More than a Buzzword: Innovation in Public Health

Objectives

- Describe innovation in public health
- Discuss the relationship between QI and Innovation
- Provide examples of innovations
The Public Health National Center for Innovations (PHNCI) is a division of the non-profit Public Health Accreditation Board (PHAB), and aims to empower public health departments to drive change and improve health through innovation. PHNCI is the go-to resource for ideas, inspiration, and tools to spark public health innovation in communities. We are making innovation more than just a buzzword, so that health departments can use innovation processes to transform practice in ways big and small.

Definitions of ‘Innovation’
Definitions

- Making new working adjustments among material and socio-psychological culture (Hart, 1931)
- Inventions that have served to transform the environment profoundly (Ogburn, 1941)
- An idea, procedure or object perceived as new by its adopter (Rogers, 1962)

Modern General Definitions

- The act or process of introducing new ideas, devices, or methods
- Something new or different introduced
- Introduction of new things or methods
- The act of changing by introducing something new
Common innovations

Common innovations
Public health context

Tenets of public health innovation include the following:

- It is an ongoing, systematic process that can generate incremental or radical change.
- It requires both collaboration with diverse team members and partners and co-production with people with lived experience who will be affected by the results of the innovation.
- It is an open process lending itself to adaptation or replication.
Innovation in Action

**Innovation**

- **Emerging Practices**: Practices that are brand new to the field, one agency, or a small group of health departments.
- **Leading Practices**: Practices that have been adopted/replicated by others but are not yet considered "business as usual".
- **Prevailing Practices**: Practices that are considered "accepted practice" and have been diffused throughout the field.

Innovations are one step in transforming public health practice.

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**Four Types of Innovation**

- **Breakthrough Innovation**: Well defined problem, well defined domain.
- **Incremental/Sustaining Innovation**: Well defined problem, not well defined domain.
- **Frontier Research**: Not well defined problem, well defined domain.
- **Disruptive Innovation**: Not well defined problem, not well defined domain.
Public health innovations

Innovation Story – Garrett County, MD

https://vimeo.com/297969817#t=74s
Discuss!

What are some of the ways you are innovating at your health department/agency?
Innovation and Quality Improvement
Aspects of Innovation and Quality Improvement

<table>
<thead>
<tr>
<th>Innovation</th>
<th>QI</th>
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<tbody>
<tr>
<td>Seek to solve customer/user needs, examine root causes</td>
<td>Used to improve existing processes, products, programs, or polices - improvements can lead to incremental innovation</td>
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<tr>
<td>Can use similar tools/processes</td>
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<tr>
<td>Well suited to address problems with unpredictable/unknown solutions (wicked)</td>
<td>Promotes ongoing ideas and debate (divergent)</td>
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<tr>
<td>Promotes consensus building (convergent)</td>
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<tr>
<td>Aims to uncover what is important to consumers in their everyday lives</td>
<td>Aims to uncover what is important to consumers within a particular experience</td>
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<tr>
<td>Empathy research focuses on what people feel to reveal new/disruptive outcomes</td>
<td>Empathy research focuses on what people think to reveal improved outcomes</td>
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Public Health Innovation: Organizational Culture

- Openness to new ideas
- Risk-taking
- Time for innovative thinking
- Collaborative approach to problem solving

Basically, many of the same characteristics as a high performing health department and a culture of quality

Eight Pillars of Innovation Culture

1. Have a mission that matters
2. Think big but start small
3. Strive for continual innovation, not instant perfection
4. Look for ideas everywhere
5. Share everything
6. Spark with imagination, fuel with data
7. Be a platform
8. Never fail to fail

Susan Wojcicki, Senior Vice President of Advertising.
https://www.thinkwithgoogle.com/articles/8-pillars-of-innovation.html
Discuss!

What are some ways you have seen QI and innovation converge? Diverge? in your work.

What is Design Thinking?

IDEO Shopping Cart Video: https://youtu.be/uhOg95BsyG8

Design thinking is a non-linear, iterative process which seeks to understand users, challenge assumptions, redefine problems and create innovative solutions
The How: Design Thinking

INSPIRE
- Define the challenge
- Observe people
- Form insights

IDEATE
- Frame opportunities
- Brainstorm ideas

IMPLEMENT
- Try experiments

A non-linear process

Empathise → Define → Ideate → Prototype → Test

Learn about users through testing
Empathise to help define the problem
Tests create new ideas for the project
Learn from prototypes to spark new ideas
Tests reveal insights that redefine the problem
If you don’t know where you’re going, how do you know if you got there?

A solution in search of a problem
Sweet Spot for a Design Challenge

Desirability

Viability

Feasibility

Innovation Story – DuPage County, IL
https://vimeo.com/297969817#t=401s
The IDEO/ExperiencePoint Model

Design Thinking Process

Finding Opportunities
- Frame a Question: Identify the right problem to solve.
- Gather Inspiration: Inspire new thinking by discovering what people really need.
- Synthesize for Action: Make meaning out of diverse information to identify a strategic focus.

Creating Solutions
- Generate Ideas: Push past obvious solutions to come up with breakthrough ideas.
- Make Ideas Tangible: Build rough representations of your idea to help you think.
- Test to Learn: Experiment your way toward market through iterative prototyping.

IDEO and ExperiencePoint model
Frame a Question

Framing the Question

Traditional Thinking

- Start with a single idea
- Refine that idea
- Organization is the focus

Design Thinking

- The right question
- Explore ALL ideas
- User is the focus
Framing the Question

- Broad: Allows exploration of areas of unexpected opportunity & value
- Focused: Narrow enough that we have a clear, manageable starting point
- Human-Centered: User desirability is at the core of efforts

The Starting Question

Gather Inspiration
Making the User the Focus

New thinking is inspired by discovering what people really need

- How are people making the situation work for them?
- What’s important to the user regarding the question?
- What doesn’t match the situation or something opposite of what is indicated?

Observation
Observe the Extremes

Video: GE Healthcare MRI: Doug Dietz Ted Talk
https://youtu.be/jajduxPD6H4
Synthesize for Action

Observation to Insight

- Generating the ‘Why’
- Why is this behavior happening?
- What are patterns?
- What are the themes?
- What is unexpected?

Look at a situation differently than others.
It is supported by the observations that you made.

The observation is not just something that someone would immediately think of when describing the subject.

It offers a glimpse into how people think or feel.

Good Insight

Generate Ideas
Your idea should be related to the original starting question.

Your idea should be novel, exciting and easy to understand.

Your idea should meet a real need and solve a real problem.

Brainstorming

- Defer Judgement
- Encourage Wild Ideas
- Build on the Ideas of Others
- Stay Focused on the Topic
- One Conversation at a Time
- Be Visual
- Go for Quantity
Make Ideas Tangible

Build to Think

- Think through important aspects of a solution
- Think through insights and user needs
Storyboard Ideas

Show your idea in four panels

Include the user in each panel

Test to Learn
Create an Experiment

- Identify a key assumption
- Test **one** aspect of your idea
- To learn, not validate

Conducted with a safe audience at a minimal cost.

The test should be on target to help you learn and grow the idea.

The test should be easy to build or create and easy to run.

Good Experiment
REMINDER: What is design thinking?

It’s an exploratory process that is open-ended, open-minded and iterative.

- Promotes unlimited creativity
- Human centered – focuses on the user
- Considers all ideas – no matter how wild
- Problem with no obvious solution
What can you do?

- Remember that collaboration is essential and failure is a regular visitor
- Be comfortable with uncertainty and have an open mind
- Be receptive to ideas from very different disciplines
- Use a disciplined process that is replicable
- Embrace the tools and skills to pinpoint and manage the risks inherent in innovation

Resources

- eLearning modules
- Stories and lessons learned – share yours!
- Design Thinking Training
- Public Health Innovation Playbook
- COPPHII Innovation Track
Discuss!

• What might you use design thinking for at your agency/in your community/in your work?