

Intro to Systems Thinking

Understanding Systems



What is a system?

 System = a collection of processes working together to produce a defined output

"Every system is perfectly designed... to achieve the results it gets"



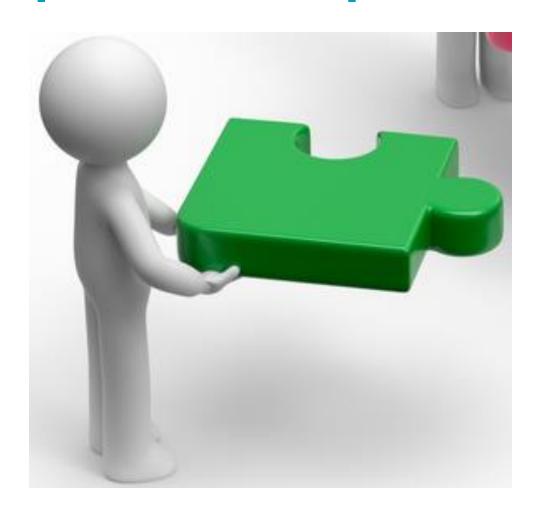
Why is Systems Thinking Important?

- Achieving health equity is an adaptive challenge involving multiple systems
- To help us go from mostly "downstream" work to also going "midstream" and "upstream"
- So that we can re-design our systems to be more equitable



Photo Credit: Raw Pixel

We all hold a piece of the puzzle





And our puzzle pieces are part of even a larger puzzle – it's a bigger system!





Why is Systems Thinking Important?

To Help us figure out who we can/should have on our **Equity**Improvement Teams!

- Who do we need to work with to improve our system?
- How do we collaborate and align for equity?
- What are gaps in our system?



Action and Learning Community Components



Equity Improvement Teams

Teams working together towards a common goal. Includes internal HCA teams, community teams working on SDoH priority areas, and Population Health Equity Collective teams.



Multi-day learning and relationshipbuilding events for equity improvement teams. These include interactive capability-building and planning activities.



Action Periods

The heart of the Action and Learning Community, when teams work to achieve their aims by testing and refining their plans and integrating what they have learned into their daily work.



Equity Action Labs

A framework of action that involves setting an ambitious goal, designing and testing potential solutions, and developing an action plan.



Improvement Coaches

Advisors who will provide general improvement and measurement support, coaching, and training to equity improvement teams.



Equity Project Implementation Grants

Grants of up to \$500K will be available to support team projects addressing the SDoH priority areas.





Equity Improvement Teams

A group that will work together to achieve a common aim in one more more of the 3 Priority Areas



HCA Teams

Community Teams

(with or without an Implementation Grant)

Population
Health Equity
Collective Teams

Or a "mash-up" of all three!

Your equity improvement projects

We'll help ensure that each project has...

- A clear, ambitious aim statement
- A focus on systems change*
- A way to measure if your change is effective
- Deep codesign and partnership with people affected by the issue
- A coach to talk with when you hit a roadblock
- A positive impact on the lives of our Orange County neighbors!



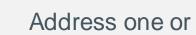
What is Systems Change?

- 1. A strategic approach to <u>problem-solving</u> based on systems thinking that focuses on how stakeholders influence a problem's causes (upstream) rather than just treating its symptoms.
- 2. A lens for thinking A way to see complex (adaptive) problems based on systems thinking and complexity theory.
- 3. An organizing tactic A process of bringing together all stakeholders involved with a problem to address it.
- 4. A strategic goal Large-scale or transformational change that occurs as a result of changing the conditions that cause a problem or allow it to persist. Common conditions include rules, policies, practices, relationships, power, mindsets, and use of resources.

Source: https://bryanlindsley.com



What will be true of the system change projects we design together:



Address one or more of these 3 focus areas



Work to improve the **systems** involved



Include working "midstream" and/or "upstream"



Apply an equity lens



Are **designed with the people** that the effort is for



Use **data** (identify need, track progress, guide decision-making)



Increase **collaboration** (leverage and align)



Are actionable and feasible now

Foundational Tools for Systems Thinking



(Some) Foundational Tools

- Iceberg Model
- Process Maps
- Systems Mapping
- Causal Loop Diagrams
- Stocks and Flows
- Driver Diagrams

- Mid-Stream & Upstream Analysis
- Root Cause Analysis
- 7 Stories (Story to Theory)
- Asset Mapping
- Power Mapping



The Iceberg Model

Rather than reacting to individual problems, systems thinking will ask about relationships to other activities within the system, look for patterns over time, and seek root causes.

THE ICEBERG

A Tool for Guiding Systemic Thinking

EVENTS

React

What just happened? Catching a cold.

PATTERNS/TRENDS

Anticipate

What trends have there been over time?
I've been catching more colds
when sleeping less.

UNDERLYING STRUCTURES

Design

What has influenced the patterns?
What are the relationships between the parts?
More stress at work, not eating well, difficulty accessing healthy food near home or work.

MENTAL MODELS

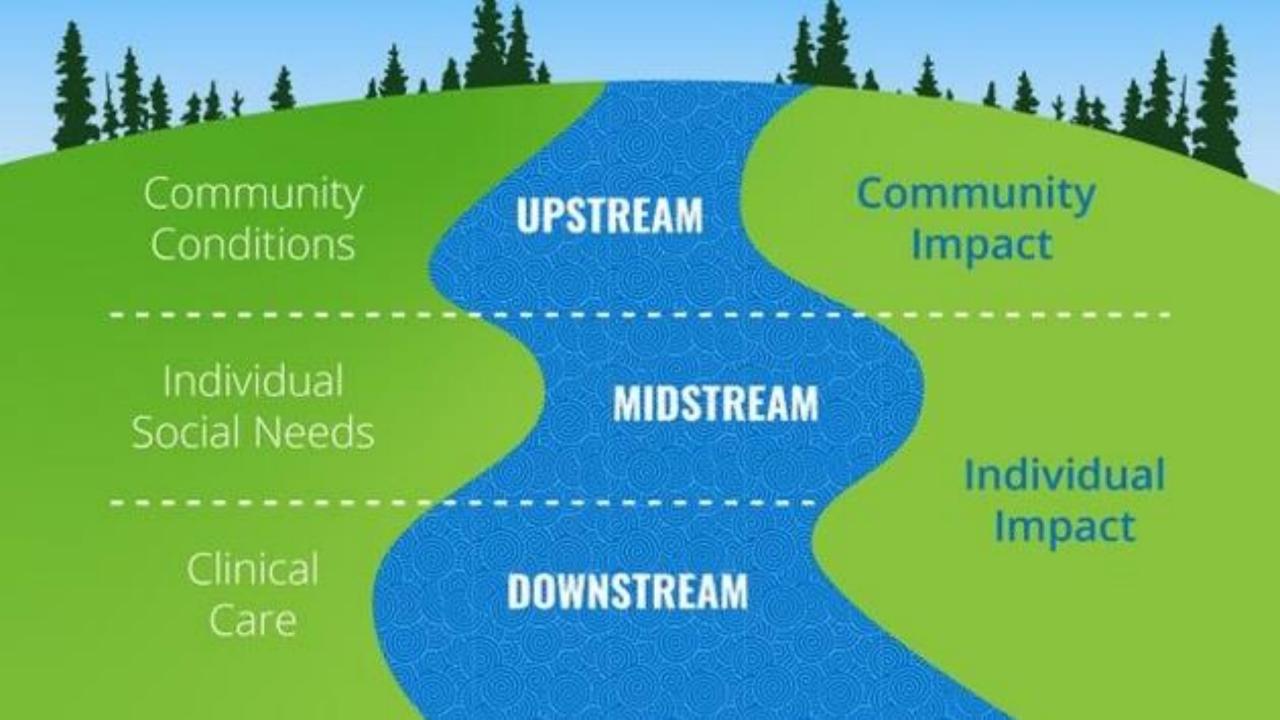
Transform

What assumptions, beliefs and values do people hold about the system? What beliefs keep the system in place?

Career is the most important piece of our identity, healthy food is too expensive, rest is for the unmotivated.

Topic: Homelessness React **EVENTS** People living on the streets What just happened? People living in shelters **Anticipate** PATTERNS/TRENDS What's been happening? Number of people experiencing What's changing? homelessness increasing Street homelessness viewed as a problem **STRUCTURES** Design What has influences these patterns? Lack of prevention services and What are the relationships between parts? coordinated access to these services, What are the rules, norms, cultures, values and polices? lack of affordable housing, structural inequities, and failures of other systems **MENTAL MODES** Transform What assumptions, beliefs and values do people hold about the systems? Homelessness is intractable and What beliefs keep the system in place? too costly to try to solve





What is Happening Upstream (structural determinants)?	Poverty Low wages - jobs that don't pay a living wage Income inequality Redlining - certain neighborhoods are poorer
What is Happening Midstream (social determinants)?	Poor nutrition - junk food Lack of access to healthy food (too expensive) Low income neighborhoods don't have healthy options Parents don't have time to prepare healthy meals Unhealthy foods are cheaper
What is Happening Downstream?	Childhood obesity Diabetes Hypertension Cardiovascular disease



Mapping Our Ideal System



What would our ideal system look like?

For our 3 priority SDOH areas



Start by thinking of a system that achieves "all/everyone" or "zero/no one"

Why do this?



Now think of the system from the perspective of the people using the system

Why is this important?



Now think about how to incorporate the Iceberg and Downstream, Mid-Stream and Upstream exercises into your system

Why?



Putting it All Together: develop your ideal system from the perspective of your end-users that gets us to all/everyone or zero/no one



3 Focus Options

Develop your ideal system for:

- Housing is Health (Housing)
- Food as Medicine (Nutrition and Basic Medical Care)
- Health and Healing (Health and Wellness)



Food as Medicine

Aim –Orange county has a food security system (focused on minority and vulnerable communities) that provides safe, affordable and nutritious food to every resident



Housing is Health

Aim –Orange county has a housing system
(focused on minority and vulnerable
communities) that provides safe, affordable and
decent housing to every resident



Health and Healing

Aim -Orange county has a wellness system (focused on minority and vulnerable communities) that provides proven neighborhood and/or sub-population-based strategies to foster physically active lifestyles



Or Choose Your Own Vision

- Based on your Vision from yesterday or a grand vision for your work
 (if your table/group can agree within 5 minutes on which Vision to
 use), Design the ideal system for that Vision
- Keeping in mind:
 - Designing for all/everyone or zero/no one
 - Downstream, mid-stream and up-stream
 - From the perspective of the people that use the system



2 Ways to Develop your Ideal System

 Use flip chart paper, post-it notes and markers to illustrate what your ideal system would look like (see guidance on next slide)

OR

 Use flip chart paper, post-it notes and markers to complete the Mid and Upstream Systems Thinking Exercise (detailed guidance in handout) for your Focus Area



Guidance for Illustrating Your Ideal System

- This is from the point of view of end-users the people that are negatively affected by the system currently and would benefit if the system is improved
- Your group can visualize/illustrate the system in a way that makes sense to you (it is
 often easier to place most of the writing on post-it notes so that you can more easily
 move things around and quickly make changes/edits
- The system should include:
 - Downstream elements (how the system will address the immediate needs/symptoms)
 - Mid-stream elements (how the system will address social determinants of health related to your focus area)
 - Upstream elements (the policies and systems that would be redesigned and aligned)
- It may be helpful to start from scratch as if you have full control of the systems involved and build a system that gets OC to all/everyone or none/no one



Let's Go!

- You have approx. 30 minutes to develop your ideal system (using one of the two options (or a mash-up of the two approaches)
- IHI and HCA staff and faculty are here to provide support raise your hands if/when you want help and someone will come over
- We will then debrief after this, including how you can use what you come up with!



Our 3 Aims!

Food As Medicine - Orange county has a food security system (focused on minority and vulnerable communities) that provides safe, affordable and nutritious food to every resident

Housing is Health - Orange county has a housing system (focused on minority and vulnerable communities) that provides safe, affordable and decent housing to every resident

Health and Healing - Orange county has a wellness system (focused on minority and vulnerable communities) that provides proven neighborhood and/or sub-population-based strategies to foster physically active lifestyles



Systems Exercise Debrief

- What did you learn about your system?
- What was hard about this exercise or something you aren't sure you got right (yet)?
- How might you use this as you form your improvement teams and begin to develop your projects?
- Who else will you need to bring to the table to make your vision a reality?





Please evaluate this session (intro to Systems Thinking)

Aim your phone's camera at the code, and a short survey will open. Thanks for helping us improve.