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Social Determinants of Health and Universal Screening: Ohio's Core 5 Assessment Tool

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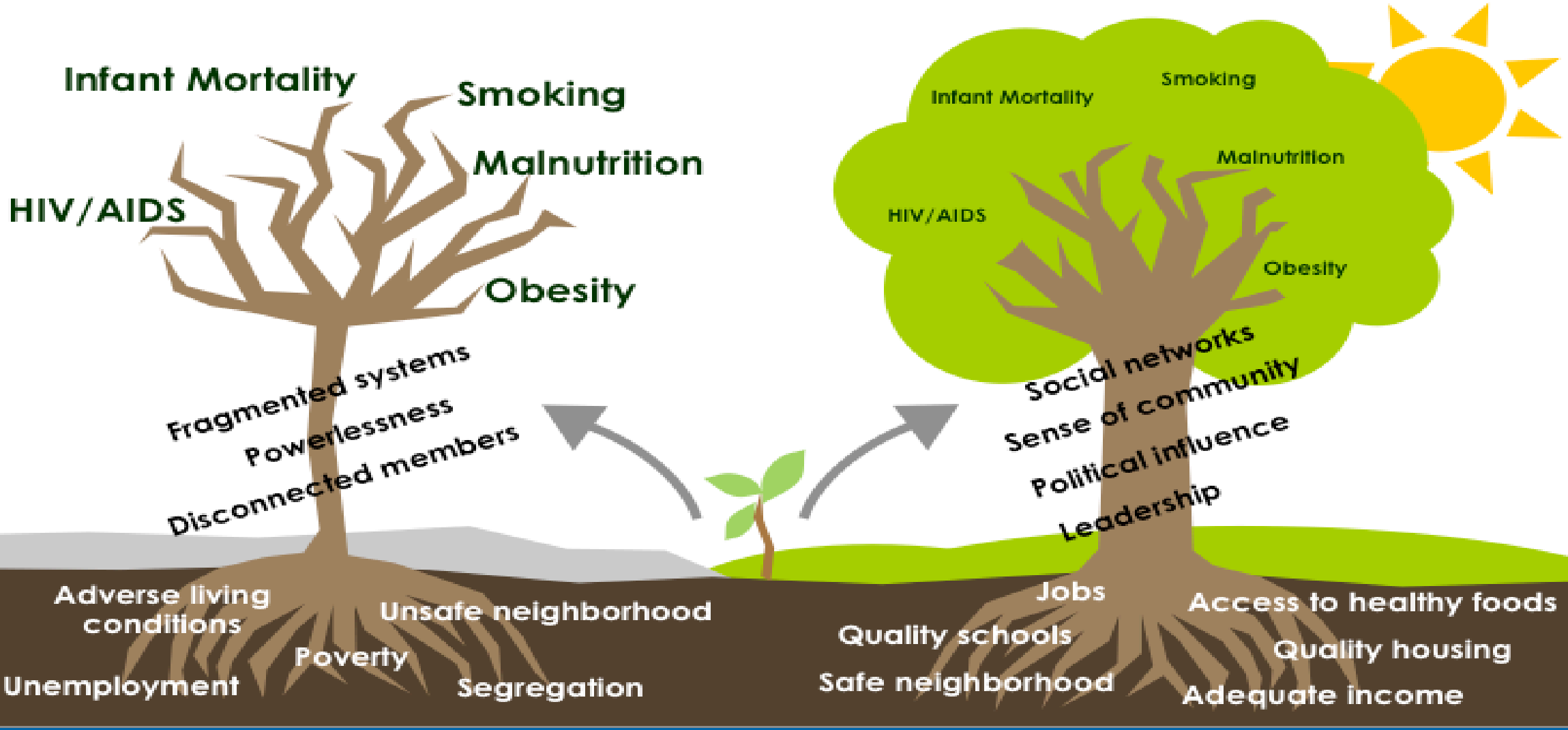
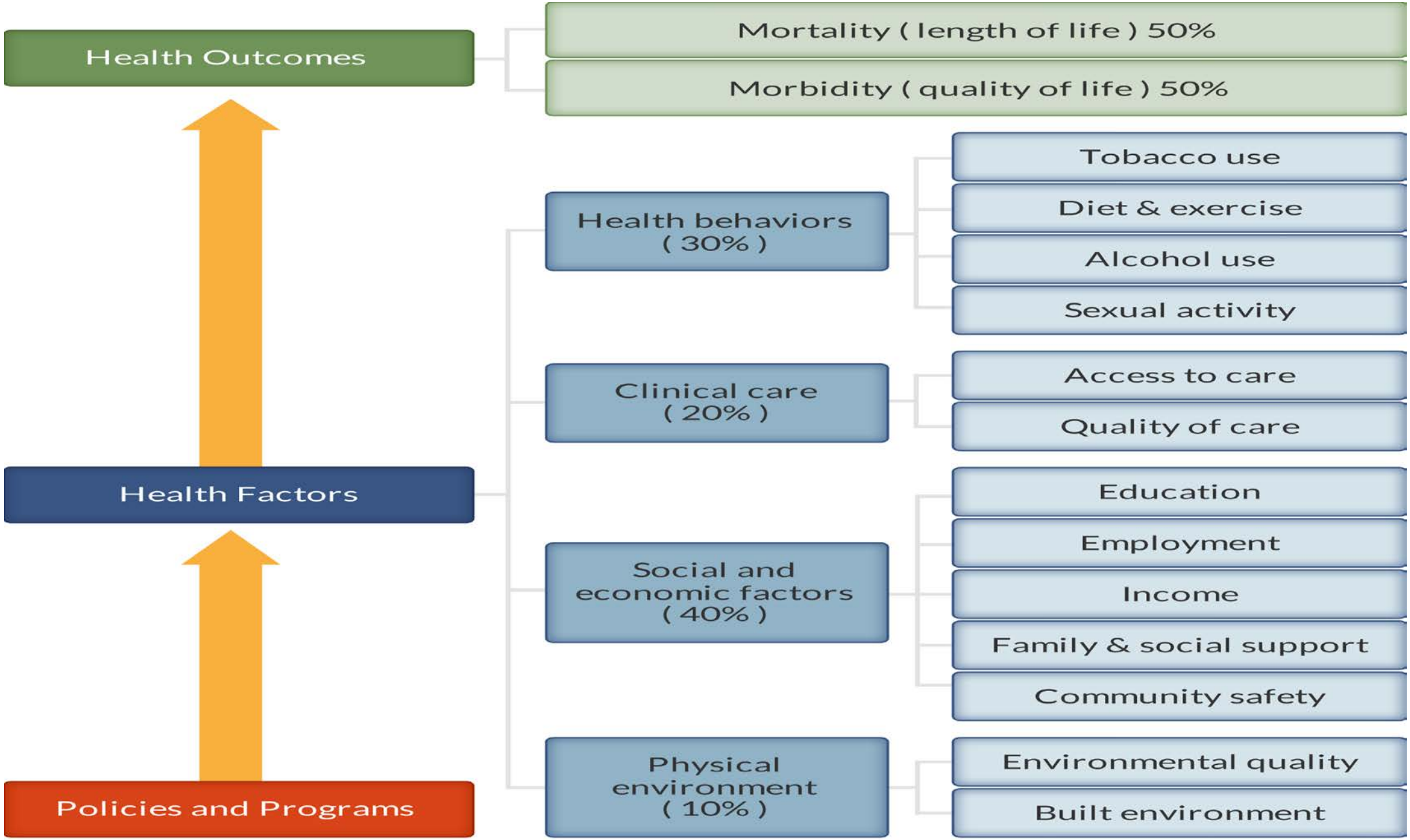
OBJECTIVES

- Define social determinants of health (SDHs)
- Identify outcomes of SDHs
- Provide examples of work to address SDHs toward improved health outcomes

SOCIAL DETERMINANTS OF HEALTH

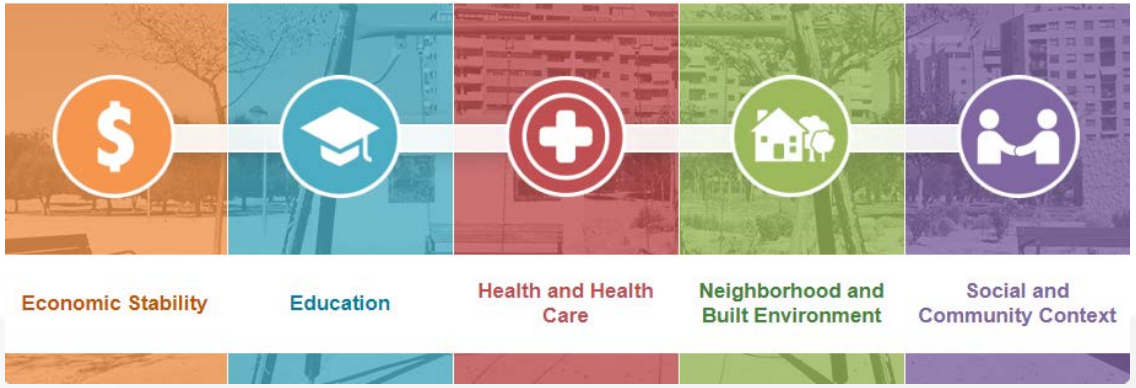




County Health Rankings model ©2012 UWPHI

HP2020: 5 Domains of SDHs[1]

Domain 1



Economic Stability

- Poverty
- Employment
- Food insecurity
- Housing insecurity

CDC Healthy People 2020, https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health/interventions-resources

Economic Stability

- Influenza-related hospitalization rates are twice as high those living in poverty than non-poverty neighborhoods[2]
- 50% higher risk of heart disease among persons with low SES[3]
- 2x the visual impairment in women with diabetes & low SES than non-low SES[4]

Domain 2

> Education

- High school graduation
- Enrollment in higher education
- Language & literacy
- Early childhood education & development

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Education

- U.S. adults without a high school diploma die on average 9 years sooner than college graduates
- Diabetes prevalence is 2x higher among non-college grads (15% compared to 7%)[5]
- Health Literacy
  - 47% of adverse effects in hospitals (moderate harm to death) among patients with Limited English Proficiency resulted in physical harm, compared to 24% of patients proficient in English[6]

Domain 3

> Health & Health Care

- Access to health care
- Access to primary care
- Health literacy

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Health & Health Care

- Access to birth control among teens decreases teen birth rates and increases high school graduation rates[7]
- Primary Care utilization is associated with[8]:
  - Improved population health outcomes including lower rates of premature death
  - Decreases in emergency department misuse & hospitalizations for ambulatory-care conditions
  - Higher infant birth weights, life expectancy & overall satisfaction with the healthcare system

Domain 4

> Neighborhood & Built Environment (NBE)

- Food access that supports healthy eating patterns
- Housing quality
- Crime & violence
- Environmental conditions

Neighborhood & Built Environment

> Housing quality:

- Children with low SES living in HUD-subsidized housing had 50% lower mean blood levels than children in non-HUD housing[9]
- Children who are Medicaid insured are more likely to have higher blood lead levels due to exposure in the home or daycare setting than their privately insured peers.

Domain 5

> Social & Community Context

- Social Cohesion
- Civil participation
- Discrimination
- Incarceration

CDC Healthy People 2020, https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health/interventions-resources

Social and Community Context: Discrimination

- RWJF Study[10]:
  - 32% of African-Americans experienced discrimination when going to a doctor or a health clinic
  - 22% have avoided seeking medical care out of concern about discrimination
  - 60% say that they/a family member have been profiled by police, leading to avoiding calling the police when needed
  - Chronic discrimination creates physiological responses that lead to premature aging (biologically older than chronological age): Results in higher rates of CVD, HTN, cancer, kidney dx, infant mortality & maternal mortality

So what can we do to address the SDHs?

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Actions to address SDHs[11,12,13]

- Educate current and future clinicians
- Practice culturally competent care
- Advocate for the importance of addressing SDHs
- Integrate social needs interventions into clinical care: Routinely screen for SDHs & connect patients to SDH services when there are gaps
  - Know what exists, find viable resources, understand how to connect, overcome barriers to access
- Data, data, data!

Background

- In March of 2015, the Robert Wood Johnson Foundation selected two Public Health Nurse Leaders (PHNLs) from Ohio to assist with a leadership development and nurse-based project to advance the "Culture of Health"

- Partnership with Ohio Action Coalition

Background

- Health is affected 80% by where we are born, live, work & play [56] ; remaining 20% by clinical medical care
- Nurses are duty-bound to help their clients achieve optimal health
- Clients cannot achieve optimal healing, immune system functioning and health if they experience:
- Nurses are not traditionally taught about impacts of Social Determinants of Health (SDH)
- SDH screening tools not considered an essential part of nursing assessment or intervention

Project Intent

To increase assessment of the SDHs by Ohio's nurses in order to improve the health of individuals based on those determinants and advance the culture of health in Ohio.

Literature Review

- Completed extensive literature review including evidence-base of many SDH assessment tools
- Centers for Medicare and Medicaid Services (CMS) *Accountable Health Communities* Model
- *What can nurses and other healthcare team members consistently "do" that is* ***targeted, timely, and actionable*** *within the health system's framework that can make a difference to the health of their clients?*

CMS Accountable Health Communities Model[14]

- 5 basic determinants of health:
  - Food insecurity
  - Housing instability
  - Utilities
  - Transportation
  - Interpersonal violence (IPV)
- 5 additional SDHs:
  - Family & social support
  - Education
  - Employment
  - Income
  - Health behaviors

Baseline Survey

> Conducted statewide baseline survey measuring formal assessment of SDHs & use of SDH tools at Ohio nursing institutions.

- Convenience sample: 310 Ohio hospitals, health departments & colleges/schools of nursing
- Based on CMS' *Accountable Care Communities Model:* five "core" plus five secondary SDHs
- 32% response rate
- CMS' basic, core five SDHs not routinely being assessed or addressed

Survey Key Findings

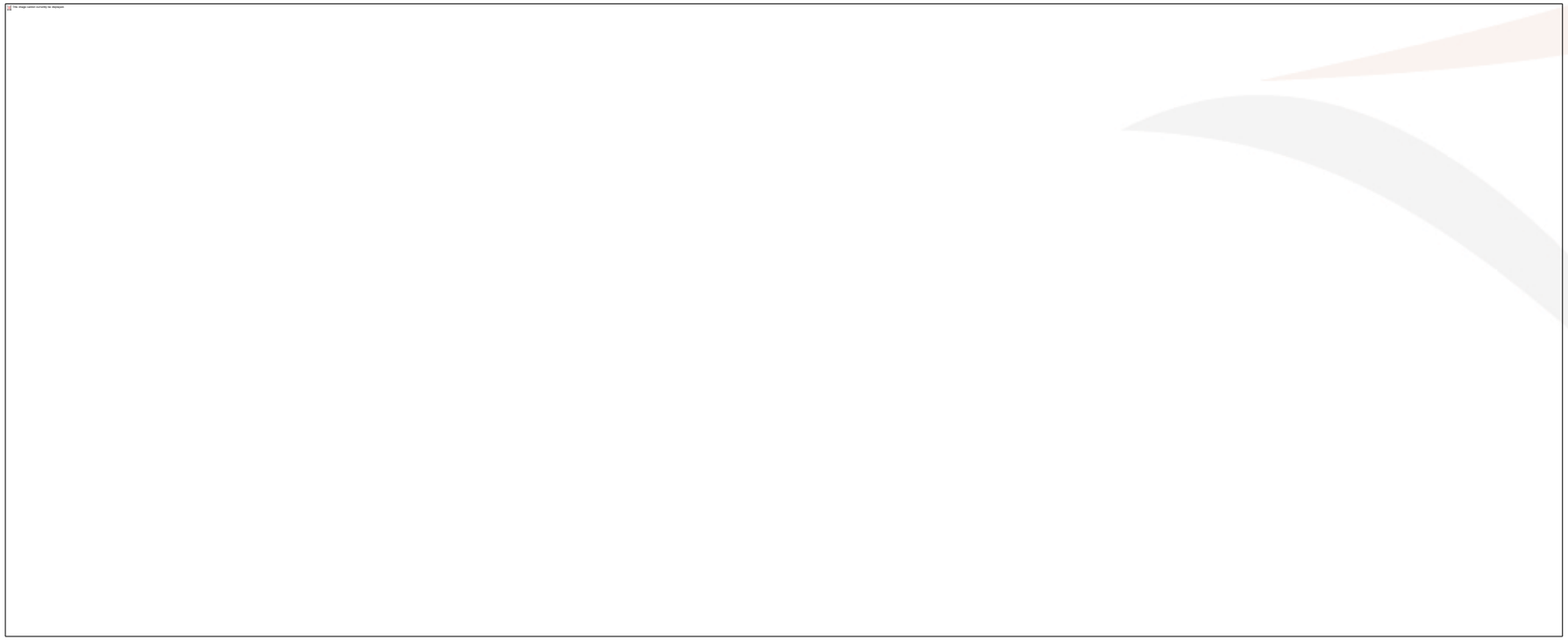
- 41% hospitals & 67% Public Health (PH) departments have no formal policy or procedure to screen for any SDHs
  - Domestic (interpersonal) violence screening most common
  - Perceived transportation screening question: "Do you have a ride home?"
- Few hospitals and PH departments provide SDH training
  - 36% of hospitals & 23% of PH depts provide training to newly hired nurses on one or more SDHs (usually IPV)
  - Only 12% of hospitals & 10% of PH depts provide training to existing nursing staff (annually or ongoing in any way; usually IPV)
- Nursing academic programs do not integrate SDH assessments in their curriculums

Core 5 Screening Tool

- Based on CMS' basic core five SDHs:
  - Food security
  - Housing security
  - Utilities
  - Transportation
  - Interpersonal Violence
- Evidence-informed but not yet evidence-based

Core 5 Screening Tool

- If any one or more of the following five CDHs is a “YES” by the client, it is considered a positive screen



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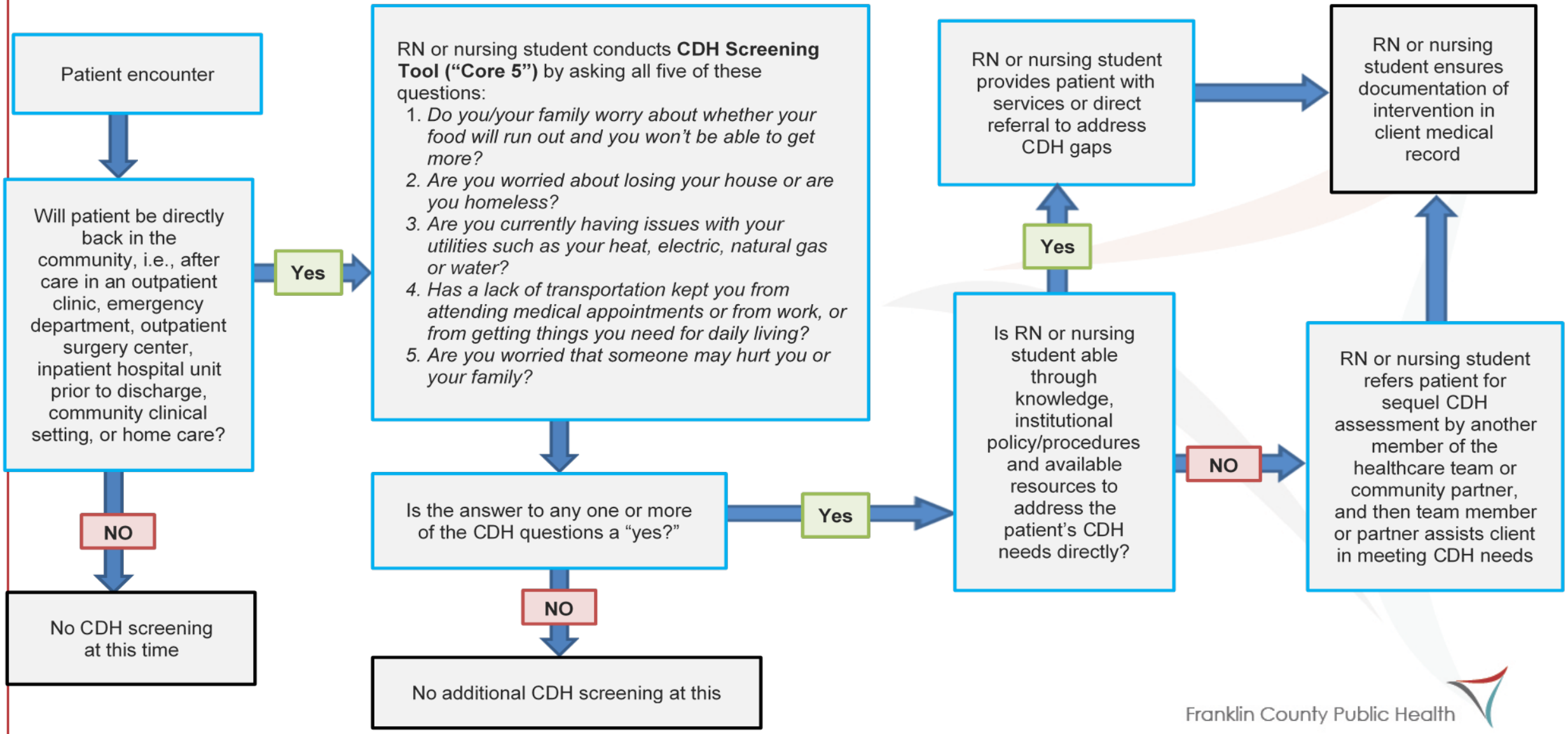
Screening & Intervention Process

- Screen all patients who are imminently returning to the community
- Per institutional policy, nurses either:
  - Intervene directly to address Core 5 need; or
  - Refer for “sequel assessment” if any of Core 5 = “yes”
- Sequel assessment may be internal to the institution or may be an external partner/agency: Team approach
- Institutions must have processes in place prior to initiating the Tool & Process

PROCESS ALGORITHM



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Initiative “Products”

- Scope & process white paper
- Core 5 screening tool, aka “Core 5” Tool
- Process algorithm
- PowerPoint educational module for training nurses/ nursing students on what SDHs are, the Tool & Process
- Written summary: Statewide baseline survey premise, work & results
- Compilation of SDH assessment tools
- Compilation of training evidence

Pilot: Core 5 Tool and Education Module

> Pilot Sites
- One hospital system
- Three colleges/schools of nursing
- Five local health departments

> Process
- Institution leadership buy-in
- Staff training
- Routine screening for 30 days
- Qualitative evaluation survey

Pilot Results

95%	• Screening tool was clear and easy to understand
86%	• Tool provided a good measure for evaluating Core Determinants of Health (CDH)
75%	• Tool took a reasonable amount of time to complete
88%	• Tool could be easily incorporated into the nursing assessment
81%	• Tool and process are vital components of a nursing assessment

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Research

- RWJF funded; OSU College of Nursing research partner
- Objectives:
  - Implement the Core 5 Screening Tool at the OSU Total Health and Wellness Clinic (FQHC Look Alike)
  - Examine the extent of screening on identification of social need with appropriate referral and receipt of community services
  - Explore the extent to which the receipt of the community resources result in reduced emergency department and urgent care visits

Summary

- Health care providers have a duty to help their patients be as healthy as possible

- SDHs impact our patients' ability to gain/regain health
  - Especially related to adequate nutrition & chronic high levels of stress hormone cortisol

- Patients cannot be healthy/regain health if CDHs are not addressed

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- Robert Wood Johnson Foundation
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THANK YOU!

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