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Systems Change for Health

Course 1 – Assessing and Defining the Problem

November 2020

Four Distance-Learning Sessions

PPT slides

Provided to:

Crater Health District (Virginia)

Developed and Facilitated by:

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Systems Change for Health

COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Assessing and Defining the Problem

(Course 1)

Developed by:
James Emery, MPH
Carolyn Crump, PhD
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(2008, revised 2020)

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Session 1 of 4

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Welcome to our Virtual Class

- Introductions
 - Host, Participant cohorts, Faculty
- Tips for Virtual attendance
 - Keep microphone on Mute unless speaking
 - Use Chat to ask questions or comment
 - Can send a chat to one person or everyone
- Workshop materials

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Workshop Learning Objectives

- Participants will be able to:
 - Describe how health evidence, stakeholder values, and social determinants of health contribute to a problem definition
 - Identify structural inequities that perpetuate a problem
 - Use systems thinking to diagnose a problem
 - Develop a concise problem statement

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Knowledge Pre-Test

- Go to Zoom CHAT
 - Click the link for the survey

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Workshop Agenda

<p>Session #1</p> <ul style="list-style-type: none"> • Noticing problems • Evidence vs. data • Stakeholder perspectives 	<p>Session #3</p> <ul style="list-style-type: none"> • Types of system solutions
<p>Session #2</p> <ul style="list-style-type: none"> • Root causes and inequities • Systems thinking • Structural diagnosis 	<p>Session #4</p> <ul style="list-style-type: none"> • Impact and feasibility • Problem statement

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Reflections on Problems

- **Large Group** 🗣️ (3 min)
 - What does this quote mean to you?

"A problem well-stated is a problem half-solved."
 – John Dewey (1859-1952)

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Background

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Intervention Approach

- Traditional strategies
 - Education is necessary, but not sufficient
- Population-based (structural) strategies
 - Improve policies, systems, and environments
 - Social determinants of health
 - Rely on the science
 - Practice the “art”

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Definition of Policy

Adapted from Wikipedia (12/28/12)

- Policy
 - Formal or informal rule that guides decisions and action. Policy can prohibit, require, encourage, or suggest.
- Law
 - System of policies (e.g., laws, rules, regulations, guidelines) that are enacted and enforced by social institutions to govern behavior
 - **Types of laws:** statutory, regulatory, case

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Definition of Built Environment

Adapted from Wikipedia (12/28/12)

- Built Environment
 - Human-created settings that influence behavior
 - Settings for living, learning, working, playing, and praying
 - **Examples:**
 - Macro: Industrial facility, school, sidewalks, suburban development, farm, park, downtown business district
 - Micro: Store layout and display cases, bus shelter

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Definition of System

Adapted from Wikipedia (12/28/12)

- System
 - Set of inter-connected parts that form a whole
 - **Examples:**
 - Inter-organizational systems such as healthcare or finance systems that have multiple organizations, departments, groups, and procedures
 - Governmental institutions such as education, law enforcement
 - Production/Service processes such as food or manufacturing systems

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Understand Any Limitations

- Ability to communicate with policymakers varies
- Identify any limitations or guidelines
 - Federal, state, local agency, or department
- Can change with administrations
- For more information
 - Consult with your agency leadership
 - CDC anti-lobbying restrictions (July 2012)

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Competencies to Acquire

- Handout A
 - Five domains of competencies
 - Five steps in change process

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Competency Curriculum

- Series of courses
 - Introductory course (1 day)
 - Five skills-building courses (2 days each)
- Draws from multiple disciplines
 - Public Health
 - Public Policy
 - Public Administration
 - Political Science
 - Urban Planning
 - Sociology

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Your Experience

- Answer this Poll about:
 - Your experience working on changing policies, systems, or built environments

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What is a “Problem?”

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Public Health Issues

- Success stories
 - Drinking water and wastewater
 - Large scale energy distribution
 - Bacterial infections
 - Oral health
 - Consumer product safety
 - Safer motor vehicles

Other success stories?

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Public Health Issues

- Lingered, complex issues
 - Health inequities
 - Social inequities (e.g., poverty)
 - Discrimination
 - Racism, sexism, ageism, homophobia
 - Resource overuse (soil, water, energy)
 - Environmental hazards
 - Waste disposal/storage (municipal, agricultural, hazardous)
 - Disaster management
 - Chronic disease
 - Obesity, diabetes, substance use disorder

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Noticing Something is Wrong

1. Events (e.g., crisis) and personal observation
 - Real or staged events that focus public attention
2. Data (research, surveillance, evaluation)
 - Change in size or rate of impact
 - Presence or increase in disparities
 - Ineffective outcomes
3. Claims of “wrongdoing”
 - Placing blame
 - Lawsuits

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Noticing an Issue is Not Enough

- Problems are socially constructed
 - Agreement needed
 - Public concern – not private
 - Solution is required
- Examples
 - Worker injury
 - Poverty

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Problem Definition is Important

- Definitions are essential
 - Structures how people think
 - Motivates interest and involvement
 - Provides criteria to assess progress

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Problem Definition is Important

80% of child safety seats not installed properly

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Need “Upstream” Solutions

- Upstream action can require/prohibit
 - Policy actions
 - Require all meals be low sodium in state-sponsored institutions
 - Prohibit smoking in public places
 - Environmental actions
 - Student parking farther from school than visitor lot; lock the school elevator (only for people with disabilities)
 - System actions
 - Car airbags; fluoridation; iodine in salt; preferential review of plans for mixed-use developments
- Upstream action can influence the “Market”
 - Policy actions
 - Taxes: Tobacco products; fattening foods
 - Funding: School food contracts awarded based on reduction in average Body Mass Index (BMI) of students

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Defining a Problem is a Process

- Handout B
 - Model of Domain #1

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Learn About the Problem

Part 1. Evidence and Data

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Data and Evidence

- Answer this Poll about evidence and data

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Data and Evidence

- Data
 - Systematically collected information
 - Quantity and quality can vary
- Evidence
 - Synthesized results from peer-reviewed research
 - Criteria for study results being considered
 - Number of available studies
 - Study design and execution
 - Size and consistency of reported effects

Anderson et al. (2005). <http://phpartners.org/handout/>

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Make the Problem Relevant

- Public policy is both science and art
 - Evidence is necessary (the “science”)
 - Evidence will need interpreting to become relevant (the “art”)
- Researchers want evidence to be used
 - Complain when “evidence-free policy” is enacted
- Policy makers need relevance to be obvious
 - Complain when research lacks obvious policy conclusions

Patterson et al. (2004); Anderson et al. (2005)

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Make the Problem Relevant

- Political reality of making decisions
 - Multiple perspectives
 - Scientific (evidence)
 - Political (values)
 - Economic (resources)
 - Time is frequently limited
 - Decisions required whether or not evidence is available

Alkins et al. (2005)

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Resources on Data/Evidence

- Handout C
 - Sources of data and evidence
- Handout D
 - Tips for using data

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Learn About the Problem

Part 2. Stakeholder Perspectives and Values

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Stakeholders of a Problem

Midgley, Munie & Brown (1988); Rochefort & Cobb (1994)

- Varying interests/roles in the problem
 - Perpetrator, victim, observer, solver
- Usually have ideas about solutions
- Have differing levels of political power
 - Will use it to protect interests/values

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Classifying Stakeholders

- Interest groups
 - Taxpayers, citizens, industry, lobbyists, advocacy groups, voluntary health organizations, media
- Elected/Appointed officials
 - Legislators, governors
 - County commissioners, mayors
 - School Boards, superintendents (elected)
- Government administrators
 - Superintendents (hired), principals

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Analyze Stakeholder Perspective

- Analyze what you've learned about them
 - Definitions of the problem
 - Key words and images
 - Potential solutions
 - Current policy climate
 - Dominant political values
 - Policy agenda (popular issues)
 - Information about decision-makers
- What stakeholders tell you reveals their values

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Popular American Values

Coughlin (in Rochefort & Cobb, 1994)

- **Individualism**
 - Liberty and choice, personal and property rights, efficiency, prosperity, material growth, individual responsibility
- **Community**
 - Fairness and equity, opportunity, protection of common good, sustainable growth, collective, communitarian, social responsibility

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Example: Community Development

Adapted from Coughlin (in Rochester & Cobb, 1984)

- **Individualism** (valuing freedom, consumerism)
 - Owning a home and car; suburban development
 - Incentivizing policies (e.g., G.I. Bill; U.S. highway system)
 - Organizational policies (e.g., "red-lining")
 - Consequences
 - Sprawl, gentrification, pollution, obesity, isolation, segregation
- **Community** (valuing equity, sustainability)
 - Equity, and ecologic and economic sustainability
 - Regulatory policies to prevent/mitigate negative consequences
 - Consequences
 - Policy perceived as compromising freedom

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APPLICATION

- **Breakout Groups** ☀️ (25 min)
 - Worksheet 1 (Questions #1-4)
 - Record what you know about the situation
 - Opportunity or problem you want to focus on (5 min)
 - Outcome disparities (differences) between groups (5 min)
 - Evidence or data that clarify its importance (5 min)
 - Key stakeholders (10 min)

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Assessing and Defining the Problem

(Course 1)

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Session 2 of 4

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Workshop Agenda

<p>Session #1</p> <ul style="list-style-type: none"> • Noticing problems • Evidence vs. data • Stakeholder perspectives 	<p>Session #3</p> <ul style="list-style-type: none"> • Types of system solutions
<p>Session #2</p> <ul style="list-style-type: none"> • Root causes and inequities • Systems thinking • Structural diagnosis 	<p>Session #4</p> <ul style="list-style-type: none"> • Impact and feasibility • Problem statement

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Learn About the Problem

Part 3. Root Causes

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Notice “Problems”

- **Large Group** (1 min)
 - How do you notice something is wrong?

Noticing Problems	Related Concepts	Reason to Use
Events (crisis, observation)	Social determinants of health	Contextual (influence)
Data (research, surveillance, eval.)	Health outcomes, and health disparities	Statistical (significance)
Claims (blame, lawsuits)	Health inequities	Political (fairness, justice)

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1. Social Determinants of Health

- Healthy People 2020/2030 definition
 - Social, economic, and physical conditions in the environments in which we are born, live, learn, work, play, worship, and age
 - Influence health, functioning, and quality-of-life outcomes and risks

Healthy People 2020 (USDHHS)

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What are Determinants of Health?

Brennan-Ramirez, Baker & Metzler (2008)

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Types of Health Determinants

<p>Individual</p> <ul style="list-style-type: none"> • Biology <ul style="list-style-type: none"> – Age, race, sex, genetics • Behavior <ul style="list-style-type: none"> – Healthy or unhealthy 	<p>Social</p> <ul style="list-style-type: none"> • Social (societal) <ul style="list-style-type: none"> – Social cohesion, sense of community, racism • Physical environment <ul style="list-style-type: none"> – Air/water, land fertility, built environment, housing, access to food, access to healthcare • Economic <ul style="list-style-type: none"> – Poverty, employment, income, education and school dropout rates
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Adapted from: WHO (1980)

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Healthy People and Determinants

- Healthy People 1980, 1990, 2000
 - Social Determinants of Health (SDOH) not mentioned
- Healthy People 2010
 - SDOH mentioned *per se*
 - Commitment to improving health equity
 - Mentions social and physical “conditions”
- Healthy People 2020, 2030
 - SDOH is explicitly one of the goals

Metzler (2007); Healthy People 2020, 2030 (USDHHS)

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Social Determinants of Health

Adapted from: Raphael (2008); WHO (1980)

Improve the individual?

Improve the social determinants of health?

Negative Health Outcome

Lack of sidewalks, parks, open-space

Limited access to nutritious food

Exposure to toxic substances

Poor quality education

Poor quality housing

Poverty and unemployment

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2. Health Disparities

Noticing Problems	Related Concepts	Reason to Use
Events (crisis, observation)	Social determinants of health	Contextual (influence)
Data (research, surveillance, eval.)	Health outcomes, and health disparities	Statistical (significance)
Claims (blame, lawsuits)	Health inequities	Political (fairness, justice)

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Health Disparities

Adapted from: Healthy People 2020 (USDHHS)

- Healthy People 2020 definition
 - Health difference closely linked with social, economic, and/or environmental disadvantage
 - Adversely effect people who have systematically experienced greater obstacles to health based on:
 - Race/ethnicity, religion, SES, gender, age, mental health, disabilities, sexual identity/orientation, geography, other historically discriminated attributes

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Health Disparities

Adapted from: Healthy People 2020 (USDHHS)

- Evolution of focus by USDHHS
 - HP 2000: Reduce health disparities
 - HP 2010: Eliminate health disparities
 - HP 2020: Achieve health equity, eliminate disparities, and improve the health of all groups
- **Large Group** 🗨️ (1-2 min)
 - What does that evolution mean to you?

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Population-Based Approach

Adapted from: Frohlich & Potvin (2008)

of People

Year 0 Year 5 Year 10

Unhealthy conditions

Average Improvement (from intervention)

Healthier conditions

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Enhance the Approach

Adapted from: Semenza (2010)

of People

Year 0 Year 10

Unhealthy conditions

Average Improvement (from intervention)

Healthier conditions

Focus on the conditions that perennially harm vulnerable populations

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3. Health and Structural Inequity

Noticing Problems	Related Concepts	Reason to Use
Events (crisis, observation)	Social determinants of health	Contextual (influence)
Data (research, surveillance, eval.)	Health outcomes, and health disparities	Statistical (significance)
Claims (blame, lawsuits)	Health inequities	Political (fairness, justice)

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Disparities Might Be Inequities

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“Digging” for Root Causes

When you find...	Dig deeper for...
Negative health outcomes	<ul style="list-style-type: none"> Soc Deter of Health Health disparities
Health disparities	<ul style="list-style-type: none"> Structural inequities
Structural inequities	

It is no longer “health disparity,” but rather “health inequity”

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Health in All Policy (HiAP)

- Health outcomes and health equity are influenced by policies from other institutions
 - Examples: Economic growth; community development
 - Can transform poor communities/nations
 - But does not guarantee health equity
- Health and health equity can be goals
 - For all improvements to systems, policies, and built environments

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More about Health Inequities

- California Newsreel
 - Unnatural Causes
- NACCHO
 - Roots of Health Inequity
- University of Michigan
 - Measuring Health Disparities
- Ted Talks
 - Richard Wilkinson

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APPLICATION

- Breakout Groups ☀️ (15 min)
 - Worksheet 1 (Question #5)
 - Record what you know about root causes
 - Determinants of health

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Put It Together

Systems Thinking

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How We Think about Problems

Adapted from: Midgley (2001)

<p>Component Thinking</p> <ul style="list-style-type: none"> • Study each part separately • Independent observation • Value-neutral perception 	<p>Systems Thinking</p> <ul style="list-style-type: none"> • Study the relationships between parts • Observation is never independent <ul style="list-style-type: none"> – Observer is also a subject, influencing the process • Value-informed perception
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Characteristics of a System

Kim (1989), Midgley (2001), Midgley (2006)

1. Purpose is relative to the whole
2. All parts are needed
3. Sequence of parts is critical
4. Stabilize (or improve) via feedback/adjustment

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Types of Systems

WHO (2009), WHO (2015)

- Large-scale systems
 - Society's institutions
 - Transportation, education, commerce, government, healthcare
- Sub-systems
 - Smaller-scale (but can still be complex) within an organization
 - Concerned with procedures and transactions

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Large-Scale Systems

WHO (2015)

- Examples of systems involving government sectors and non-government stakeholders

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Systems Have Parts

- **Example:** Healthcare system has many components including:
 - Services and products
 - Diagnostic, treatment, surgical, rehabilitation
 - Healthcare team coordination
 - Human resources (employees)
 - Medication formulary, prescription, delivery
 - Waste management (including biohazardous)

WHO (2009)

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Systems Have Parts

- **Example:** Commerce is a system with parts such as the Retail subsystem:
 - Store locations, licensing, design
 - Human resources (employees)
 - Product inventory, stocking, pricing
 - Marketing and advertising
 - Sales transactions
 - Customer relations and liability

WHO (2009)

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System Model

- Drawing the system can be helpful
 - Components of the system
 - Arrows that show relationships between components
 - Might contain “feedback loops”
 - Arrows move in the same direction and form a circular loop

Adapted from: Sterman (2006)

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System Determinants (Layers)

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EXAMPLE: System (Obesity)

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EXAMPLE: System (Tobacco)

National Cancer Institute (2007)

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Define the Problem

Part 1. Structural Diagnosis

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Identifying Problems in a System

1. Set a system boundary
2. Identify what is wrong in the system
3. Diagnose the underlying structures that perpetuate any undesirable system dynamics

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1. System Boundaries

- What do boundaries achieve?
 - Identify what to include and exclude
 - Bring focus to diagnosis and improvement
- Boundary size
 - Too large: Becomes unmanageable
 - Too small: “Counter-intuitive” outcomes are noticed

Adapted from: Sierman (2006)

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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Boundary Considerations

- Balance multiple criteria
 - Stakeholder interests
 - Simplicity vs. complexity
 - Readiness to make improvements
- Consider multiple perspectives
 - Business, government, environment, justice, public health, education, transportation, etc.
- Adapt as needed: boundaries are flexible

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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Example: Obesity (School)

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Systems Change for Health

COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Boundaries and Stakeholders

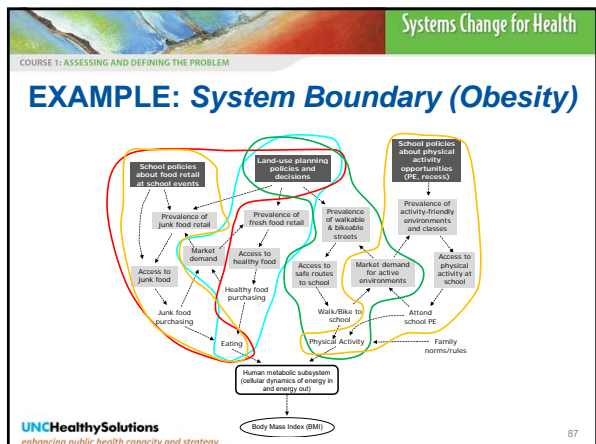
- Boundary-setting is political
 - When you set the boundary, you limit stakeholders
- Size of the boundary
 - Politically powerful want to shrink it
 - Politically weak want to expand it
- Changing the problem boundary
 - Shrink: define problem in procedural terms
 - Expand: connect problem to sweeping social themes (justice, democracy, liberty)

Stone (1980), Schattschneider (1960)

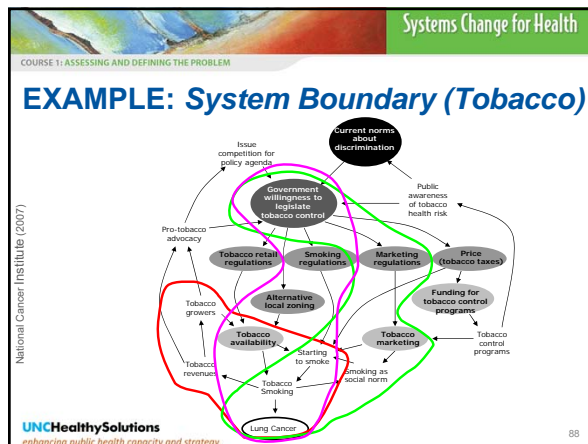
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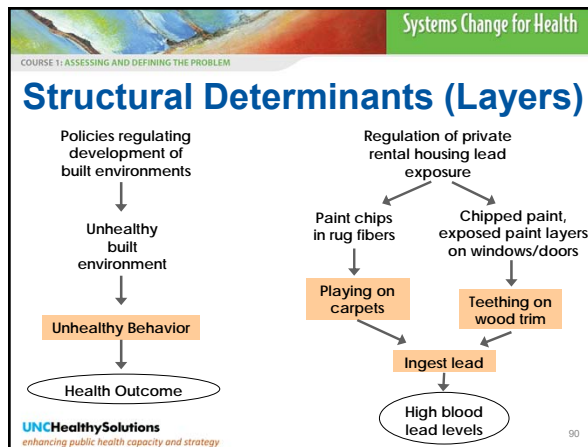


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2. Identify What is Wrong in System

- Identify the undesirable system dynamics
 - Look at the model (arrows and items)
 - Where is there a process that needs to be unpacked (opened up for investigation)
 - Try to describe all the hidden parts of that process
- Identify the determinants that might be hidden and perpetuate the dynamics
 - Policies are the ultimate “perpetuator”
 - Sometimes the determinant is absent or missing

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3. Diagnose the Structural Issues

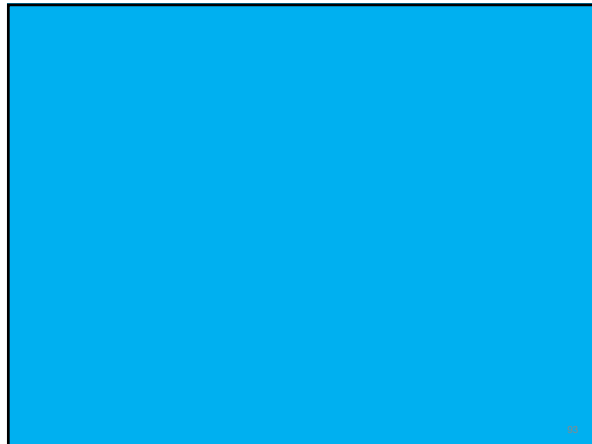
- Gap**
 - Structure does not exist
- Weakness**
 - Structure exists, but it is weak and needs improvement
- Implementation Failure**
 - The structure exists and is sufficient in quality, but is not being implemented effectively

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APPLICATION

- Breakout Groups** ☀️ (35 min)
 - Worksheet 1 (Question #6)
 - Diagnose what needs improvement
 - Gap
 - Weakness
 - Implementation Failure

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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Systems Change for Health

Assessing and Defining the Problem

(Course 1)

Developed by:
James Emery, MPH
Carolyn Crump, PhD
UNC Gillings School of Global Public Health
(2008, revised 2020)

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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Systems Change for Health

Session 3 of 4

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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Systems Change for Health

Workshop Agenda

<p>Session #1</p> <ul style="list-style-type: none"> • Noticing problems • Evidence vs. data • Stakeholder perspectives 	<p>Session #3</p> <ul style="list-style-type: none"> • Types of system solutions
<p>Session #2</p> <ul style="list-style-type: none"> • Root causes and inequities • Systems thinking • Structural diagnosis 	<p>Session #4</p> <ul style="list-style-type: none"> • Impact and feasibility • Problem statement

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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Systems Change for Health

Define the Problem

Part 2. Solutions

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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Systems Change for Health

Types of Solutions

- **Built Environment**
 - Human-created settings that influence behavior
 - Facilitate and support, or inhibit and impede
- **Policy**
 - Formal or informal rules that guide decisions and action
 - Prohibit, require, encourage, suggest
- **System**
 - Linked processes, organizations, and institutions that dynamically interact to change the determinants of a problem
 - Synergistic effect creates impact

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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Built Environment Solutions

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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Built Environments (Obesity)



Photos: James Emery

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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Built Environments (Obesity)



Photos: James Emery


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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Built Environments (Tobacco)



That cigarette butt you just tossed on the ground can take 10-15 years to break down, killing wildlife and contaminating our water in the meantime.

Photo: U.S. Dept. of Agriculture, National Wildlife Research Center
Photos: U.S. Dept. of Agriculture, National Wildlife Research Center

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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Built Environments (Substances)



Marijuana consumption

Photo: City of Vancouver
Photo: iStockphoto.com


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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Built Environments: GIS Mapping



Source: www.ralighnc.gov, GOOGLE, City of Raleigh AND Hillsborough street redesign

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Built Environments: *Process/People*

- Handout E
 - Description of process and people

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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Built Environments: *Process/People*

- **Large Group** 🗨️ (3-5 min)
 - Share your experiences of working with the processes or the professionals involved

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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Policy Solutions

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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Types of Policies

- Contract for services
- Inform, educate
- Support or conduct research
- Create market incentives, privatize, create public trusts
- Regulate, ration
- Tax, spend, subsidize, charge fees

Keefe and Fuhsang (2006)

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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Example of a Policy

- **Individual Activity** ☀️ (10-15 min)
 - Handout F (example state policy)
 - Read the background story on Page 1
 - Tour the policy by answering the questions on Page 2
- **Large Group** 🗨️ (2-5 min)
 - Answer the discussion questions

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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Policy: *Process/People*

- Handout G

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Policy: Process/People

- Stage 1: Initiation
 - What are stakeholders doing at this stage?

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Policy: Process/People

- Stage 2: Formulation
 - What are stakeholders doing at this stage?

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Policy: Process/People

- Stage 3: Implementation
 - What are stakeholders doing at this stage?

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Policy: Process/People

- Individual Activity ☀️ (3-5 min)
 - Handout G
- Large Group 🗨️ (5-7 min)
 - Share your experiences working with the processes or the professionals involved

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System Solutions

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Systems-Level Change

- How the pieces work together:
 - Policies
 - Environments
 - Implementation process and dynamics
 - Stakeholder decisions and actions

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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Systems-Level Change

- We can “diagnose” the system
 - **Gap**
 - Pieces are missing
 - **Weakness**
 - All pieces exist, but some are weak
 - **Implementation Failure**
 - Pieces exist, but the system dynamics show there is a problem with how it is implemented

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Systems Change for Health

COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Example: System Diagnosis

- Lack of grocery stores with fresh produce
 - **Gap**
 - No local incentive (tax break) to attract such stores
 - **Weakness**
 - Incentive exists, but it is too small
 - **Implementation Failure**
 - Incentives are sufficient, but store does not market itself effectively

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Systems Change for Health

COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Systems-Level Change

- Systems diagnosis helps us identify the highest-level that needs change
- Examples from high-level to lower-level:
 - Overarching mission/vision
 - Guiding principles for the system
 - System procedures and rules
 - System components

WHO (2009)

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Systems Change for Health

COURSE 1: ASSESSING AND DEFINING THE PROBLEM

APPLICATION

- **Breakout Groups** ☀️ (25 min)
 - Worksheet 1 (Question #7)
 - Identify potential solutions to consider
 - Built environments
 - Policies
 - Systems

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Systems Change for Health

COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Assessing and Defining the Problem

(Course 1)

Developed by:
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Systems Change for Health

COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Session 4 of 4

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Systems Change for Health

COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Workshop Agenda

Session #1

- Noticing problems
- Evidence vs. data
- Stakeholder perspectives

Session #2

- Root causes and inequities
- Systems thinking
- Structural diagnosis

Session #3

- Types of system solutions

Session #4

- Impact and feasibility
- Problem statement

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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Define the Problem

Part 3. Impact and Feasibility

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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Impact x Feasibility

- Size of potential health impact
- Feasibility of getting enacted and implemented

Gill, King & Caterson (2005)

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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Impact x Feasibility

Feasibility (to get enacted)	Size of Impact for Target Need ^a		
	Large	Medium	Small
High	Attempt	Attempt	Maybe
Medium	Attempt	Maybe	Maybe
Low	Maybe	Maybe	Avoid

^a Target need might include: decrease disparities, reach entire state, etc.

Adapted from: Gill, King & Caterson (2005)

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Systems Change for Health

COURSE 1: ASSESSING AND DEFINING THE PROBLEM

APPLICATION

- **Breakout Groups** ☀️ (20 min)
 - Worksheet 1 (Question #8)
 - Estimate the impact and feasibility for each potential solution

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Systems Change for Health

COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Define the Problem

Part 4. State “What’s Wrong”

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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Stating What’s Wrong

- Concise statement (1-2 sentences)
- 3 parts
 - WHO: population being affected
 - WHAT: negative outcome they are experiencing
 - WHY: contextual cause
- Syntax order can be adapted

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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

WHO: Population Affected

- Phrase that identifies the group(s) suffering or being negatively affected
- Can include a proportion
- **Examples**
 - 30% of young children
 - Children with special healthcare needs ages 2-12 years old

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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

WHAT: Negative Outcome(s)

- Phrase that identifies the outcome(s) being experienced
 - Because there is a problem, generally will be negative
- **Examples**
 - 1) “... have elevated blood lead levels ...”
 - 2) “... experience a decrease in cognitive and neurological functioning...”

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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

WHY: Contextual Cause

80% of child safety seats not installed properly

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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

WHY: Contextual Cause

- Phrase that articulates the systems-level context causing the problem
- **Example**
 - 1) “... has not **regulated** lead-based paint in private rental housing.”

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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Verbs Suggest Solutions

Verb Phrase	Solution Implied
Lack of coordination in...	System
Displays favor for...	Built environment
Placement of...	
... is not regulated...	Policy

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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Building the Statement

- Sentence structure can vary: Handout H

WHO (population)	WHAT (negative outcome)	WHY (structural cause)
Group A	suffers X	because of Y.

Group A suffers X because of Y.

WHY (structural cause)	WHO (population)	WHAT (negative outcome)
Because of Y,	Group A	suffers X.

Because of Y, Group A suffers X.

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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Building the Statement

- Strive for precision and powerful verbs
 - Let's study three examples
 - We will decide which is strongest

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Systems Change for Health

COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Example Statement #1

WHO (population)	WHAT (negative outcome)	WHY (structural cause)
15% of children in our county	have elevated blood-lead levels and cognitive impairment,	because they have been exposed to lead-based paint in private rental housing.

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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Example Statement #2

WHO (population)	WHAT (negative outcome)	WHY (structural cause)
15% of children in our county	have elevated blood-lead levels and cognitive impairment,	because private rental housing owners do not remove or adequately mitigate lead-based paint exposures.

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Systems Change for Health

COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Example Statement #3

WHO (population)	WHAT (negative outcome)	WHY (structural cause)
15% of children in our county	have elevated blood-lead levels and cognitive impairment,	because our city does not regulate lead exposure in private rental housing.

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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Example: Affordable Housing

- **Small Groups & Debrief** ☀️ (5-7 min)
 - Assess the following problem statement:

“In no city in America can a fulltime minimum-wage employee afford a 2-bedroom apartment.”

WHO (population)	WHAT (negative outcome)	WHY (contextual cause)
----------------------------	-----------------------------------	----------------------------------

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Systems Change for Health

COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Example: Affordable Housing

- **Small Groups & Debrief** ☀️ (5-7 min)
 - Assess the following problem statements:
 - **Original:** “In no city in America can a fulltime minimum-wage employee afford a 2-bedroom apartment.”
 - **Revised:** “Minimum wage is so low, that no hardworking American in a fulltime job can afford a 2-bedroom apartment.”

WHO (population)	WHAT (negative outcome)	WHY (structural cause)
----------------------------	-----------------------------------	----------------------------------

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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Example: Child Abuse

- **Small Groups & Debrief** ☀️ (5-7 min)
 - How would you improve the following:

“Each year, more than 900,000 children are abused or neglected. (That’s more people than live in San Francisco.)”

WHO (population)	WHAT (negative outcome)	WHY (structural cause)
----------------------------	-----------------------------------	----------------------------------

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Systems Change for Health

COURSE 1: ASSESSING AND DEFINING THE PROBLEM

APPLICATION

- **Breakout Groups** ☀️ (35 min)
 - Worksheet 1 (Question #9)
 - Develop a problem statement

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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Closing

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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Reference Handout

- Handout I

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Systems Change for Health

COURSE 1: ASSESSING AND DEFINING THE PROBLEM

Workshop Learning Objectives

- Participants will be able to:
 - Describe how health evidence, stakeholder values, and social determinants of health contribute to a problem definition
 - Identify structural inequities that perpetuate a problem
 - Use systems thinking to diagnose a problem
 - Develop a concise problem statement

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COURSE 1: ASSESSING AND DEFINING THE PROBLEM

CLOSING

- Go to Zoom CHAT
 - Click the link for the survey
 - Post-test
 - Feedback on the workshop

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