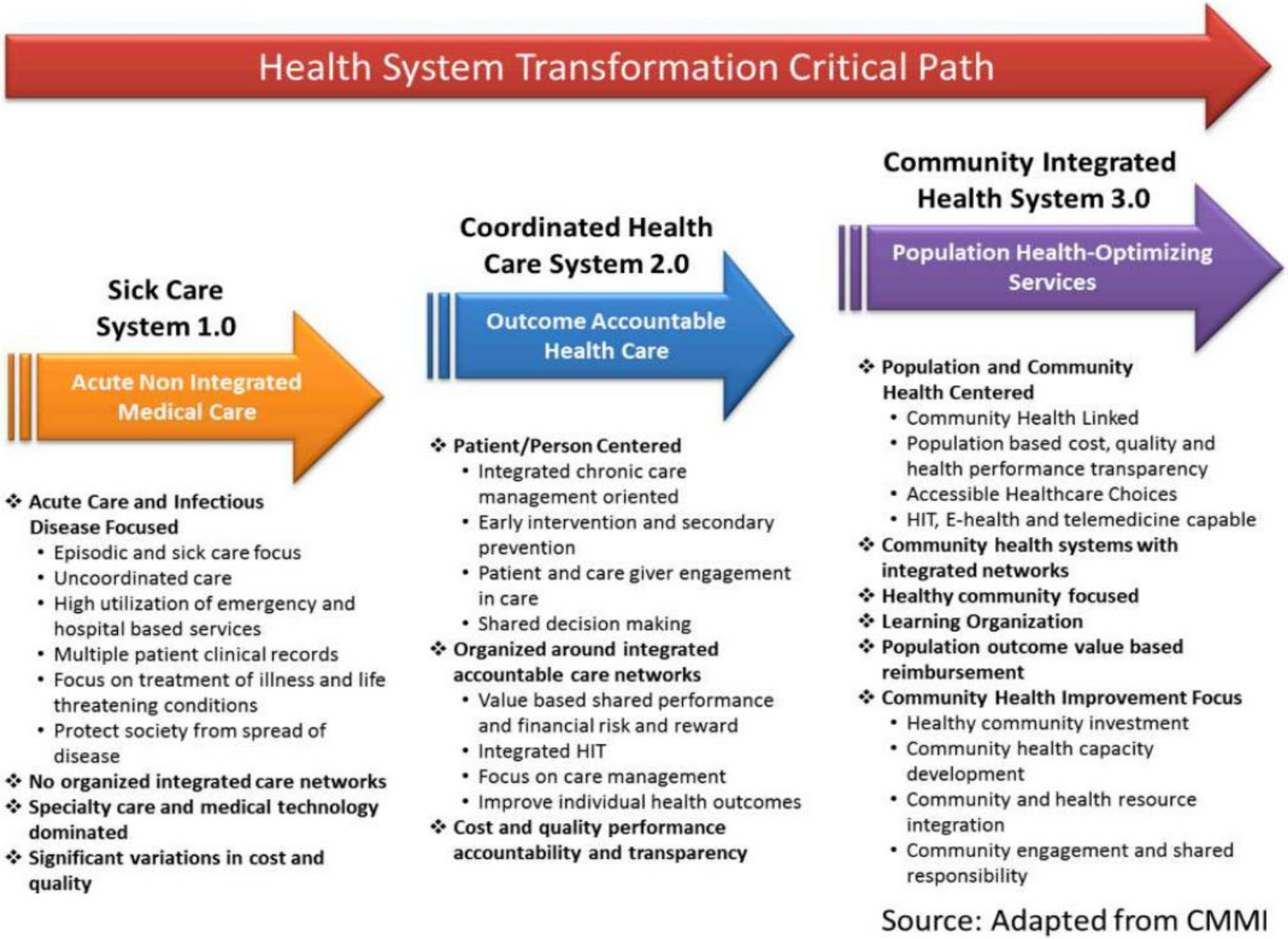
TERTIARY PREVENTION

Catch drowning people
before the waterfall

STAGE OF PREVENTION	PRIMARY	SECONDARY	TERTIARY
“River Story”	Fix Bridge Upstream, Prevent People Falling In	Pull People Out of River and Onto the Raft	Pull People Out Before They Go Over the Waterfall
Stage of Disease	None (yet)	Imminent	Established
Primary Objective	Disease Avoidance	Early Detection	Minimize Damage Slow Progression
Intervention Tools	Routine Screening Wellness Resources/Edu. Health Policy	More Assessment Coaching Health Education Reduce Risk Factors	Diagnosis Treatment Plan Medication Care Management Specialist Referrals
Examples of Vaya/PHP Roles	Rallies, Health Fairs Educational Resources Prevention Policies	Encourage Providers to Screen Care Mgmt/Call Center – Screening, Referrals, etc.	Authorize Care/UM Ensure Fidelity to Model Support Integrated Care Complex Care Mgmt


HEALTH· FAIR
BLOOD PRESSURE
WEIGHT
STRESS MGT.
CHOLESTEROL
DIET


Early Intervention
Treatment
Recovery
Prevention
Continuing Care
Illness Identif-ication
Early Treatment
Indicated (high-risk)
Standard Treatment
Selective (at-risk)
Self-Management
Relapse Prevention
Universal (general)
Rehabilitation
Mental Health Promotion


Health System Transformation Critical Path
Sick Care System 1.0
Acute Non Integrated Medical Care
Coordinated Health Care System 2.0
Outcome Accountable Health Care
Community Integrated Health System 3.0
Population Health-Optimizing Services
❖ Acute Care and Infectious Disease Focused
• Episodic and sick care focus
• Uncoordinated care
• High utilization of emergency and hospital based services
• Multiple patient clinical records
• Focus on treatment of illness and life threatening conditions
• Protect society from spread of disease
❖ No organized integrated care networks
❖ Specialty care and medical technology dominated
❖ Significant variations in cost and quality
❖ Patient/Person Centered
• Integrated chronic care management oriented
• Early intervention and secondary prevention
• Patient and care giver engagement in care
• Shared decision making
❖ Organized around integrated accountable care networks
• Value based shared performance and financial risk and reward
• Integrated HIT
• Focus on care management
• Improve individual health outcomes
❖ Cost and quality performance accountability and transparency
❖ Population and Community Health Centered
• Community Health Linked
• Population based cost, quality and health performance transparency
• Accessible Healthcare Choices
• HIT, E-health and telemedicine capable
❖ Community health systems with integrated networks
❖ Healthy community focused
❖ Learning Organization
❖ Population outcome value based reimbursement
❖ Community Health Improvement Focus
• Healthy community investment
• Community health capacity development
• Community and health resource integration
• Community engagement and shared responsibility
Source: Adapted from CMMI

Let's Start with a Case Study

- Mr. M – 51, father of two, Type II diabetes Last HbA1c = 8.2. BMI: 29
- Medications:

  Metformin 1000mg po bid

  Glipizide 10mg po bid

  No known problems with medication adherence.
- At the end of last month, he was extremely dizzy, nearly fainted and was hospitalized
- Diagnosis: Hypoglycemia

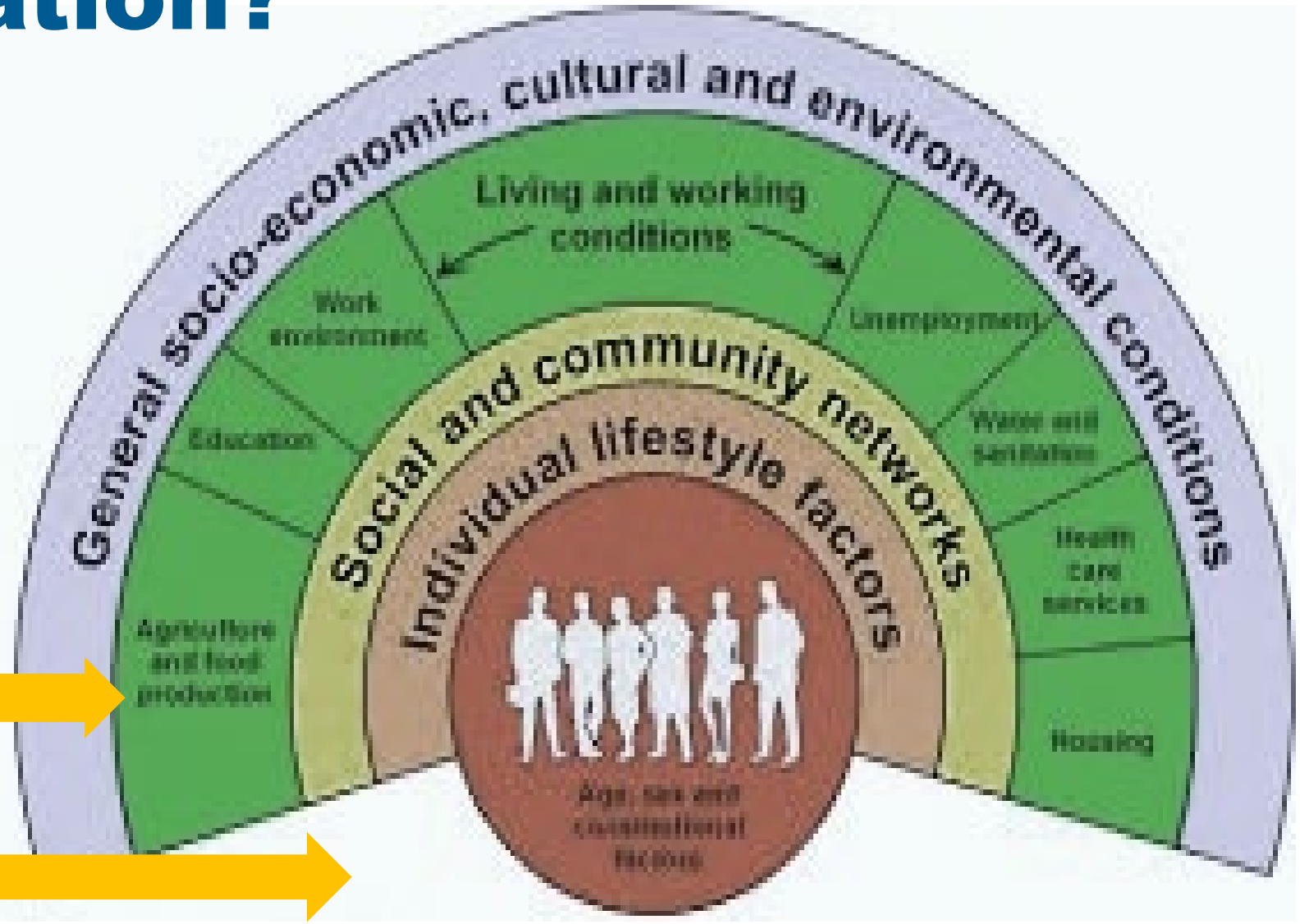
So, what could have led to Mr. M's hospitalization?

What Could Have Led to Mr. M's Hospitalization?

Food Insecurity

Poor Dietary or Exercise Habits

Medications



Food Insecurity and Diabetes

- Food insecurity reflects the inability to access food because of inadequate finances or other resources
    - Hunger is related as an individual – level physical sensation
    - One in seven Americans cannot reliably afford food
- **The risk of diabetes is about 3X higher in very food-insecure households** compared to food-secure households, after accounting for differences in socioeconomic status and obesity

Food insecurity is a driver of preventable, high-cost healthcare utilization

Lower-income diabetic adults have a 27% higher rate of hospital admissions due to end-of-the month food insecurity, compared with higher-income diabetics (Health Affairs)

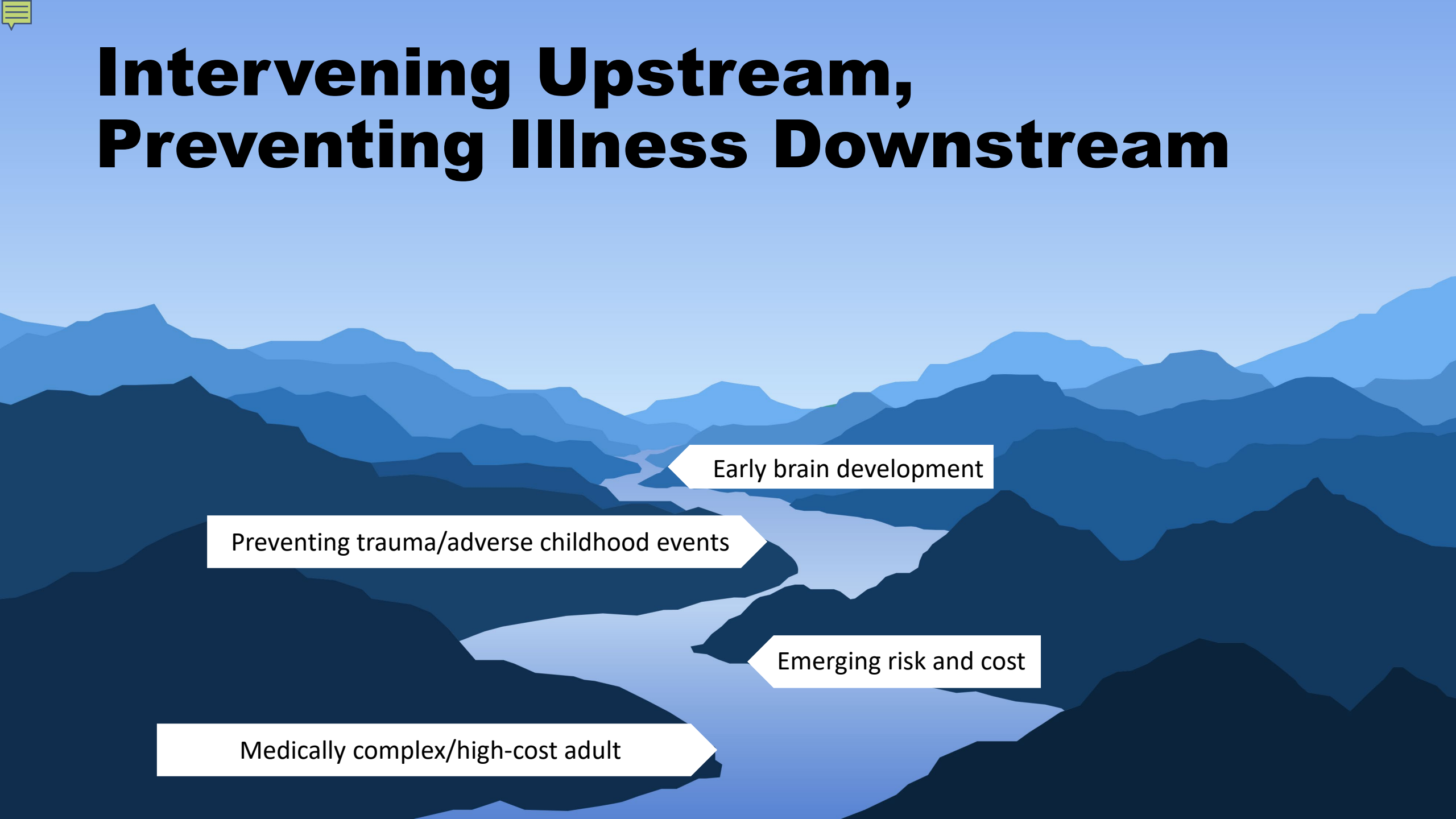
More than half of patients with high hospitalization rates (at least 3 inpatient visits in a 12-month period) were food insecure or marginally food secure. 75% were unable to shop for food on their own and 58% were unable to prepare their own food. (Philadelphia)

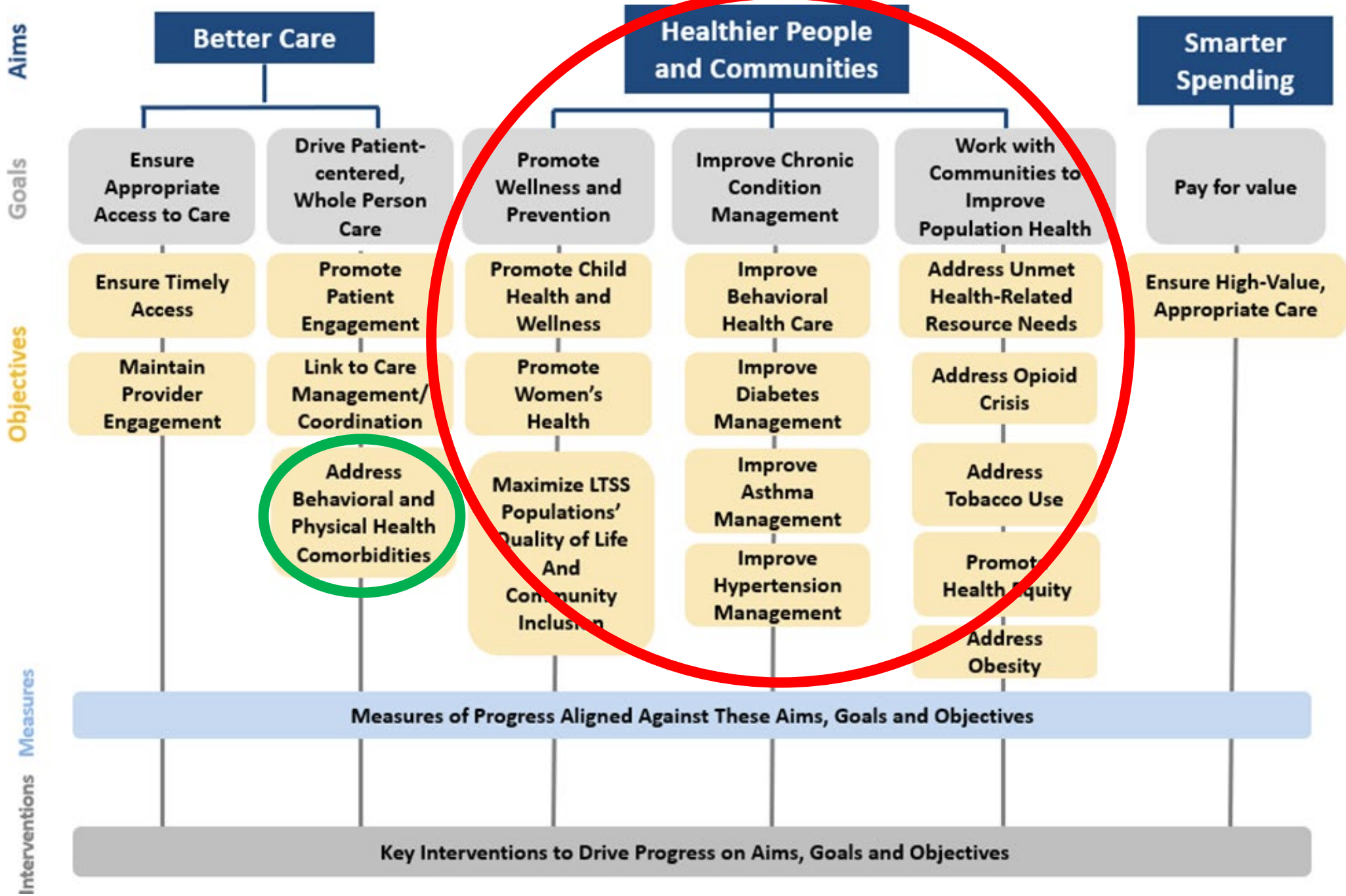
Upstream is important and an ounce of prevention is worth a pound of cure—got it.

But how does this relate to Tailored Plan?

And what does NC DHHS think about all of this?

Intervening Upstream, Preventing Illness Downstream

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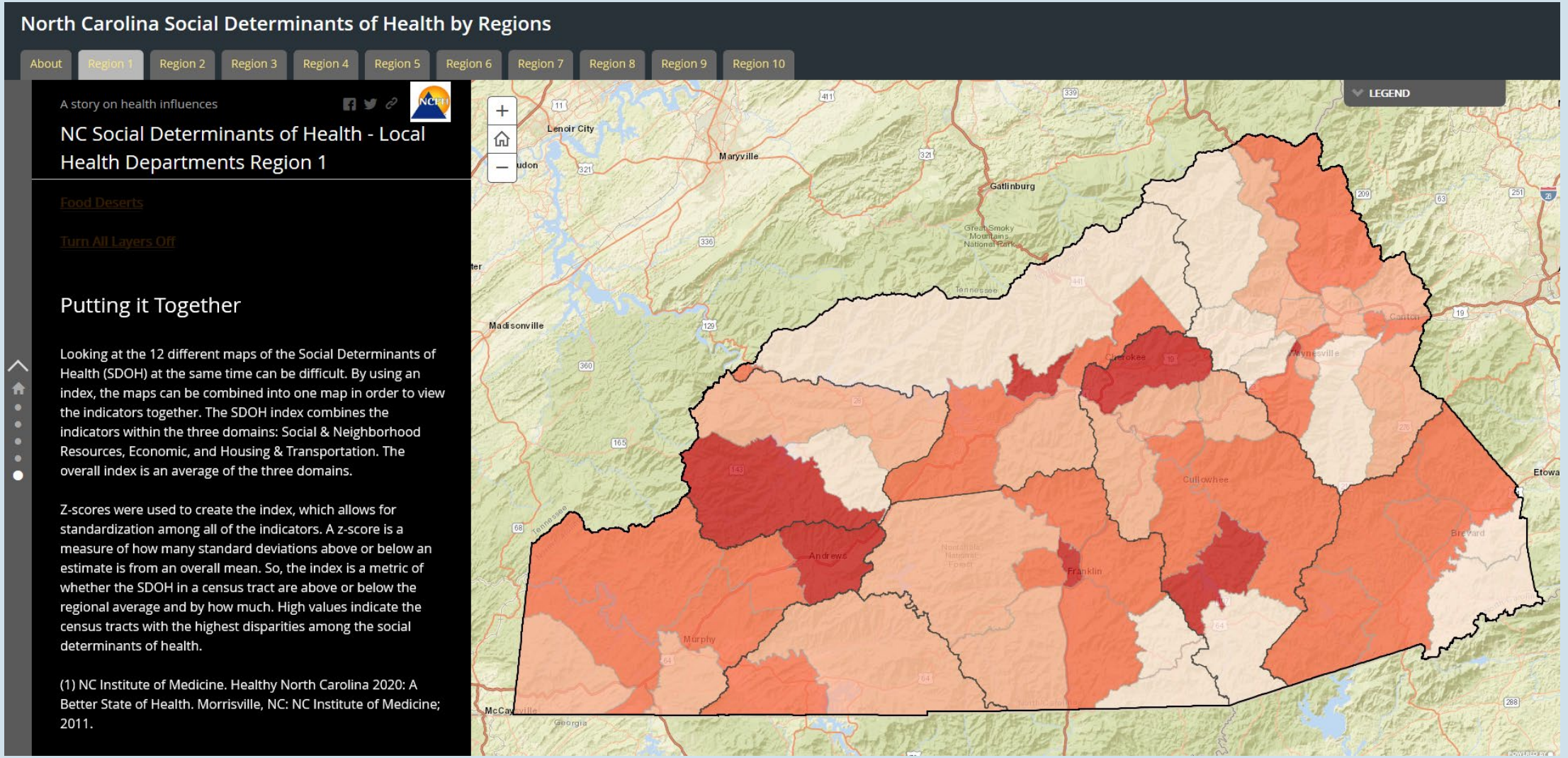
Measures of Progress Aligned Against These Aims, Goals and Objectives
Key Interventions to Drive Progress on Aims, Goals and Objectives

Regional Hot Spots: Combined Index of 12 SDOHs



Take Home Messages

- Heroes include planners and bridge builders – not just waterfall rescuers
- Meeting 1115 required targets for disease prevention requires wider array of upstream approaches
- US healthcare system has been slow to adopt upstream approaches (traditional care = “sick care” aka downstream, acute care)
  - NC Medicaid Transformation is innovative – around prevention & SDOH pilots
- NC DHHS is *all in* – geo mapping & hot spotting, Healthy Opportunities Pilots, wide ranging “Prevention & Population Health” programs, etc.

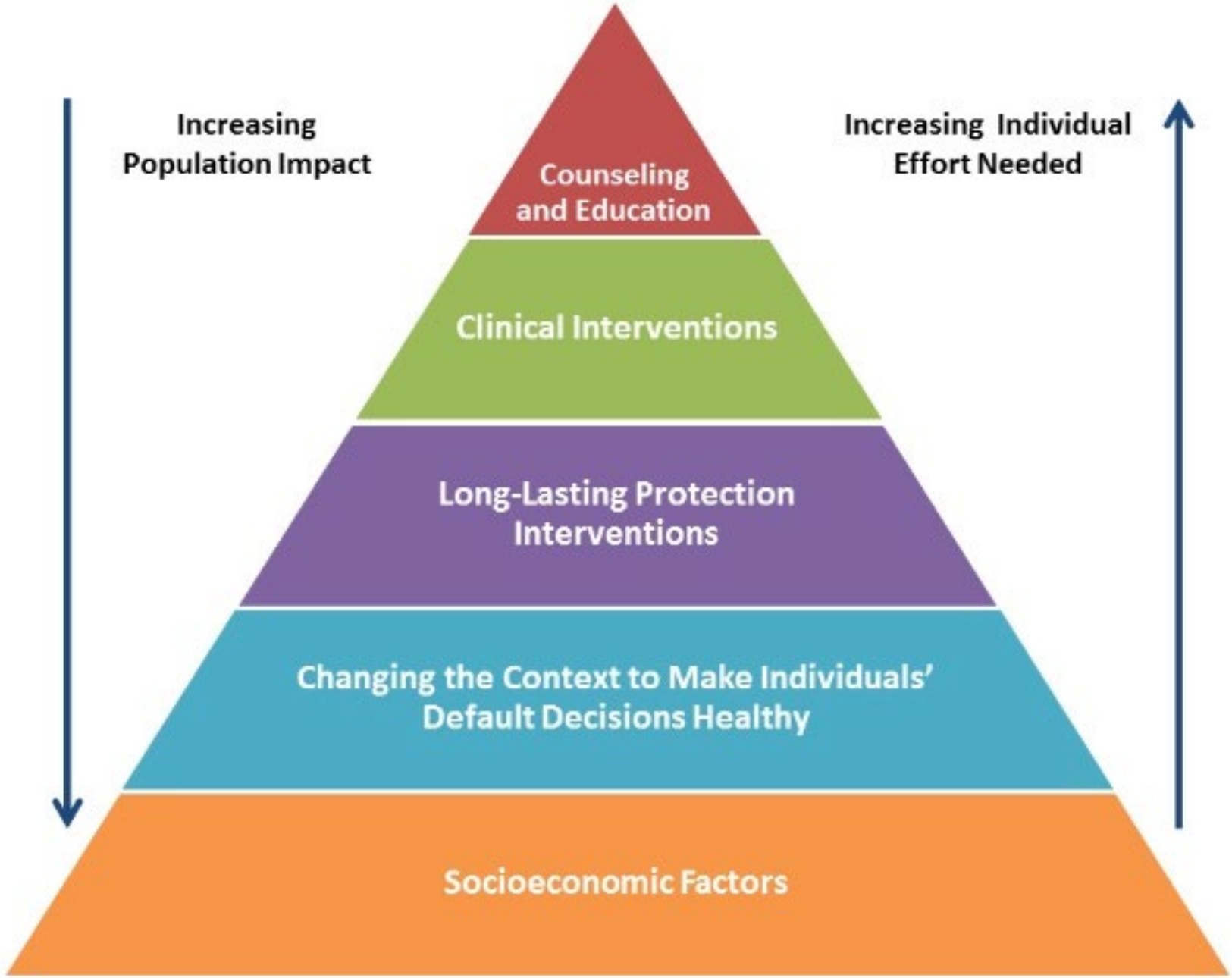
Okay, so I'm hearing ideas about *when* to do things (e.g., before illness), *how* and *what* to do (e.g., address unmet resource needs not just clinical care).

But what about the *who*?

Whole Population Approaches are ….

Beyond the Individual – Who

Beyond What Vaya/Providers Can Do, Alone – With Whom


Increasing
Population Impact
Increasing Individual
Effort Needed
Counseling
and Education
Clinical Interventions
Long-Lasting Protection
Interventions
Changing the Context to Make Individuals'
Default Decisions Healthy
Socioeconomic Factors

Population Health, Still Person Centered!

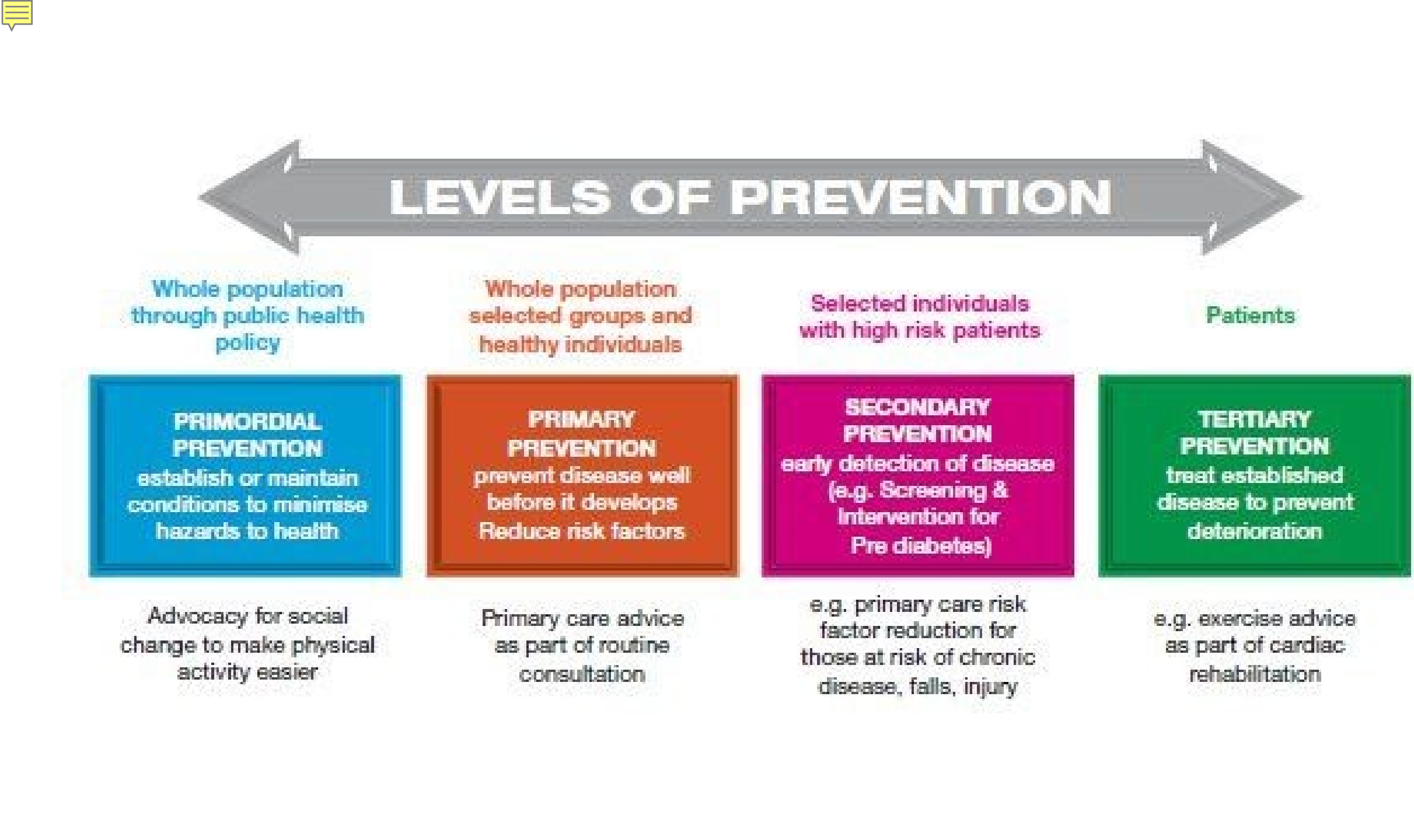
"Planning for groups, caring for individuals"

- Looking at groups – determining their needs, challenges, strengths…. all this still informs person centered, specific, tailored approaches.
- It just helps organizations and teams marshal resources, clarify priorities, build programs/resources, increase ROI, and streamline efforts.
- One care team should not (!) have to become experts on everything. For example, you can't put an expert diabetes educator on every care team.


Public Policy
Government
Laws
Community
Parks & Recreation
Neighborhood
Regulations
Organizational
Health Care
Media
Culture
Faith
Organizations
Schools
Interpersonal
Community
Organizations
Values
Food Industry
Family
INDIVIDUAL

Let's Match Them Up!

- Accessibility and affordability of mammography facilities/services
- Friends and relatives affected by breast cancer
- Mammogram screening recommendations
- Knowledge of breast cancer risk factors
- Community programs to promote cancer screening for women over 50 from all backgrounds

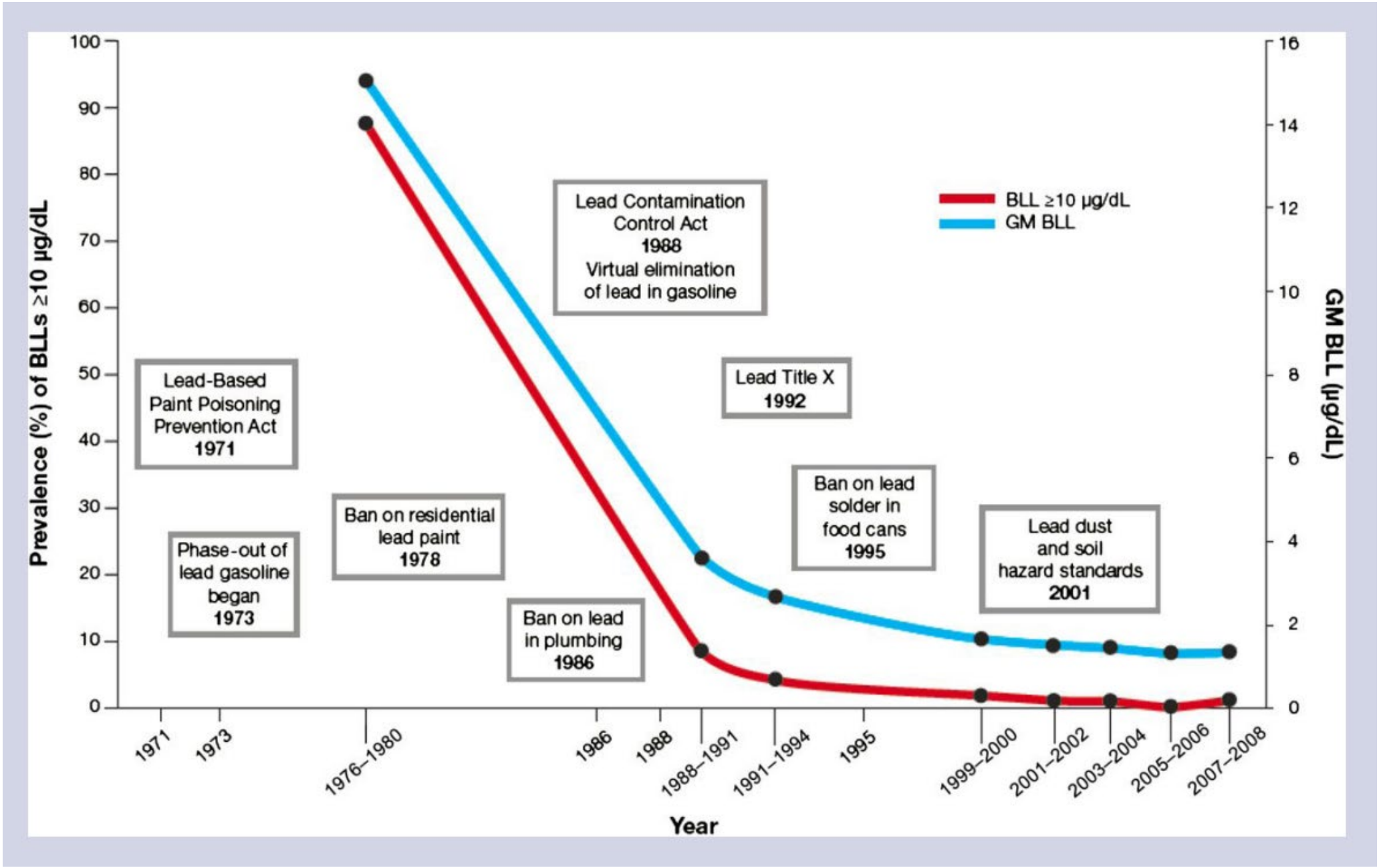

LEVELS OF PREVENTION
Whole population through public health policy
Whole population selected groups and healthy individuals
Selected individuals with high risk patients
Patients
PRIMORDIAL PREVENTION
establish or maintain conditions to minimise hazards to health
PRIMARY PREVENTION
prevent disease well before it develops
Reduce risk factors
SECONDARY PREVENTION
early detection of disease (e.g. Screening & Intervention for Pre diabetes)
TERTIARY PREVENTION
treat established disease to prevent deterioration
Advocacy for social change to make physical activity easier
Primary care advice as part of routine consultation
e.g. primary care risk factor reduction for those at risk of chronic disease, falls, injury
e.g. exercise advice as part of cardiac rehabilitation

Preventing ACEs

Strategy	Approach
Strengthen economic supports to families	• Strengthening household financial security • Family-friendly work policies
Promote social norms that protect against violence and adversity	• Public education campaigns • Legislative approaches to reduce corporal punishment • Bystander approaches • Men and boys as allies in prevention
Ensure a strong start for children	• Early childhood home visitation • High-quality child care • Preschool enrichment with family engagement
Teach skills	• Social-emotional learning • Safe dating and healthy relationship skill programs • Parenting skills and family relationship approaches
Connect youth to caring adults and activities	• Mentoring programs • After-school programs
Intervene to lessen immediate and long-term harms	• Enhanced primary care • Victim-centered services • Treatment to lessen the harms of ACEs • Treatment to prevent problem behavior and future involvement in violence • Family-centered treatment for substance use disorders

Public Health


to improve health for everyone


Prevalence (%) of BLLs ≥10 µg/dL
GM BLL (µg/dL)
Year
BLL ≥10 µg/dL
GM BLL
Lead-Based Paint Poisoning Prevention Act 1971
Phase-out of lead gasoline began 1973
Ban on residential lead paint 1978
Lead Contamination Control Act 1988 Virtual elimination of lead in gasoline
Ban on lead in plumbing 1986
Lead Title X 1992
Ban on lead solder in food cans 1995
Lead dust and soil hazard standards 2001
1971
1973
1976–1980
1986
1988
1988–1991
1991–1994
1995
1999–2000
2001–2002
2003–2004
2005–2006
2007–2008


School
SHELTER
SENIORS
CLINIC
salon
DEPARTMENT of HEALTH
JAIL
Health
in the
Community
PARKS
IN-HOME
HOSPITAL
ER
Community Center
Dentist
Mental Health Clinic
FAITH-BASED ORGANIZATIONS

Questions to Ponder

- How do we think bigger?
  - How can we better understand Community Health, Public Health and Population Health - and our partners in these fields?

- How do we “act” bigger?
  - How do we diversify and grow our interventions and actions?
  - How do we widen and deepen our partnerships?
    - We can’t do this alone!

This is a little overwhelming—definitely more than we can do alone.

Who do we partner with?

How do we reach agreement on priorities?

On how to tackle issues?


WORK TOGETHER
ENGAGE THE COMMUNITY
COMMUNICATE
SUSTAIN IMPROVEMENT RESULTS
Assess Needs & Resources
Focus on What's Important
Choose Effective Policies & Programs
Act on What's Important
Evaluate Actions
Collective Vision
People
Community Developers
Businesses
Education
Government
Philanthropists & Investors
Faith-Based Organizations
Health Care Providers
Public Health
Health Insurance
Nonprofits

Gaining Agreement on Priorities

Burden

- How much does this issue affect health in the community?

Equity

- Will addressing this issue substantially benefit those *most* in need?

Impact

- Can working on this issue achieve both short-term and long-term change?

Feasibility

- Is it possible to address this issue given infrastructure, capacity, and political will?

Collaboration

- Are there existing groups across sectors willing to work together on this issue?

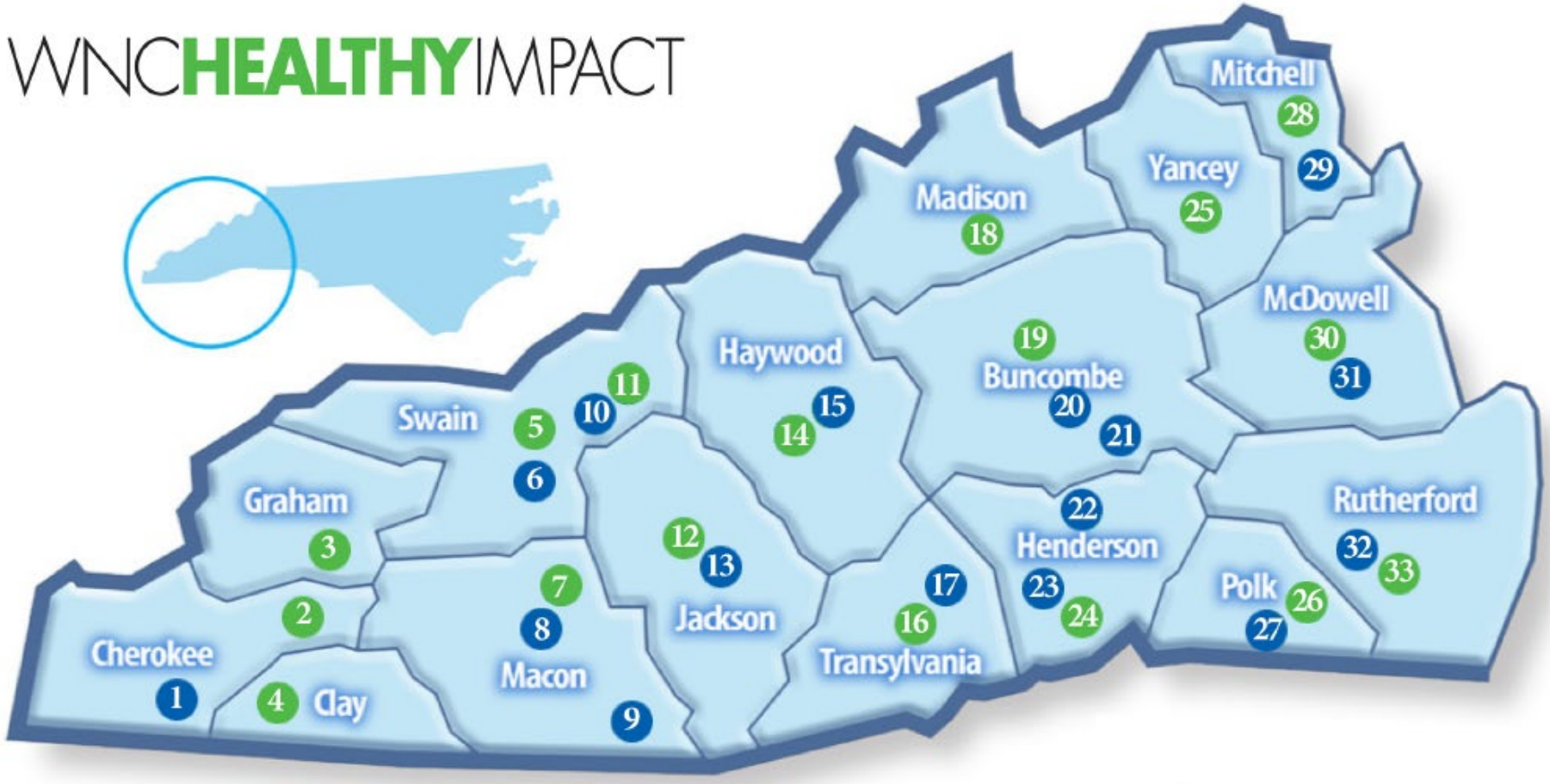
Making the Case for Collaboration

- 50% Reduction in Opioid Overdoses (2004-2012)
- 78% Reduction in Drug Related Deaths (2003-2008)

- Boston Partners: Hospital, SU Coalition, Drug Court, LHDs, Social Marketing

- Interventions:
  - Campaign - anti-prescription drug overdose social marketing campaign
  - Treatment - make referrals to treatment facilities
  - Jail Diversion - offer treatment as an alternative to incarceration
  - Education - provide substance abuse curricula for children
  - Overdose Training - train local residents in the administration of Narcan (nasal naloxone) to reverse opioid overdoses

WNC HEALTHY IMPACT



CHIP
Community Health Improvement Process

1. Erlanger Western Carolina Hospital
2. Cherokee County Health Dept.
3. Graham County Dept. of Public Health
4. Clay County Health Dept.
5. Swain County Health Dept.
6. Swain Community Hospital
7. Macon County Public Health Center
8. Angel Medical Center
9. Highlands-Cashiers Hospital
10. Cherokee Indian Hospital
11. EBCI Public Health and Human Services
12. Jackson County Dept. of Public Health
13. Harris Regional Hospital
14. Haywood County Health & Human Services Agency
15. Haywood Regional Medical Center
16. Transylvania Public Health
17. Transylvania Regional Hospital
18. Madison County Health Dept.
19. Buncombe County Health and Human Services
20. Mission Hospital
21. CarePartners Health Services
22. AdventHealth Hendersonville
23. Pardee UNC Health Care
24. Henderson County Department of Public Health
25. Toe River Health District– Yancey
26. RPM Health District– Polk
27. Saint Luke's Hospital
28. Toe River Health District– Mitchell
29. Blue Ridge Regional Hospital
30. RPM Health District– McDowell
31. Mission Hospital McDowell
32. Rutherford Regional Health System
33. RPM Health District– Rutherford

Okay, we've reviewed when, how/what, who (groups *and* individuals) and with whom (partners).

Now, let's get down to brass tacks! How about some concrete examples?

Outcome Achievement (TP/1115 Success)

Key Driver Maps – a Roadmap to Match Outcomes with Interventions and Key Partners

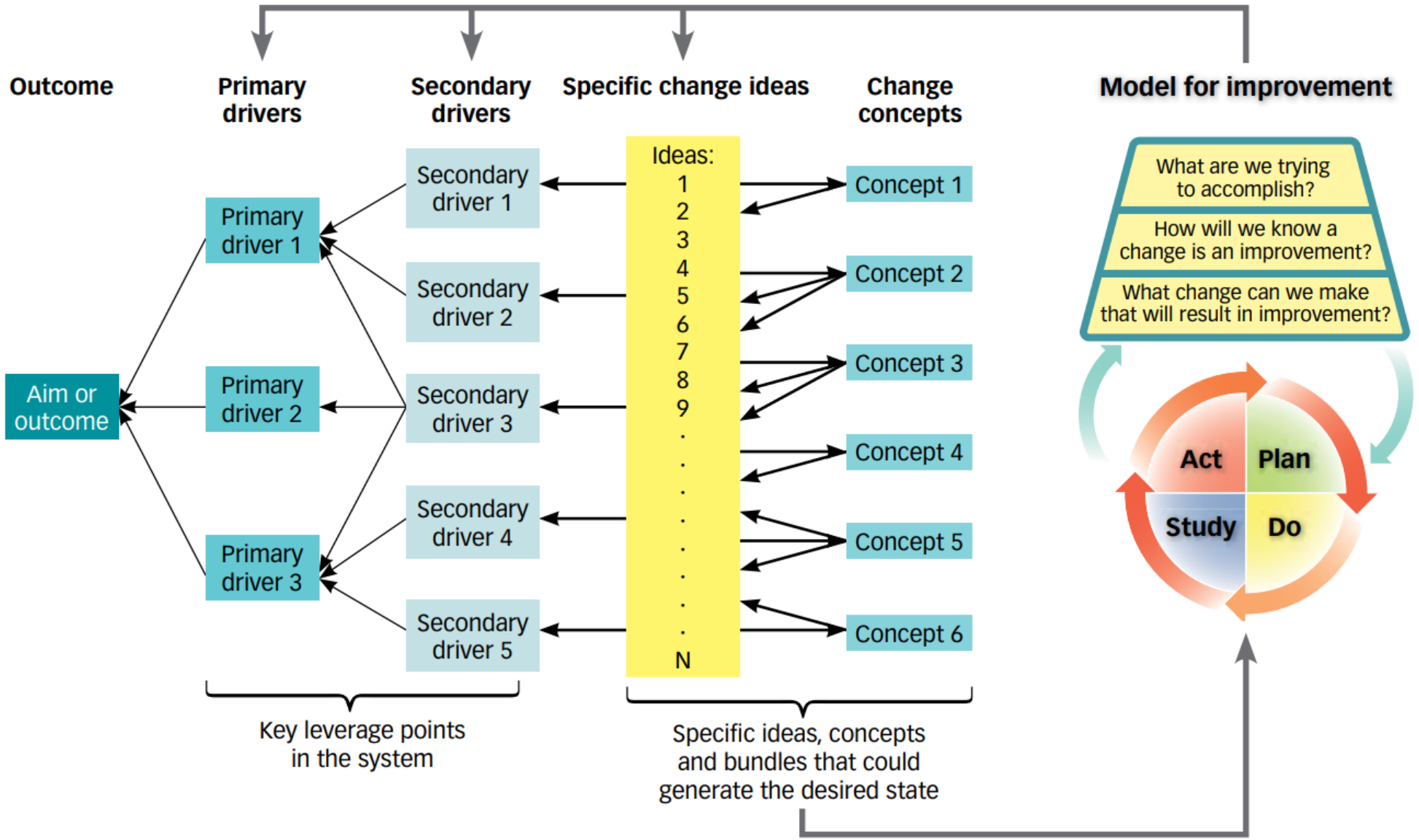
Prevention and Population Health Programs (PPHPs) – Learn Them, Love Them, Use Them

Some Key Partners, Their Tools for Outcome Success, Their Needs/How We Can Help

Designing a Roadmap to Successfully Achieve Each TP Outcome

- Work backward from the desired endpoints (start with your destination)
- Move from outcome (success indicator) to broad interventions and programs to concrete workflows (who does what, with whom, how, how much, by when)
- Clarify what (really) leads to what
  - “Key driver maps”
  - High value, evidence-based approaches
  - Best return on investment (ROI)
  - Multi-faceted, multi-level, multi-partner, multi-setting

Driver diagram informs testing, testing refines theory / FIGURE 3



Controlling High Blood Pressure (Hypertension, aka HTN)

Definition

- The percentage of members 18–85 years of age who had a diagnosis of hypertension (HTN) and whose BP was adequately controlled (<140/90 mm Hg)

Measure Type

- Outcome

NQF Number and Measure Steward

- National Quality Forum# 0018
- Measure Steward: NCQA

Key Driver Map: All the Partners

SMART Aim
Meet benchmark goal percentage of adults with high blood pressure, whose BP was adequately controlled (in a healthy range).

Goals
CDC: 80% by 2025
NC DHHS (TBD)

Performance
61% (2019), Medicaid HMOs

Key Partners (Examples)

- Providers & Practitioners
- Care Management (Plan/PHP or AMH+/CMA)
- PHPs (Vaya, etc.)
- Other Partners
- Members & Families

Key Functions (Examples)

- Assess, Treat, Refer to Specialists, Coordinate with Care Team & CM
- Assess, Screen, Develop Care Plan, Identify Care Gaps, Referrals (SDOH, etc.), Transitions, Etc.
- Educate & Incentivize (Providers, AMH+/CMA)
  Maintain Network
  Provide Data & Information
  Quality Oversight
  Overall Coordination of Care
  Medicaid Health Home Functions
- CBOs - Accept Referrals & Address SDOHs, LHDs, Health Education & Promotion, Schools, Faith Based, Parks & Rec, Govt., etc.
- Self-Management, Advocacy, Shared Decision Making, Engagement in Care

Global Aims Related to Hypertension (High Blood Pressure)

- Primary Prevention: *Prevent* Onset of Hypertension
- Secondary Prevention: *Early Identification* of Hypertension
- Tertiary Prevention: *Manage*/Mitigate Impacts of Hypertension

Key Driver Map: Vaya/PHP Functions

SMART Aim
Meet benchmark goal percentage of adults with high blood pressure, whose BP was adequately controlled (in a healthy range).

Goals
CDC: 80% by 2025
NC DHHS (TBD)

Performance
61% (2019), Medicaid HMOs

Key Vaya Depts

- Provider Network, NPI
- Care Management
- Data & Reports
- Quality & Measurement
- Other Depts
- Member Services

Key Functions (Examples)

- Specify in Contracts & Provider Manual, Provider Education, Help Disseminate Performance Data including Care Gaps (e.g., missed screening/BP check)
- Assess & Screen, Review Medications, Develop Care Plan, Track Care Gaps, Transitions, Referrals, Care Team Collaboration & Coordination
- Ensure reports developed, accessible, disseminated – within & without Vaya (Provider Portal)
- Monitor/Flag Low Performance, Run QIA if Needed, Submit to NC DHHS
- Partner Engagement, Social Marketing, Rallies & Wellness Campaigns, Policy, UM
- Call Center & Crisis Line, Nurse Line, Referrals, Member Enrollment Packet

Global Aims Related to Hypertension (High Blood Pressure)

- Primary Prevention: *Prevent* Onset of Hypertension
- Secondary Prevention: *Early Identification* of Hypertension
- Tertiary Prevention: *Manage*/Mitigate Impacts of Hypertension

Key Driver Map: Care Management Functions

SMART Aim
Meet benchmark goal percentage of adults with high blood pressure, whose BP was adequately controlled (in a healthy range).

Goals
CDC: 80% by 2025
NC DHHS (TBD)

Performance
61% (2019), Medicaid HMOs

Overall Care Mgmt Functions

HTN Related Tasks - Examples

Overall Care Mgmt Functions	HTN Related Tasks - Examples
Identification of Members Screening, Assessment	Identify members through claims data, pharmacy/Rx data, comprehensive assessment
Care Plan & Goals	Custom HTN goals related to self-management skills, health education (RN), nutrition, exercise, salt intake, medical visits
Monitoring Care, Care Gaps (PCP visits? BP tests?)	Communication with Member/Care Team
Referrals & Transitions	Cardiology? HTN/CVD inpatient/rehab?
Monitoring & Reports	-CM Workflows Followed? -Clinical Care Received? -Health Status - most recent BP?
Medication – Reconciliation, Monitoring, Adherence	Identify HTN Rx, Track, PBM & Prescribers

Hypertension Outcome Achievement:

Big Dreams and Expectations

Through these collective interventions, we hope to:

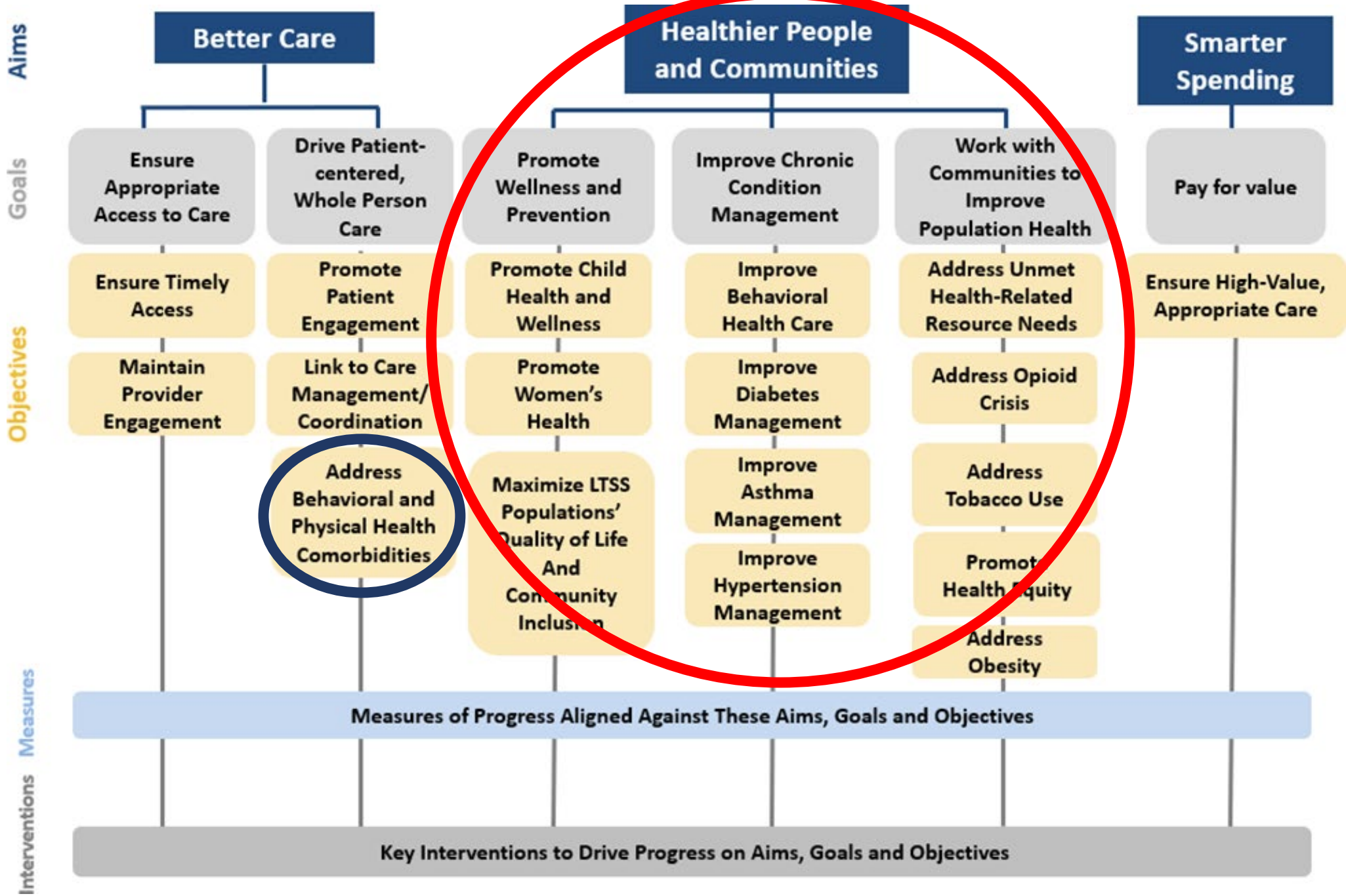
- Prevent/arrest cardiovascular damage
- Reduce the incidence of
  - Stroke
  - Ischemic heart disease
  - Heart failure
  - End stage renal disease
- Increase the numbers of members with blood pressure checks and medication adherence

Prevention and Population Health Programs (PPHPs)

These Match the Priority Conditions/Health Domains for TP/1115

Required Part of Each Region's/PHP's Strategy for Tailored Plan

PPHPs – Learn Them, Love Them, Use Them


Aims
Goals
Objectives
Measures
Interventions
Better Care
Healthier People and Communities
Smarter Spending
Ensure Appropriate Access to Care
Drive Patient-centered, Whole Person Care
Promote Wellness and Prevention
Improve Chronic Condition Management
Work with Communities to Improve Population Health
Pay for value
Ensure Timely Access
Promote Patient Engagement
Promote Child Health and Wellness
Improve Behavioral Health Care
Address Unmet Health-Related Resource Needs
Ensure High-Value, Appropriate Care
Maintain Provider Engagement
Link to Care Management/ Coordination
Promote Women's Health
Improve Diabetes Management
Address Opioid Crisis
Address Behavioral and Physical Health Comorbidities
Maximize LTSS Populations' Quality of Life And Community Inclusion
Improve Asthma Management
Address Tobacco Use
Improve Hypertension Management
Promote Health Equity
Address Obesity
Measures of Progress Aligned Against These Aims, Goals and Objectives
Key Interventions to Drive Progress on Aims, Goals and Objectives

Each Program Has Three (3) Levels of Interventions

System/Community

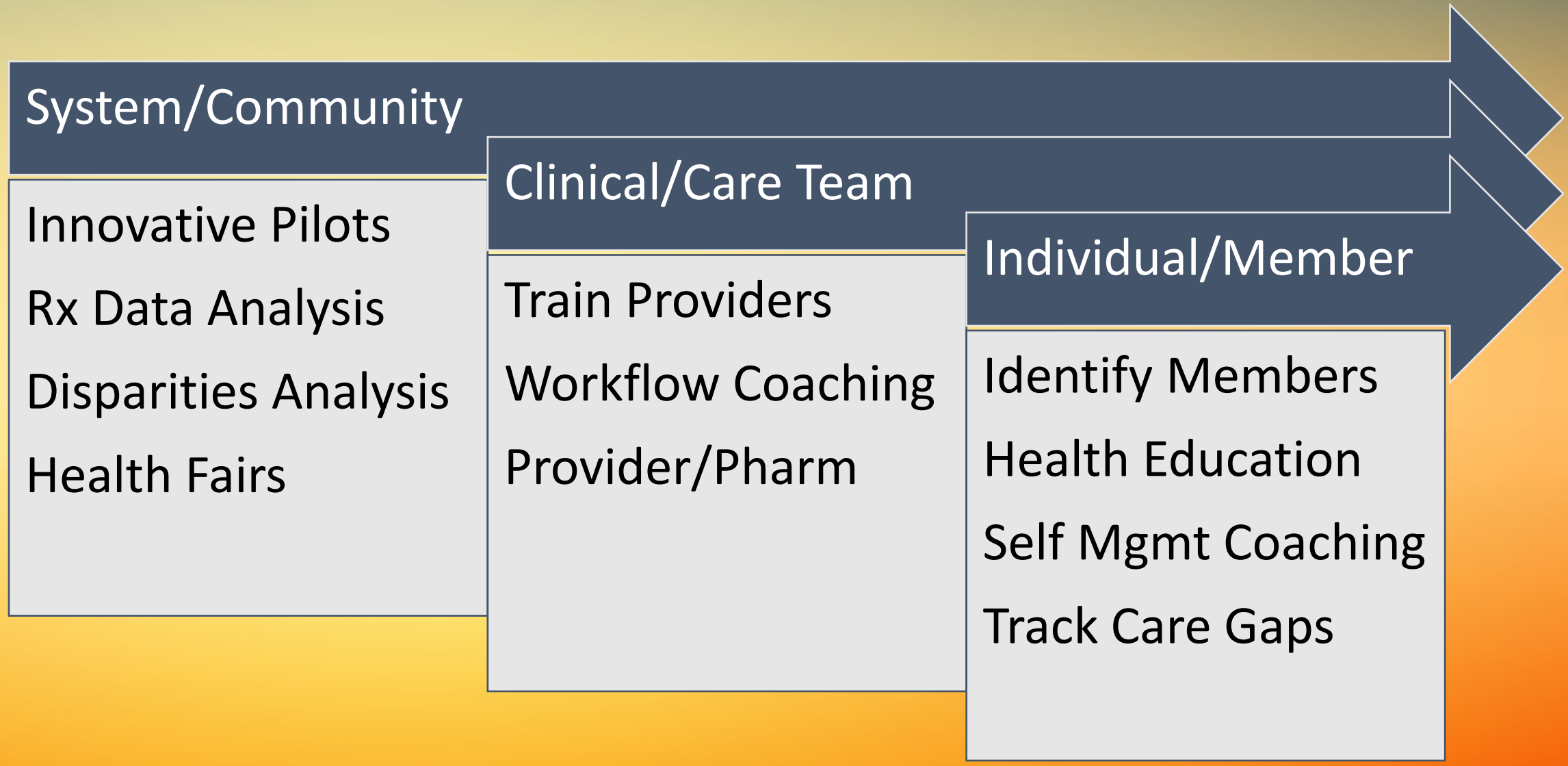
Clinical/Care Team

Individual/Member

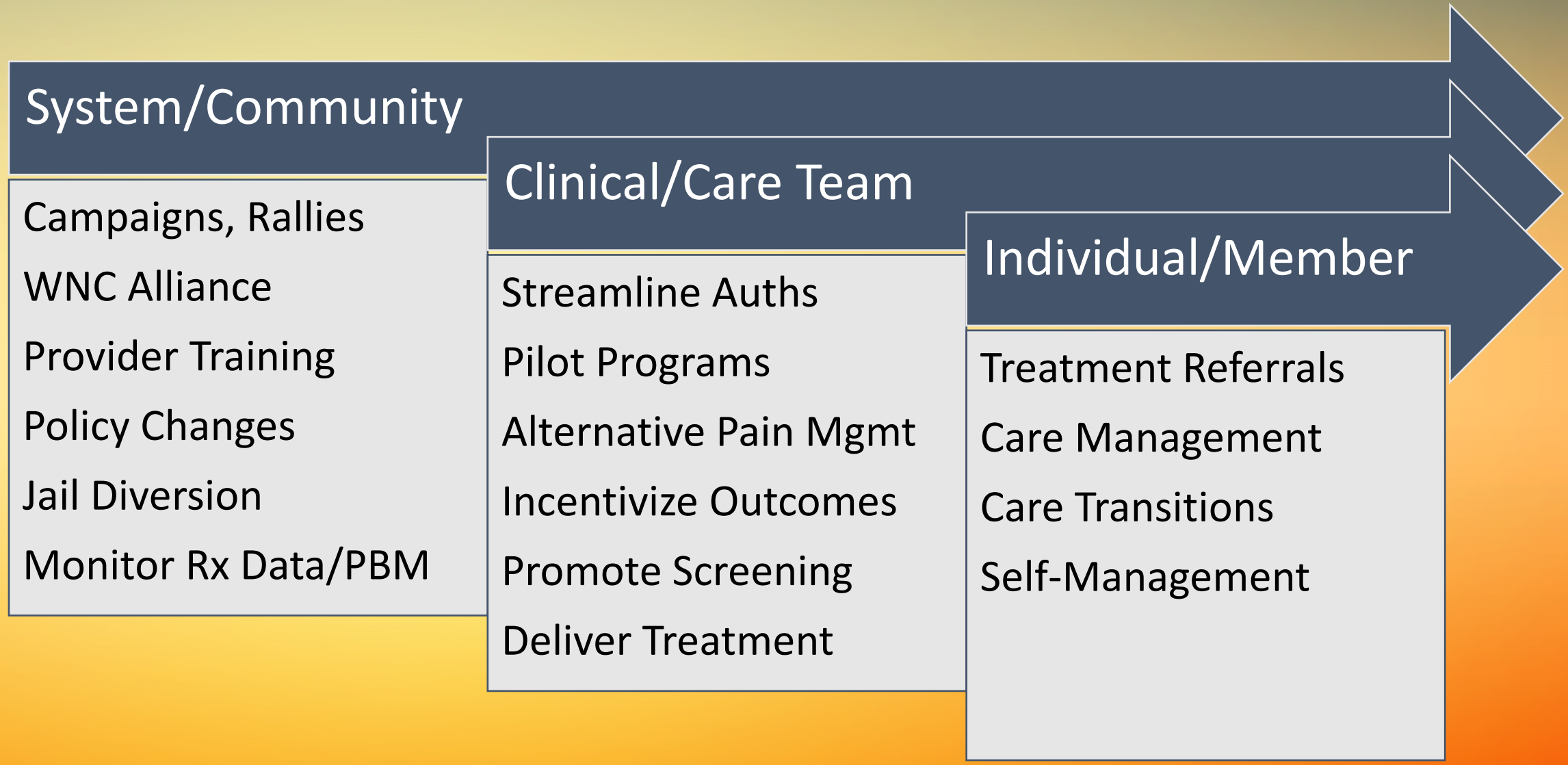
Programs

- Diabetes Prevention
- Diabetes Management
- Asthma
- Obesity
- Hypertension (High Blood Pressure)
- Tobacco Cessation
- Pregnancy Intendedness
- Infant Mortality/Low Birth Weight
- Early Childhood Health & Development
- Hepatitis C Virus (HCV)
- Etc.

Hypertension/HTN Program
(Intervention Examples)



Opioid Prevention & Misuse
(Intervention Examples)



Special Programs and Efforts

- “Big” prevention and population health programs for Tailored Plan
  - Opioid misuse and prevention
  - Tobacco cessation
- Members with LTSS
  - Quality of life, diversion, de-institutionalization, supported living, etc.
- Addressing unmet social/resource needs
  - Screening and identification
  - Referral (NCCARE 360, uniteus platform)
  - Healthy Opportunities pilots
- Reducing disparities
  - Identification of disparities
    - For each health outcome/measure
  - Setting improvement targets and goals
  - Engaging partners

Collaboration, Alignment, Synergies

- Women, Infants, and Children (WIC) program
- Newborn Screening programs
- Vaccines for Children (VFC) program
- NC Immunization Registry (NCIR)
- NC Women’s Health Report Card

Key Partners
Their Tools
Their Needs

Key Driver Maps, Process Workflows, and “Change Packages”

Key Partners (a few examples)

- PCP = Primary Care Provider
  - Physicians and advanced practitioners
- AMH = Advanced Medical Home
  - Designation through NC DHHS
- PCMH = Patient Centered Medical Home
  - Recognition through NCQA
- LHD = Local Health Department
- CBO = Community Based Organization
- AHEC = Area Health Education Center
  - MAHEC = Mountain Area Health Education Center

Let's Be Good Neighbors

PCPs/AMHs

- They know the big outcome measures VERY well – in most cases, much better than PHPs or MH/SU/IDD providers
- Through EHR adoption (years ago!) and various public (Medicare, ACO) and private payer (e.g., BCBS) initiatives, they are used to monitoring outcomes, pay for value, mapping workflows, process improvement
- AHECs play a big role in teaching, training, and quality improvement with AMHs across NC

Local Health Departments

- The essence of community-based population health
- Most know how to work on a shoestring - and partner with everybody and their brother

- We (still) don't know, what we don't know
  - E.g., the culture, social norms, stressors, limitations, lingo for primary care practices
  - Therefore, it's probably helpful to take an attitude of attentive, respectful learner – ready to listen and hear feedback on what these providers and partners are seeking from PHPs like Vaya – or other providers, as part of the integrated care team

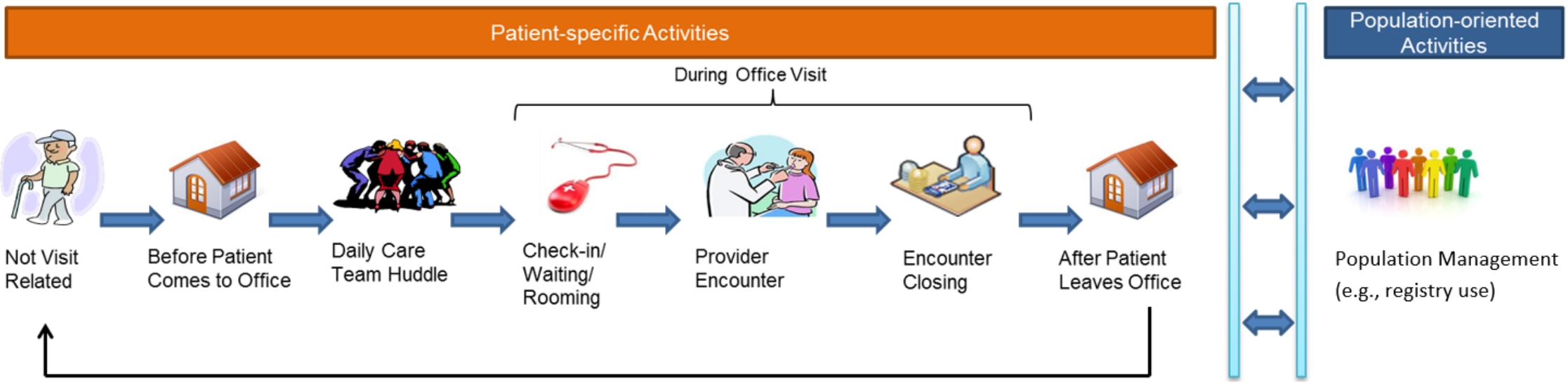
Outcome Performance Improvement

- Many excellent, existing resources for most common conditions
  - No need to reinvent the wheel!
  - Many CINs have quality improvement departments or teams, very familiar

Resources used by AMHs, CINs, quality collaboratives, etc.

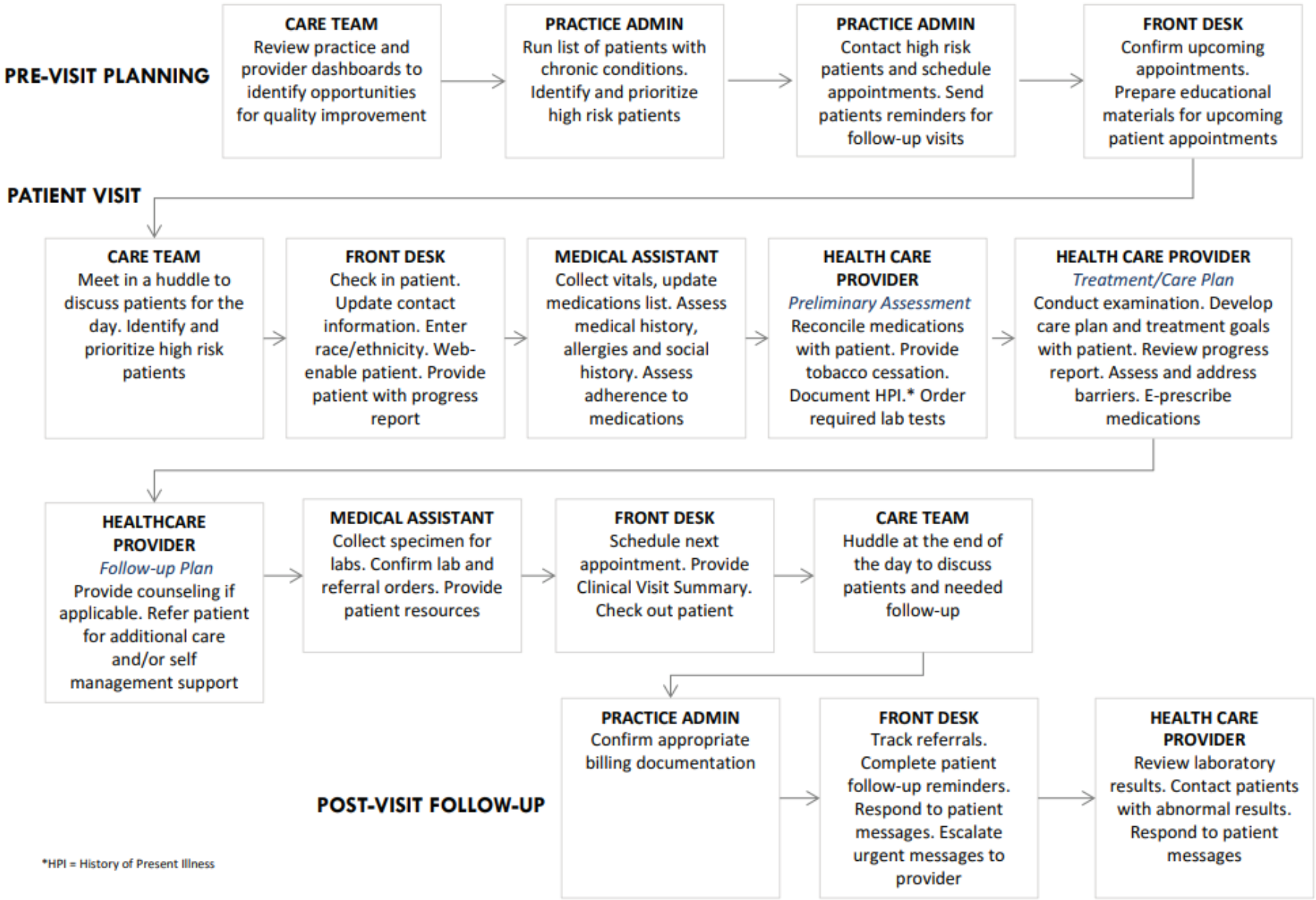
- Roadmaps and key driver maps, workflow diagrams
- Intervention guides and program plans
- “Change Packages”
  - How/what to change for improvement and outcome achievement
  - At multiple levels including individual member (patient) and whole groups (e.g., everyone with diabetes), foundational work, work before/during/after the visit)

Performance Drivers for this Target:



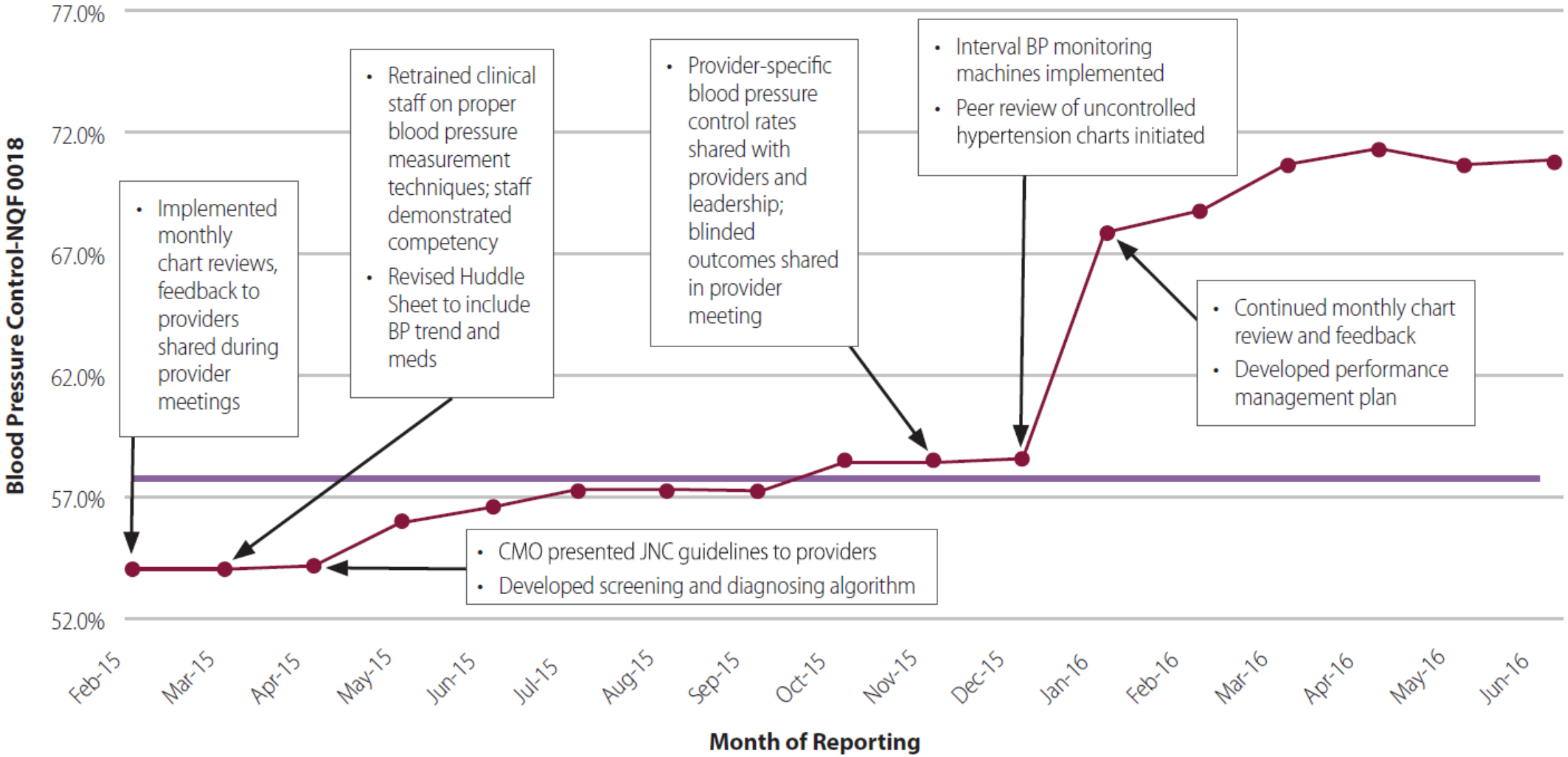
"Activities that are foundational to current patient-specific and population management activities and/or planned enhancements - e.g., staff training, policies and procedures, EHR tool development, etc."

Workflow Mapping Worksheet: Example of Chronic Care Best Practice



*HPI = History of Present Illness

Blood Pressure Control, Grace Community Health Center, February 2015–June 2016



Million Hearts®

- Initiative co-led by U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and Centers for Medicare & Medicaid Services
- Goal of preventing one million heart attacks and strokes by 2022

Million Hearts®

Hypertension Control Change Package — Quick Reference

Focus Areas

Key Foundations	Equipping Care Teams	Population Health Management	Individual Patient Supports
Make HTN Control a Practice Priority	Train and Evaluate Direct Care Staff on Accurate BP Measurement and Documenting	Identify Patients with Potentially Undiagnosed HTN	Prepare Patients Before the Office Visit via Pre-Visit Patient Outreach
Implement a Policy or Process to Address BP for Every Patient with HTN at Every Visit	Equip Direct Care Staff to Facilitate Patient Self-Management	Identify Patients with Potentially Undiagnosed CKD (chronic kidney disease)	Optimize Patient Intake to Support HTN Management (e.g., check-in, waiting, rooming)
	Establish a Self-Measured BP (SMBP) Monitoring Program	Use a Registry to Track and Manage Patients with HTN	Optimize the Patient–Clinician Encounter (e.g., documentation, orders, education/engagement)
	Prepare the Care Team Beforehand for Effective HTN Management During Office Visits (e.g., via team huddles, using EHR data)	Use Clinician-Managed Protocols for Medication Adjustments and Lifestyle Recommendations	Support Patients in HTN Self-Management During Their Routine Daily Activities (i.e., outside of the clinical encounter)
		Use Practice Data to Drive Improvement	Optimize the Encounter Closing (i.e., checkout)
			Follow Up to Monitor and Reinforce HTN Management Plans (i.e., after visits)

Key Foundations	Equipping Care Teams	Population Health Management	Individual Patient Supports
Make HTN Control a Practice Priority	Train and Evaluate Direct Care Staff o… M…	Identify Patients with Potentially Undiagnosed HTN	Prepare Patients Before … via Pre-Visit Patient C…
Imp…ment a Policy or Pro…s to Address BP for E…ry Patient with HTN … Every Visit		…entify Patients with …Potentially Undiagnosed CKD (chronic kidney disease)	Optimize Patient In… Management (e.g., … rooming)
	Estab… …P (SMBP) Monitoring Program	Use a Registry to Track and Manage Patients with HTN	Optimize the Patie… …linician Encounter (e.g., documenta…, orders, education/eng…ment)
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		Use Practice Data to Drive Improvement	Optimize the Encounter Closing (i.e., checkout)
			Follow Up to Monitor and Reinforce HTN Management Plans (i.e., after visits)

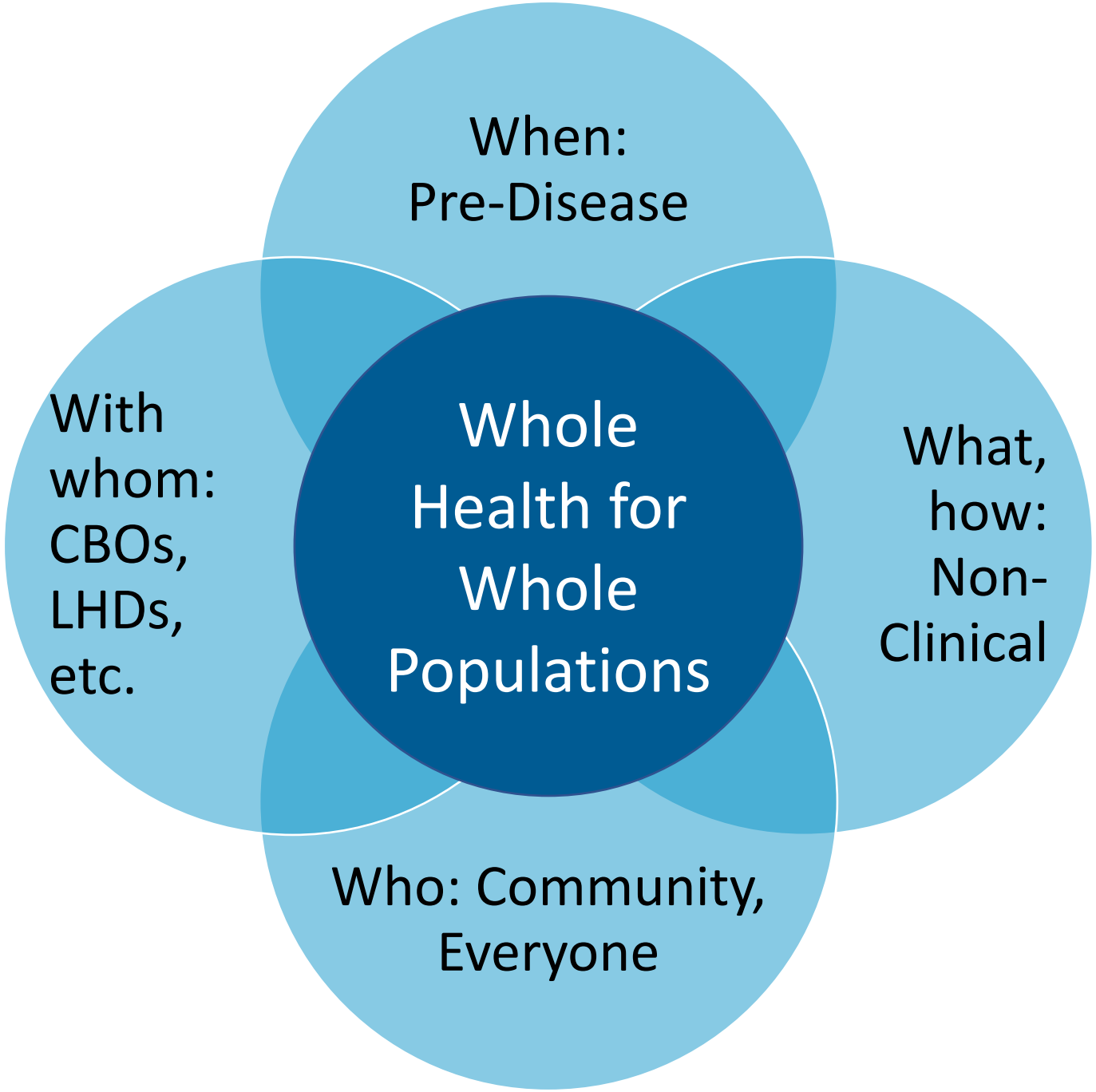
Access to Claims & Encounter Data, Pharm Data to Identify Patients

Care Mngr Help Support Patient with HTN Self Mgmt

Add to Care Team: Pharmacist or Rx Consultation, Care Manager, Peer or CHW

Provide Data – Outcome Performance, Care Gaps

Outcome Achievement Tools: Key Driver Maps, Change Packages



Whole Health is:

- Beyond the Body
  - Integrated Care: Body and Mind, Physical and MH/SU/IDD
- Beyond/Before Illness and Disease - *When*
  - Wellness, Health Promotion
  - Prevention (Primary, Secondary, Tertiary)
  - Intervening Upstream, Root Causes (e.g., Adverse Childhood Events, ACEs)
- Beyond Clinical Care and Treatment – *What and How*
  - Barriers and Needs
    - Unmet Health Related Resource Needs (Social Determinants of Health), CBO Partners, Etc.
  - Facilitating Factors and Strengths
    - Natural & Peer Supports, Community Resiliency, Life Engagement and Purpose

Whole Population Approaches are:

- Beyond the Individual – *Who*
  - Individual, family, neighborhood, community, city, state, nation, world
  - All of us/everyone - all residents/all people, potentially payer blind/agnostic
  - Public Health, Community Health, Collective Health

- Beyond What Vaya/Providers Can Do Alone – *With Whom*
  - Based on deep, wide, and diverse partnerships
  - More than MCOs/PHPs **or** associated networks of providers and practitioners
  - Non-clinical partners such as community based organizations (CBOs)
  - Different methods of communication, collaboration, coordination
  - New or changed relationships, interdependence and trust
    - Some needed partners may not be “within our network” (no formal leverage or contract)

Questions?