

## *Design Thinking for Health*

**Using the Human-Centered Approach of Design  
Thinking to Improve Health and Healthcare**



Wednesday, July 22, 2020 at 2:00 pm ET

Marion Leary, RN, MSN, MPH  
Director of Innovation  
University of Pennsylvania  
School of Nursing



**NATIONAL  
NURSE-LED CARE  
CONSORTIUM**  
a PHMC affiliate



**Penn**  
Nursing

# National Nurse-Led Care Consortium



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# National Nurse-Led Care Consortium

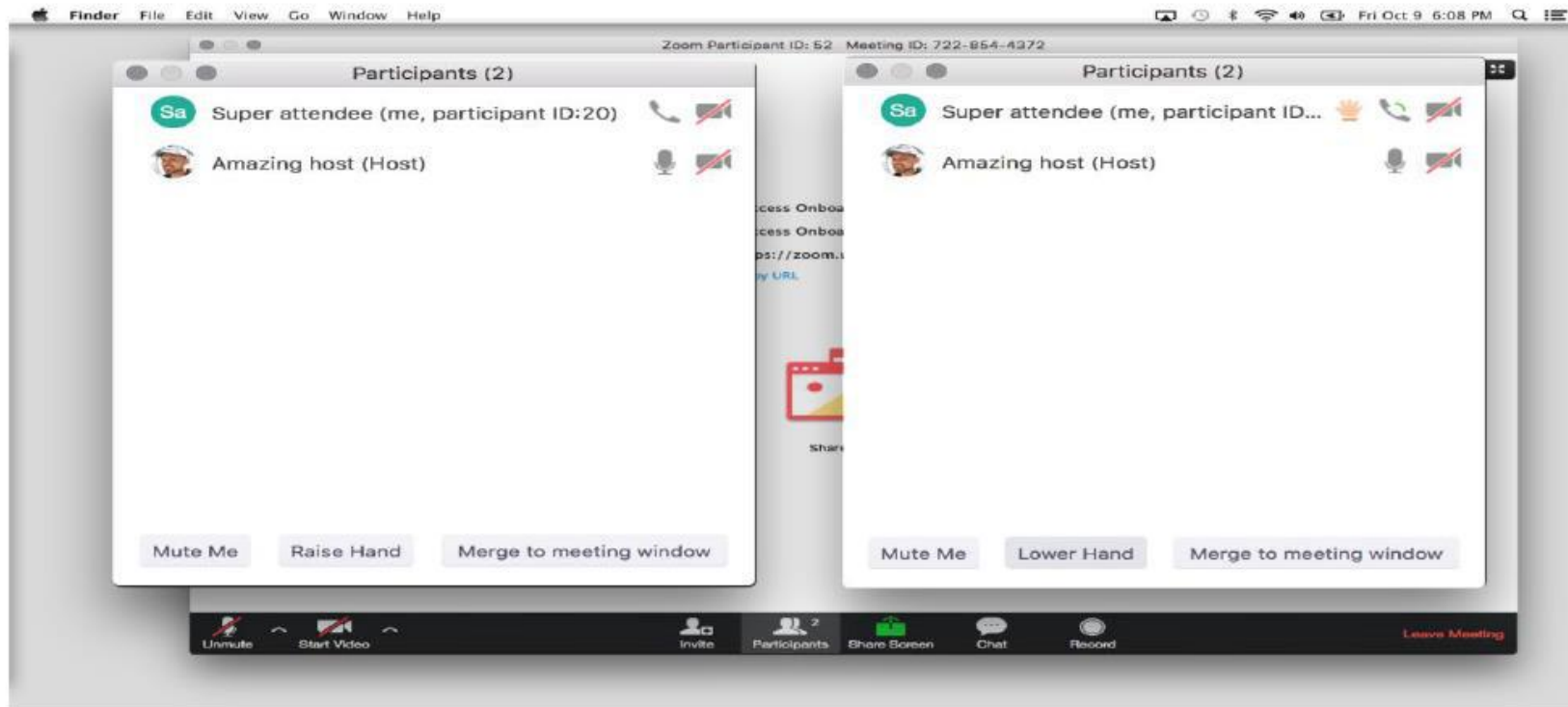
The **National Nurse-Led Care Consortium (NNCC)** is a nonprofit member-supported organization working to strengthen community health through quality, compassionate, and collaborative nurse-led care.

NNCC provides expertise to support comprehensive, community-based primary care.

- Direct, nurse-led healthcare services
- Policy research and advocacy
- Training and technical assistance support



# Housekeeping Items

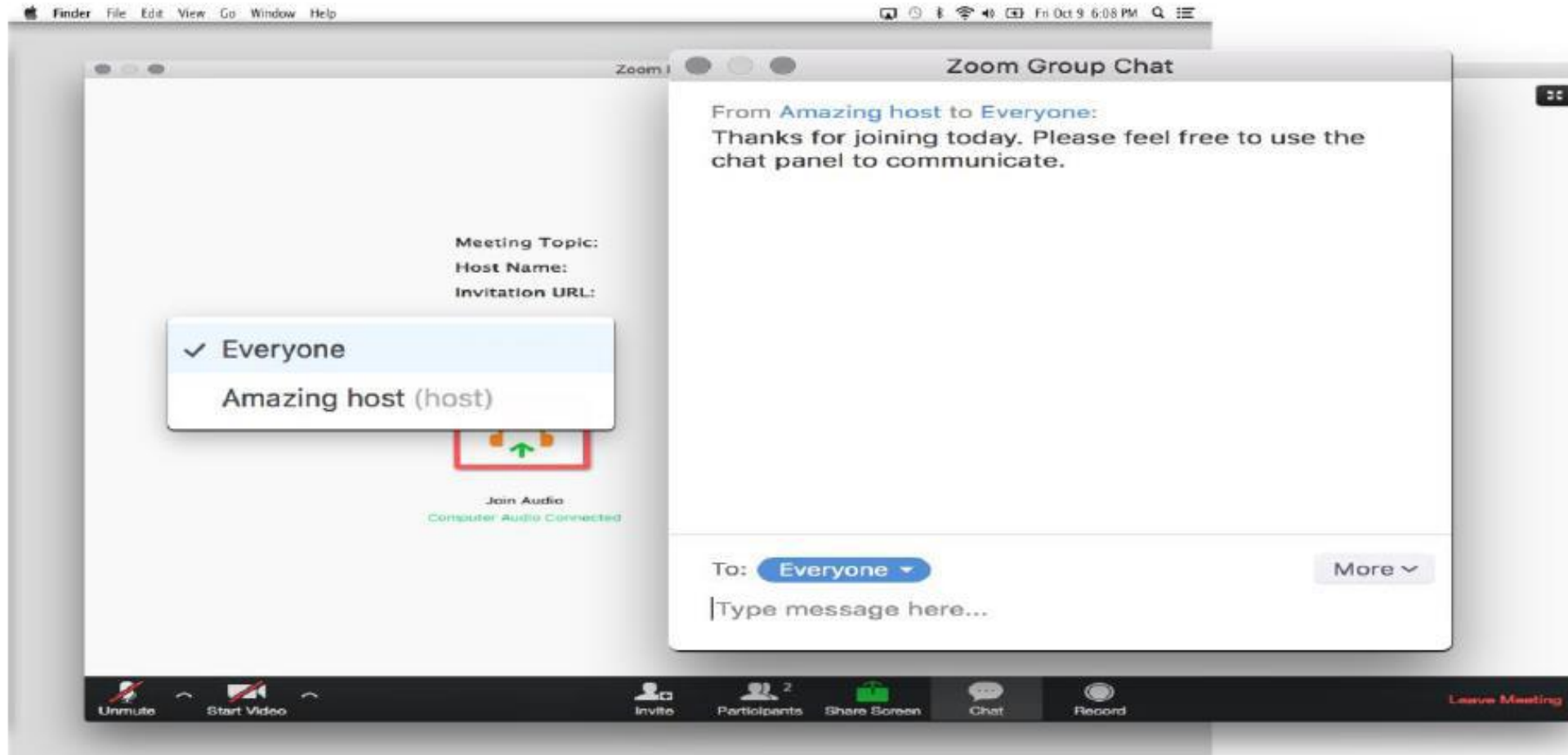


Housekeeping – Zoom Meeting viewer interaction





# Housekeeping Items



Housekeeping – Zoom Meeting viewer interaction



# Steps to Receive Free CE Credit

NNCC will review attendance list after webinar is complete.

Participants who attend entire live presentation qualify for CE credit

- **REQUIRED:** attend at least **55 minutes** of presentation
- **REQUIRED:** access & connect to presentation slide-deck
- Phone-in-only participants **DO NOT** qualify

Completion of a quiz will be required to receive CE credit.

Questions can be directed to: [jbird@phmc.org](mailto:jbird@phmc.org)

# Using the Human-centered Approach of Design Thinking to Improve Health and Healthcare



Marion Leary RN MSN MPH, Director of Innovation  
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- **Director of Innovation, University of Pennsylvania, School of Nursing**
- Innovation Advisory Committee for the American Nurses Association
- Innovation Committee for the American Heart Association's Emergency Cardiovascular Care Committee
- Founding Member of Society of Nurse Scientists, Innovators, Entrepreneurs, and Leaders (SONSIEL)
- Previously, Director of Innovation Research, Center for Resuscitation Science, University of Pennsylvania

# Disclosure

- Rita & Alex Hillman Foundation Grant (Co-I)



Drawing by: Ethan Kocak, @Blackmudpuppy





## What is innovation?

- Innovation is the application of something **new or different** that delivers value
- Involves methodological approaches infused with **creativity** and **risk taking**

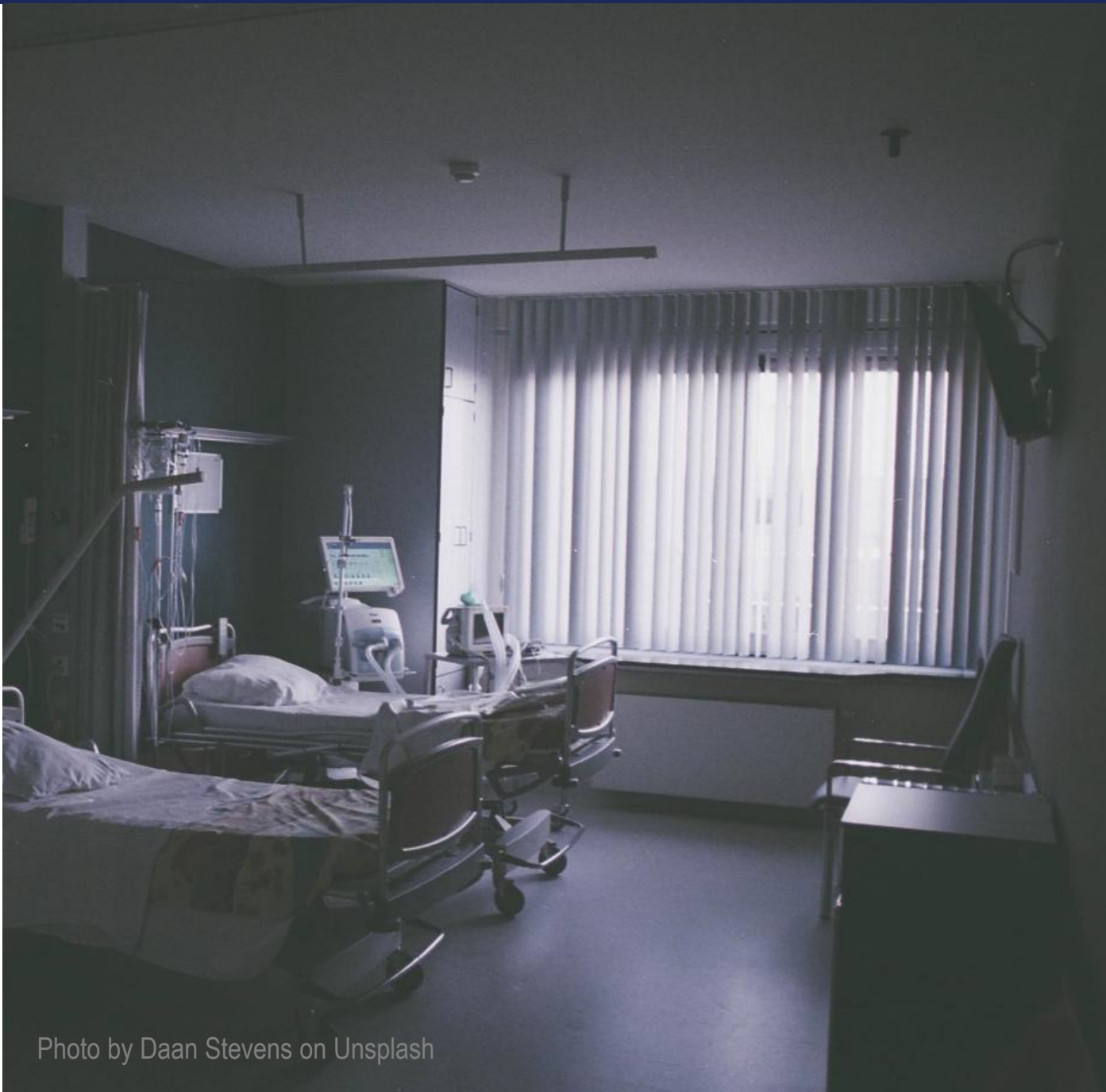


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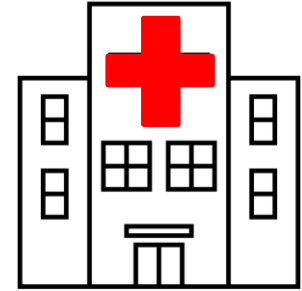
## Why Health & Healthcare Innovation?

- Generating prototypes and testing solutions in weeks or months instead years
- Understanding what the patients/clinicians want and need
- Working with an interdisciplinary team; not just with other healthcare providers

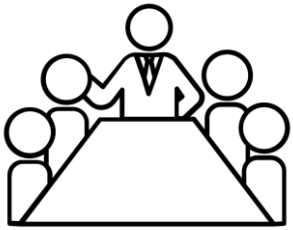


# Why Nursing Innovation?

- *Nurses are everywhere*
- *Yes we are at the bedside but...*



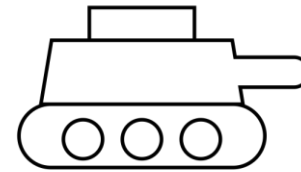
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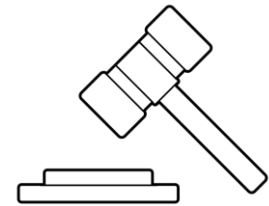
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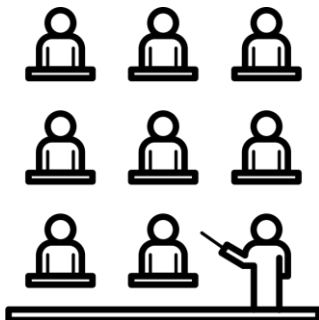
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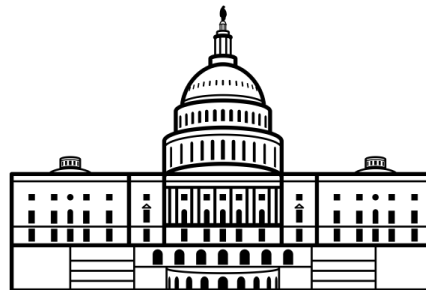
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*Nearly 19 million nurses worldwide and 4 million in the US*

**“Every product & process that touches a patient goes through a nurse” ~ Dr. Terry Richmond**



Photo by Kyle Glenn on Unsplash


## Areas of Opportunity

- Innovation is not a core component of most nursing curricula
- Solutions are typically one-offs
  - Innovation is lost
  - Same problem solved repeatedly
  - Nurses do not see themselves as innovators





**UNLEASHING  
NURSE-LED  
INNOVATION**

 **Penn Nursing**  
UNIVERSITY of PENNSYLVANIA  
SCHOOL of NURSING

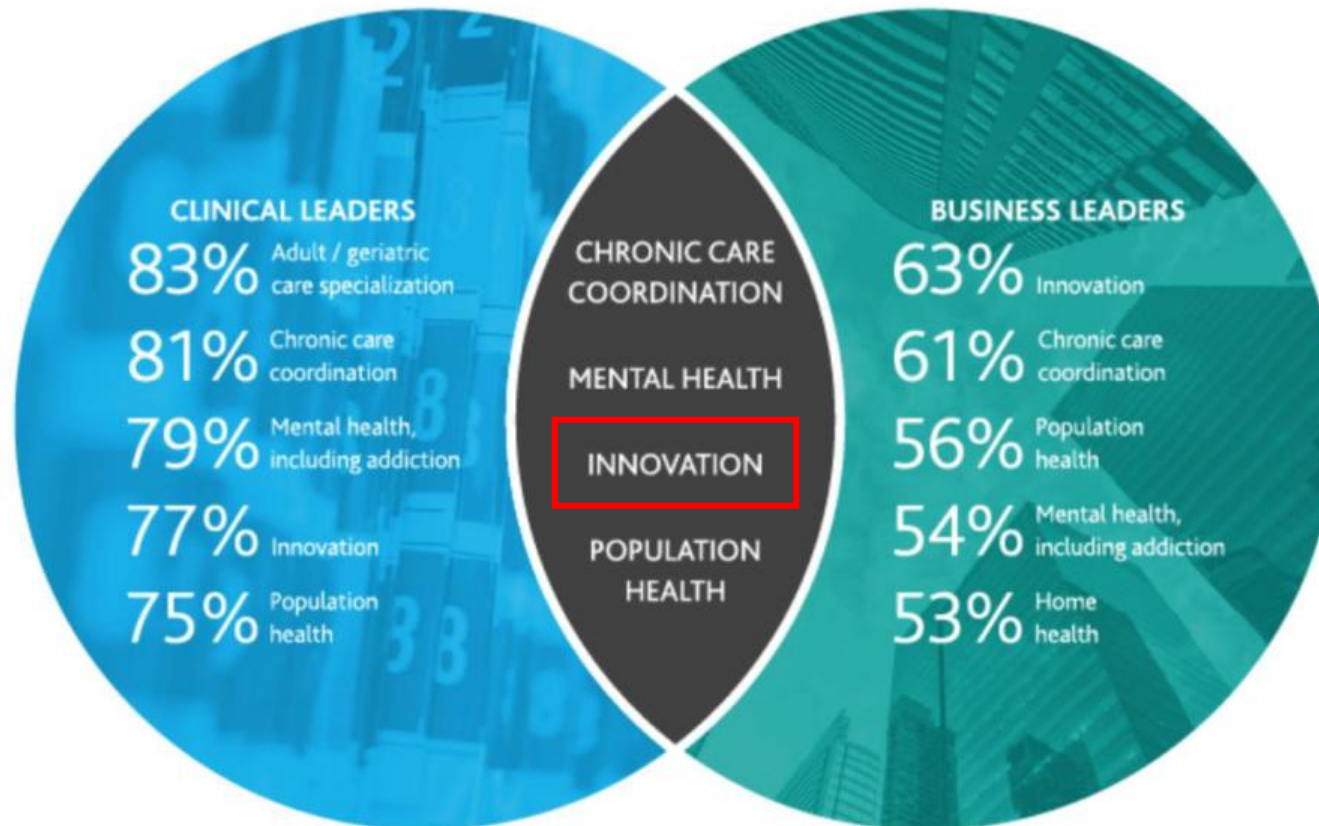
**IBDO**

# Unleashing Nurse-Led Innovation

<https://www.bdo.com> › healthcare › unleashing-nurse-led-innovation

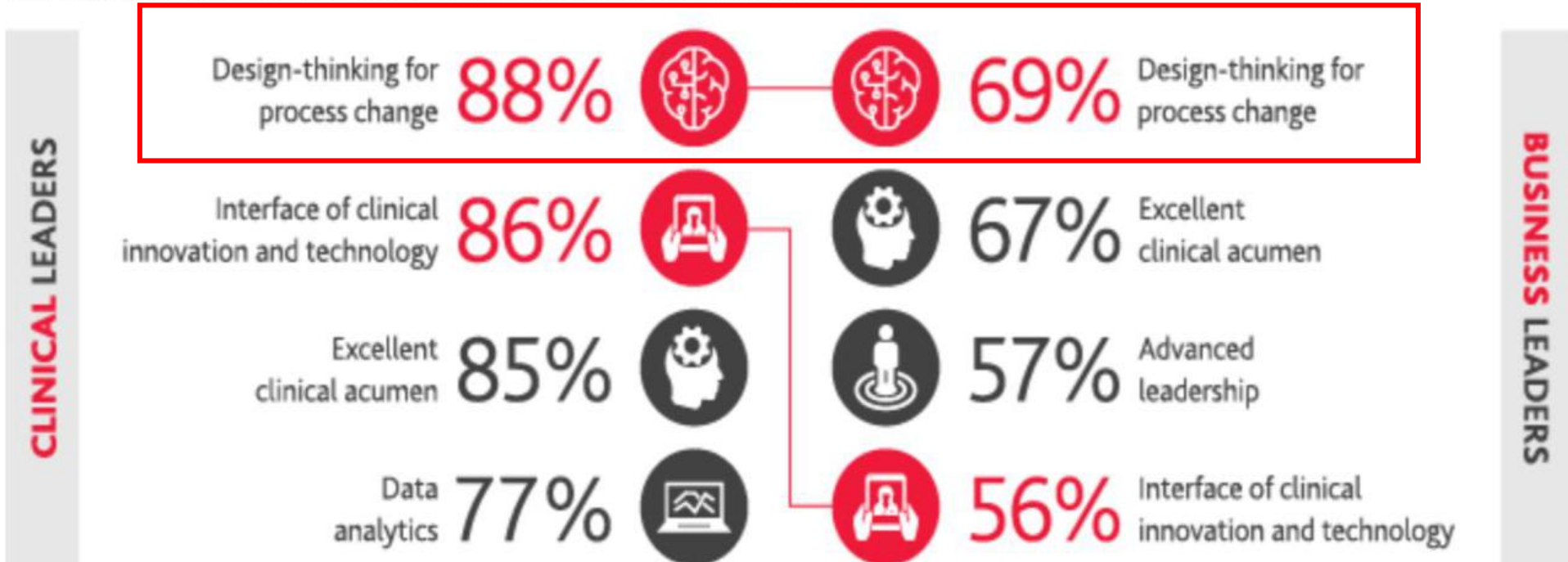
# Penn Nursing BDO Survey

**5 NURSING AREAS WITH MOST OPPORTUNITY TO TRANSFORM CARE BY 2025  
WHERE CLINICAL AND BUSINESS INNOVATION LEADERS MEET**



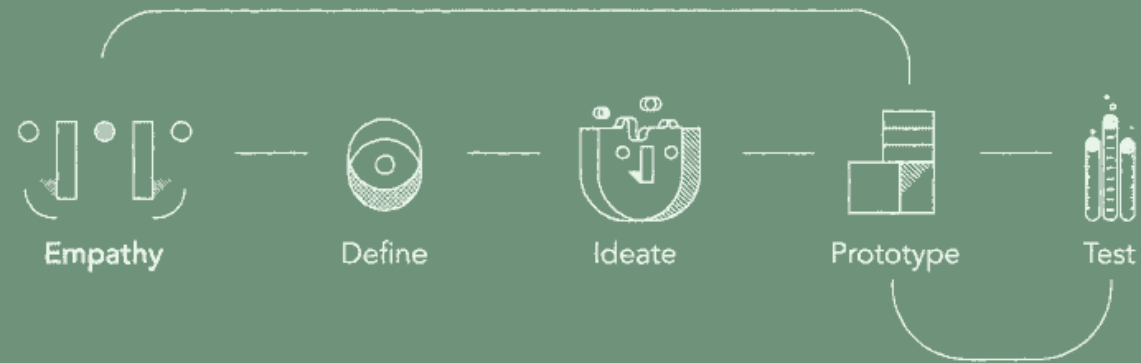
# Penn Nursing BDO Survey

## TOP 4 MOST VALUABLE SKILLS FOR NURSE INNOVATORS BY 2025



# DESIGN THINKING

## Design Thinking: A 5 Stage Process



*“Design thinking is a **human-centered approach** to innovation that draws from the designer's toolkit **to integrate the needs of people**, the possibilities of technology, and the requirements for business success.” —Tim Brown*



**“Design Thinking is a framework to generate innovative solutions through creative problem solving.”**

Design  
Thinking  
For  
Health

# Design Thinking for Health

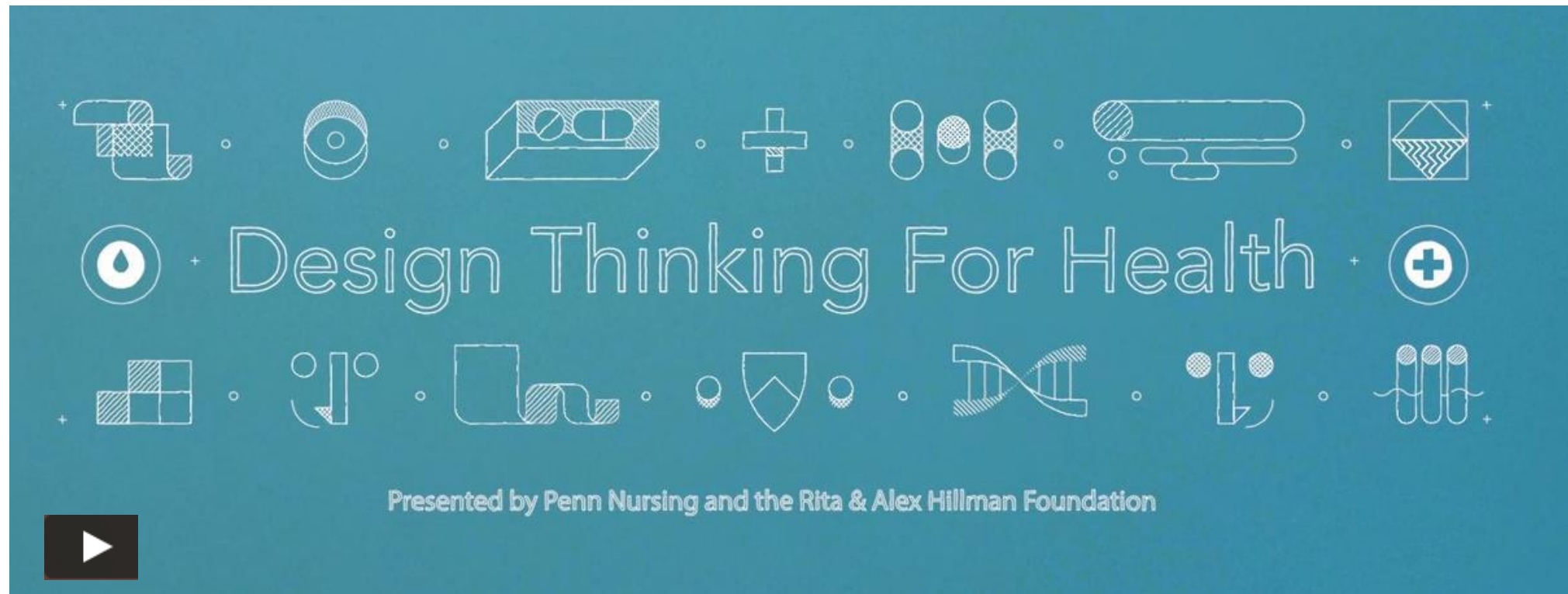
*We created this curriculum so that nurses, no matter their experience, setting, or location, could join us in designing a healthier future.*

[www.designthinkingforhealth.org](http://www.designthinkingforhealth.org)



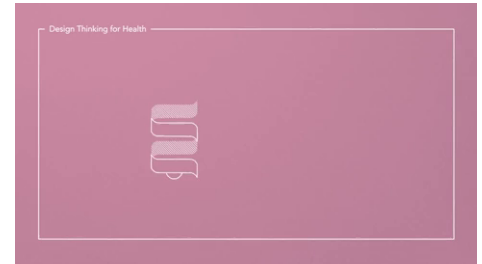
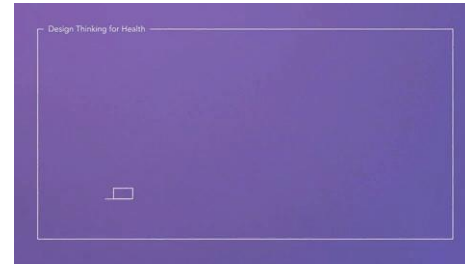
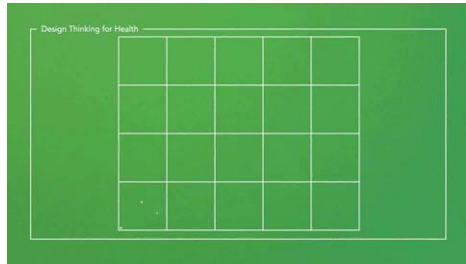


# Design Thinking for Health



<https://designthinkingforhealth.org/the-course/introduction/>

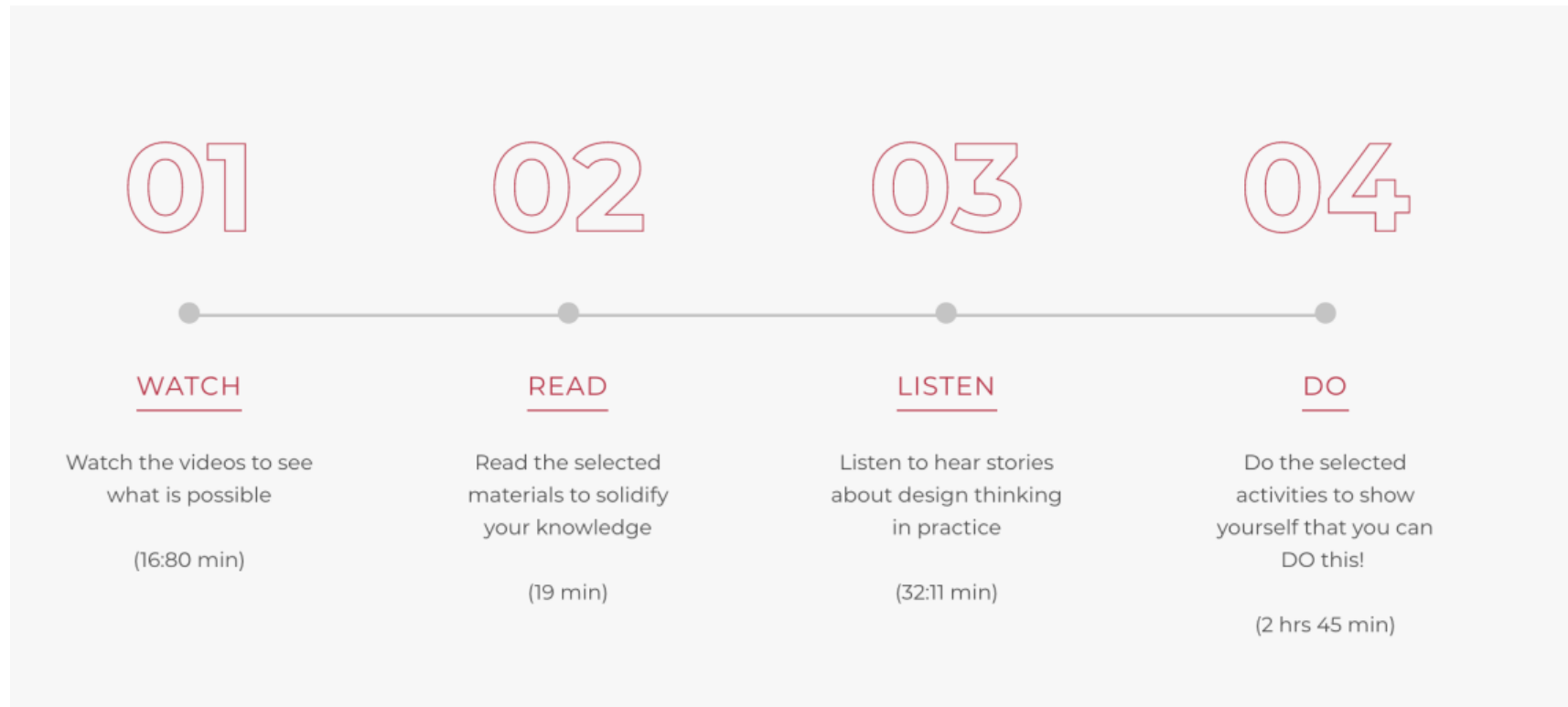
# Design Thinking for Health



## Design Thinking for Health Curriculum

- Free, online, open access platform
- 4 documentary videos of nurse innovators from around the country
- 6 lecture videos from nursing and design experts (CVS, Microsoft etc)
- 7 podcast interviews of nursing innovation and design experts
- Design thinking resources and activities

# Design Thinking for Health Platform



# Design Thinking for Health Platform

## Lectures

### Case Studies



**Kathy Bowles**

Co-Founder of RightCare Solutions

[WATCH](#)



**Ernesto Holguin**

Patented the first-ever foot care telehealth system

[WATCH](#)



**Sarah Szanton**

Helping elderly community members live more safely at home

[WATCH](#)



**Rachel Walker**

Co-creating support strategies for cancer survivorship

[WATCH](#)

### Podcasts



**Shawna Butler**  
Entrepreneurial Medicine at  
Purdue University Medical Center  
(Bloomington)

[LISTEN](#)



**Marion Leary**  
Director of Innovation in Patient  
Nursing

[LISTEN](#)



**Rebecca Lowe**  
Founder of the Society of Nurse  
Scientists, Innovators,  
Entrepreneurs and Leaders  
(SOCIETY)

[LISTEN](#)



**Margo Prosser Carthon**  
Associate Professor of Nursing at  
the University of Pennsylvania

[LISTEN](#)



**Maria Merchant**  
Associate Vice President of Patient  
Medicine

[LISTEN](#)



**Marilyn Rantz**  
Curator Professor Emerita of  
Nursing at the University of Missouri's  
Stanley School of Nursing

[LISTEN](#)



**Juana Salazar**  
Nurse Informaticist and an Adjunct  
Professor at NYU's School of Nursing

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**Erica Lewis**

PHD, RN



**Keondra Rustan**

PHD, RN, CHSE,  
CNE

# Innovation in Health: Foundations of Design Thinking

## ***Course follows the Design Thinking steps:***

- *Week 1: Overview*
- *Week 2-3: Empathy*
- *Week 4-5: Define*
- *Week 6, 8: Ideate (Week 7 Spring Break)*
- *Week 9: Mid-semester Presentations*
- *Week 10-11: Prototype*
- *Week 12-13: Test*
- *Week 14-15: Final Presentations*





# Fall 2019 Design Thinking Project: FlexC



# Modules

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## The 5 Steps



**Introduction**



MODULE 01  
**Empathy**



MODULE 02  
**Define**



MODULE 03  
**Ideate**



MODULE 04  
**Prototype**



MODULE 05  
**Test**


# Empathy



Empathy is what nurses do best! Empathy is the first stage of the design thinking process.

Empathy allows you to gain a deeper understanding of the people or population for whom you are designing. The process involves immersing oneself in the community to gain actionable insight.

Design Thinking for Health





Empathy allows you to gain a deeper understanding of the people or population for whom you are designing. The process involves immersing oneself in the community to gain actionable insight.

Watch this video first to learn about Empathy (2:56).

To learn more about Empathy, Watch, Read, Listen and Do!

01

WATCH

Watch the videos to see what is possible

(16:80 min)

02

READ

Read the selected materials to solidify your knowledge

(19 min)

03

LISTEN

Listen to hear stories about design thinking in practice

(32:11 min)

04

DO

Do the selected activities to show yourself that you can DO this!

(2 hrs 45 min)





## Define Your Audience

Consider the broad spectrum of people who will be touched by your design solution.

Before you dig into your in-context research, it's critical to know who you're designing for. You're bound to learn more once you're in the field, but having an idea of your target audience's needs, contexts, and history will help ensure that you start your research by asking smart questions. And don't limit your thinking just to the people you're designing for. You may need to consider governments, NGOs, other businesses, or competitors.

### STEPS

**TIME**

30-60 minutes

**DIFFICULTY**

Easy

**WHAT YOU'LL NEED**

Pen, paper, Post-its

**PARTICIPANTS**

Design team

- 01** | With your team, write down the people or groups that are directly involved in or reached by your project. Are you designing for children? For farmers? Write all the groups down on Post-its and put them on a wall so you can visualize your audience.
- 02** | Now add people or groups who are peripherally relevant, or are associated with your direct audience.
- 03** | Think about the connections these people have with your topic. Who are the fans? Who are the skeptics? Who do you most need on your side? Add them to the wall.
- 04** | Now arrange these Post-its into a map of the people involved in your challenge. Save it and refer to it as you move through the Inspiration phase.



# FlexC

## empathy technique #1

### Interviewing

#### WHAT & WHY

Engaging people in a structured, purposeful conversation is one of the most valuable and versatile techniques in a human-centered designer's toolkit. It can be used throughout the design process to develop empathy, refine problem understanding, inspire solutions, gather concept feedback and test hypotheses.

#### HOW

1. Create a guide. Define the topics you want to cover and list key questions for each. The list should serve as a reference and reminder during the interview, not a rigid script. It should be flexible enough to be rearranged on the fly and accommodate unexpected lines of inquiry.
2. Assemble a team. Aim for a team of 2 to 3 people. It's difficult to take notes and pick up subtle details when interviewing alone. But bringing too many people can intimidate the participant and over-crowd the space.
3. Assign roles. Each team member should have a role, for example interviewer, note-taker or photographer. The interviewer leads the discussion and creates opportunities for others to ask questions.
4. Set expectations. Introduce yourself and the goal and overall format of the interview. If you want to record or take photos, ask for permission.
5. Build rapport. Start out with broad, basic questions and ease into more specific or emotionally-charged topics.
6. Record what they say. Keep your notes as objective as possible. Capture the participant's actual language and separate any personal interpretation or commentary.
7. Be polite. Respect the participant's time by starting and ending on schedule. Regardless of the outcome, thank them and emphasize that their feedback is valuable.

## empathy technique #2

### Observation

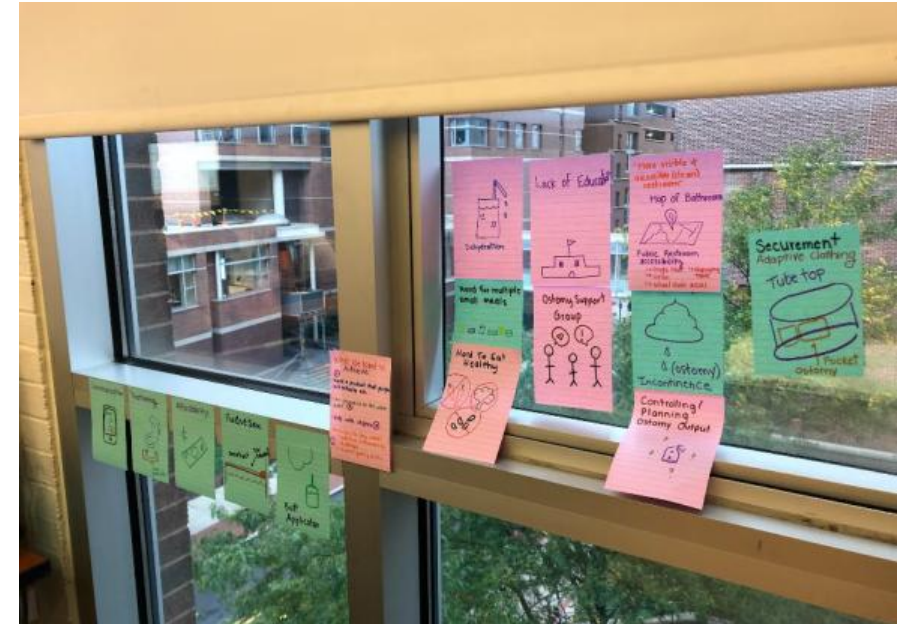
#### WHAT & WHY

Watching people, activities and environments without interrupting them allows you to see how people actually behave and to uncover unexpected social and environmental factors that may impact your solution. In surveys and interviews, participants may misremember or fit their answer to what they think is normal or expected. Direct observation can help compensate for these issues.

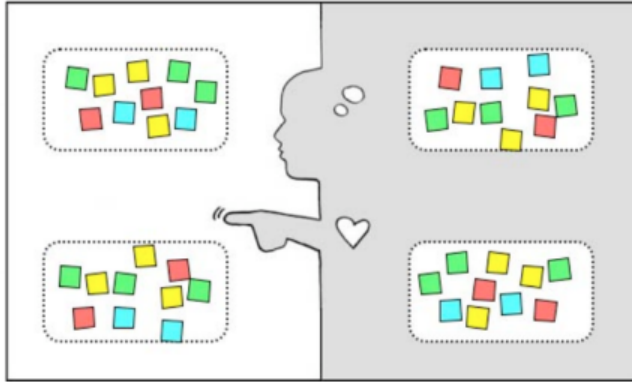
#### HOW

Structure and focus are critical aspects of observational research—they make the difference between simply watching something and actually studying it. Use the four techniques below to help focus on important aspects and activities rather than trying to capture everything.

1. Timing. Use a stop watch or log book to establish the length and relative timing of tasks and events.
2. Counting. Use a simple tally sheet to objectively measure and compare the prevalence of different types of people, things or activities in a space.
3. Mapping & Diagramming. Use floor plans and flow charts to record how people, objects and information move through space and reveal meaningful patterns in complex interactions.
4. Taxonomies & Frameworks. Use standardized categories to organize field notes and ensure you don't overlook things. Frameworks also make it easier to compare and combine notes across team members. Choose one of the frameworks below or create your own:  
AEIOU: activity, environment, interaction, object, user  
CATPOET: context, actor, task, process, object, explain, trigger  
NOABS: need, objective, activity, breakdown, solution



## METHOD EMPATHY MAP



### WHY use an empathy map

Good design is grounded in a deep understanding of the person for whom you are designing. Designers have many techniques for developing this sort of empathy. An Empathy Map is one tool to help you synthesize your observations and draw out unexpected insights.

### HOW to use an empathy map

**UNPACK:** Create a four quadrant layout on paper or a whiteboard. Populate the map by taking note of the following four traits of your user as you review your notes, audio, and video from your fieldwork:

**SAY:** What are some quotes and defining words your user said?

**DO:** What actions and behaviors did you notice?

**THINK:** What might your user be thinking? What does this tell you about his or her beliefs?

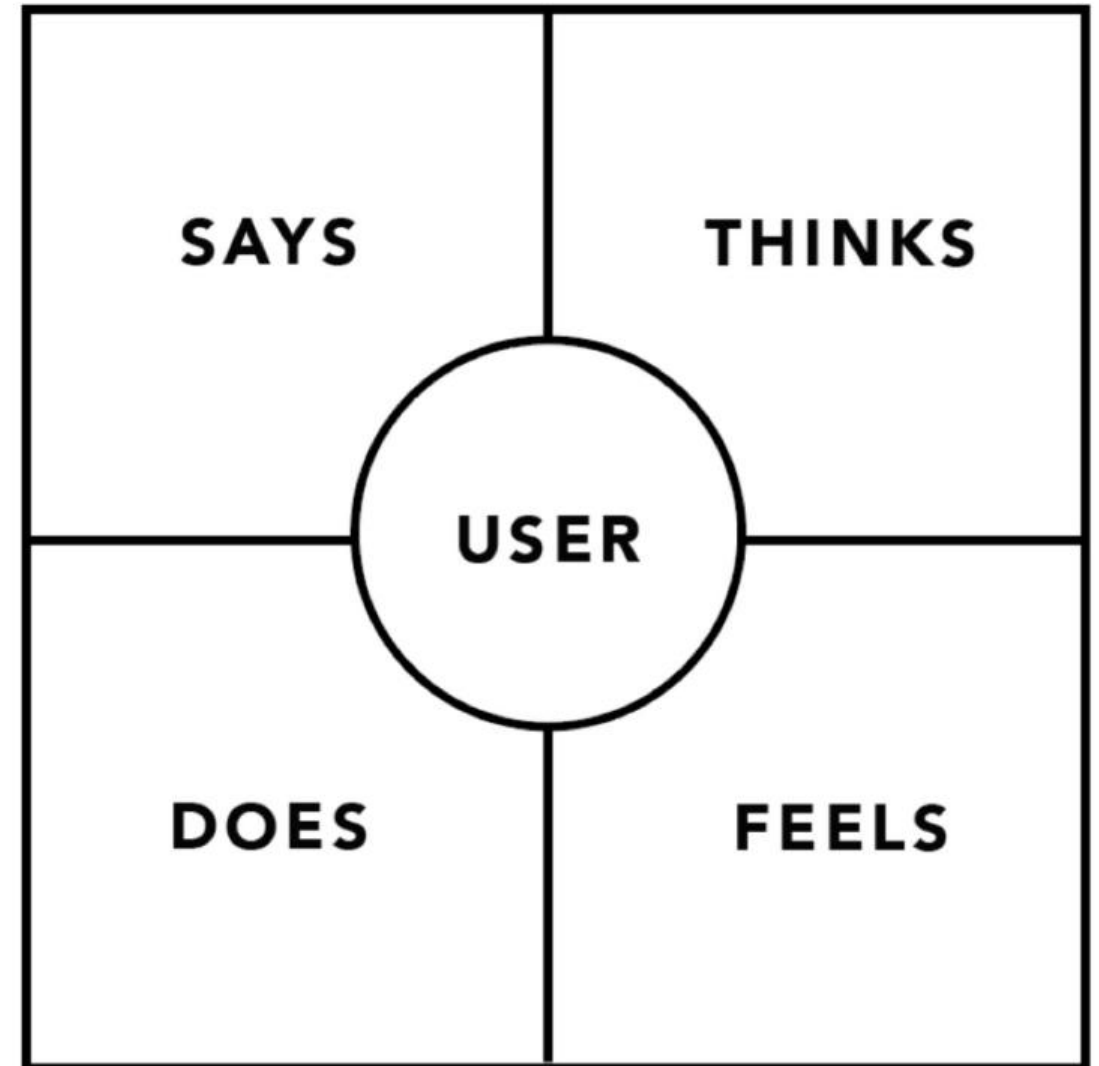
**FEEL:** What emotions might your subject be feeling?

Note that thoughts/beliefs and feelings/emotions cannot be observed directly. They must be inferred by paying careful attention to various clues. Pay attention to body language, tone, and choice of words.

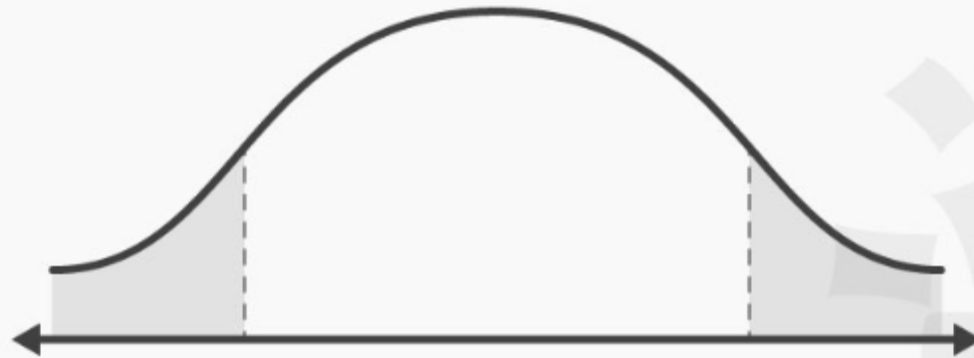
**IDENTIFY NEEDS:** "Needs" are human emotional or physical necessities. Needs help define your design challenge. Remember: Needs are *verbs* (activities and desires with which your user could use help), not *nouns* (solutions). Identify needs directly out of the user traits you noted, or from contradictions between two traits – such as a disconnect between what she says and what she does. Write down needs on the side of your Empathy Map.

**IDENTIFY INSIGHTS:** An "Insight" is a remarkable realization that you could leverage to better respond to a design challenge. Insights often grow from contradictions between two user attributes (either within a quadrant or from two different quadrants) or from asking yourself "Why?" when you notice strange behavior. Write down potential insights on the side of your Empathy Map. One way to identify the seeds of insights is to capture "tensions" and "contradictions" as you work.

## EMPATHY MAP



## Extreme users



INTERACTION DESIGN  
FOUNDATION

INTERACTION-DESIGN.ORG

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Consider testing your prototypes on **extreme users**, on top of **regular users**. In order to find extreme users, you will first need to define a dimension that is relevant to your prototype. If you are working on an idea related to a supermarket, for example, your extreme users could be people who shop at supermarkets every day, and — at the other end of the scale — people who *never* shop at supermarkets. Testing your prototypes on extreme users will often help you uncover some problems and relevant issues that affect regular users, because the extreme users tend to be more vocal about their love (or dislike) of doing things related to your prototype.

# Define

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Define your problem and create a problem statement.

In this stage, designers use the insights gained during the empathy phase to clearly define the problem they are solving for and develop a "problem statement." This problem statement guides designers through the remainder of the Design Thinking process.

Design Thinking for Health




In this stage, designers use the insights gained during the empathy phase to clearly define the problem they are solving for and develop a "problem statement." This problem statement guides designers through the remainder of the Design Thinking process.

Watch this video first to learn about Define (2:17).

To learn more about Define, Watch, Read, Listen and Do!

01

WATCH

Watch the videos to see what is possible

(19:45 min)

02

READ

Read the selected materials to solidify your knowledge

(17 min)

03

LISTEN

Listen to hear stories about design thinking in practice

(13 min)

04

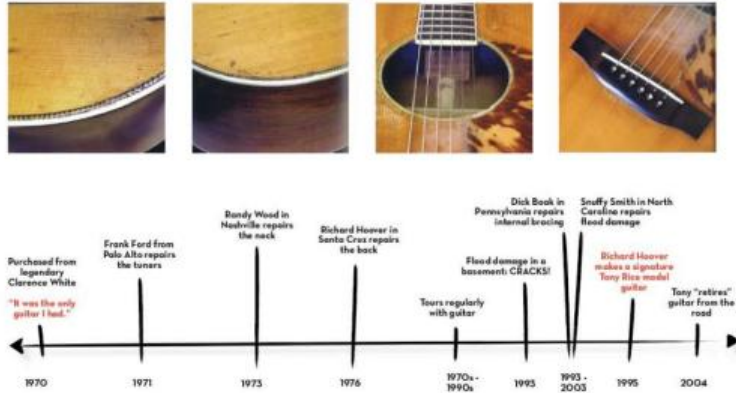
DO

Do the selected activities to show yourself that you can DO this!

(2 hrs 30 min)



## METHOD JOURNEY MAP



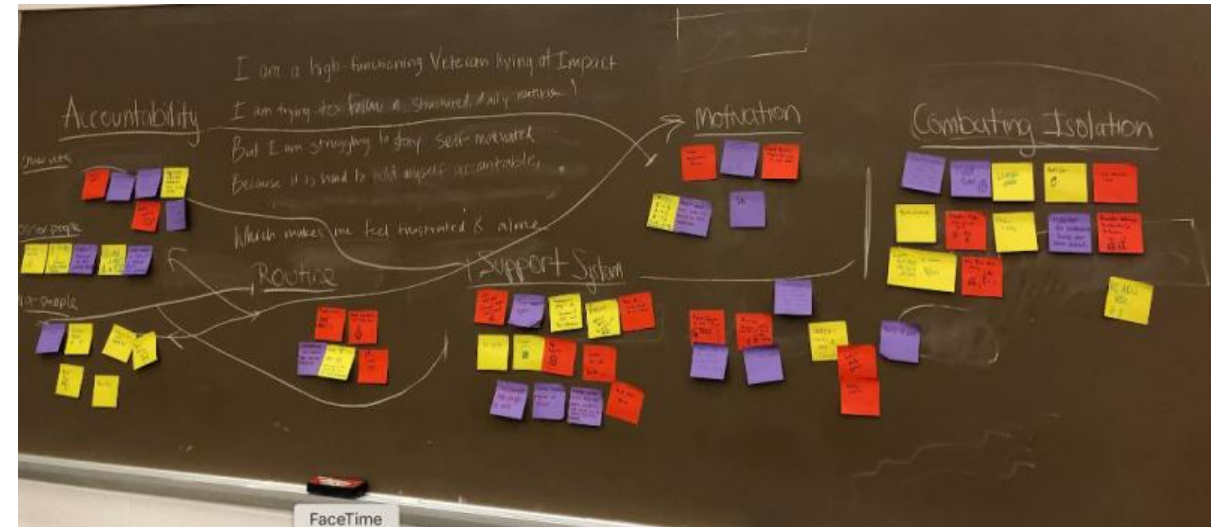
### WHY use a journey map

To gain empathy for a person or understanding of one's process through an experience, consider the details of that process to illuminate areas of potential insights. Creating a journey map is an excellent way to systematically think about the steps or milestones of a process. A journey map can be used for your own empathy work, or to communicate your findings to others.

### HOW to use a journey map

Create diagrams that capture multiple observations, e.g. a map of a user's day, a map of a user's experience, or a map of how a product moves through space and time (from manufacturing to store shelf to user's hands). Consider a process or journey that is relevant, or even tangential to, your problem space. For example, you could consider your user's morning breakfast routine. You could capture every event of one person's exercise in a month - and consider who she was with, where she came from, where she exercised, and where she went afterwards. Or perhaps you are developing a dating service website; you could document every communication between two people before the first date. One important concern is to be comprehensive within the variables you choose to capture. (Don't overlook the opening of the window shades in the morning breakfast routine.) What seems meaningless, could actually be the nugget that develops into a stunning insight. You can create a journey map based on observation and interview - or you might ask a user to draw a journey map and then explain it to you.

Organize the data in a way that makes sense: a timeline of events, a number of parallel timelines that allows for easy comparison, a series of pictures, or a stack of cards. Then look for patterns and anomalies and question why those themes or events occurred. Push yourself to connect individual events to a larger context or framework. It is often the pairing of an observation with the designer's knowledge and perspective that yields a meaningful insight.





### definition technique #3

## Problem Statement

## WHAT & WHY

A technique for narrowing a broad design challenge or problem space to a specific, actionable problem. A clearly articulated problem statement helps you align team members and ideate in a directed manner. It also serves as an artifact that can be validated with users and stakeholders.

## HOW

1. Provide each team member with a copy of the problem statement template below.
2. Individually, have team members generate a problem statement by filling in the 5 phrases. Write each phrase on a separate sticky note to easily experiment with different ways of articulating the problem.
3. As a team, one by one, share the problem statements you generated. It may help to post them up side by side. Discuss and resolve any discrepancies or conflicts, especially about your user.
4. Document the problem statement you will solve for. This may be one of the statements generated earlier or a new statement that emerged from the discussion.

TEMPLATE

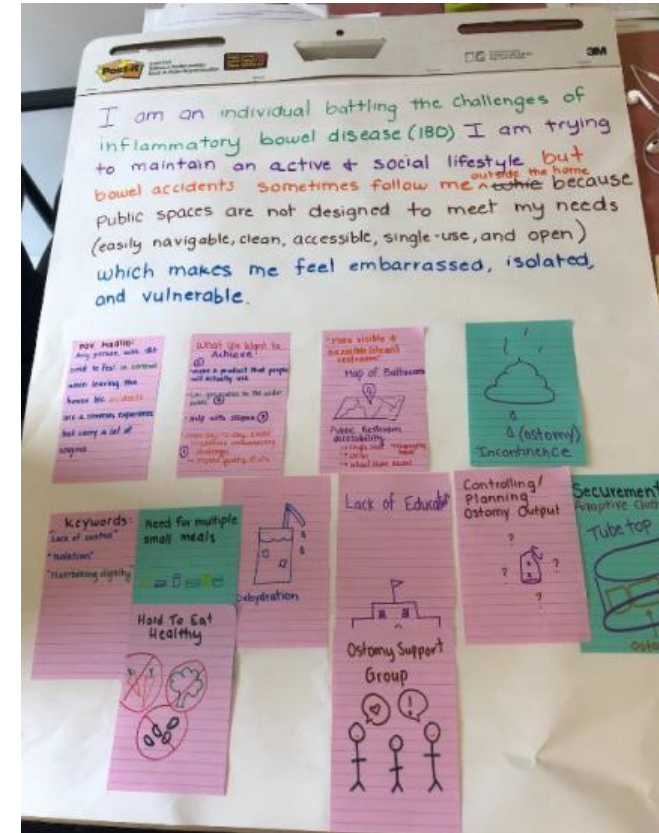
I am \_\_\_\_\_  
user description

I am trying to \_\_\_\_\_  
goal or outcome

But \_\_\_\_\_  
problem or barrier

Because \_\_\_\_\_  
root cause

Which makes me feel \_\_\_\_\_  
emotion



**Problem Statement:** *"I am an individual battling the challenges of inflammatory bowel disease (IBD). I am trying to maintain an active & social life-style but bowel accidents sometimes follow me outside of the home because public spaces are not designed to meet my needs (easily navigable, clean, accessible, single-use, and open) which makes me feel embarrassed, isolated, and vulnerable."*

# Ideate

Let your ideas run wild!

This stage is all about idea generation. Designers use brainstorming activities to generate a wide variety of ideas that could help tackle their problem. You should think big and get creative. The ideas generated in this stage will help you launch into a successful prototyping phase.

Design Thinking for Health



Ideate

• • • • •



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Watch this video first to learn about Ideate (4:15).

To learn more about Ideate, Watch, Read,  
Listen and Do!

01

WATCH

Watch the videos to see what is possible

(35:36 min)

02

READ

Read the selected materials to solidify your knowledge

(23 min)

03

LISTEN

Listen to hear stories about design thinking in practice

(48:38 min)

04

DO

Do the selected activities to show yourself that you can DO this!

(3 hrs 15 min)

# Brainstorm



Energize your team and drum up a staggering amount of innovative ideas.

At IDEO.org, we use Brainstorms to tap into a broad body of knowledge and creativity. Over the course of your project you should do them not only with your design team, but also with partners and the people you're designing for. Refer to Brainstorm Rules (p. 95) for the specifics of what makes for a fruitful brainstorm, but remember that the best policy is to promote openness, lots of ideas, and creativity over immediate feasibility. Brainstorms work best when the group is positive, optimistic, and focused on generating as many ideas as possible.

## STEPS

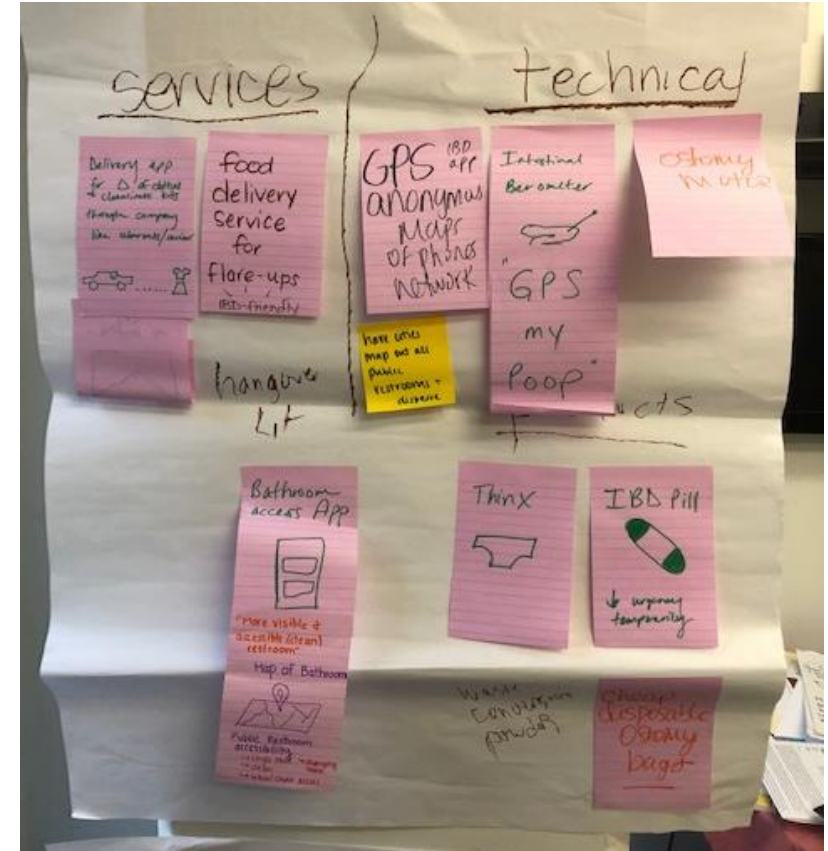
- 01** Pass out pens and Post-its to everyone and have a large piece of paper, wall, or whiteboard on which to stick them.
- 02** Review the Brainstorm Rules before you start.
- 03** Pose the question or prompt you want the group to answer. Even better if you write it down and put it at the top of the paper, wall, or whiteboard.
- 04** As each person has an idea, have her describe to the group as she puts her Post-it on the wall or board.
- 05** Generate as many ideas as possible.

**TIME**  
30-60 minutes

**DIFFICULTY**  
Moderate

**WHAT YOU'LL NEED**  
Pens, Post-its, a large sheet of paper or whiteboard

**PARTICIPANTS**  
Design team, partners, community members



# FlexC



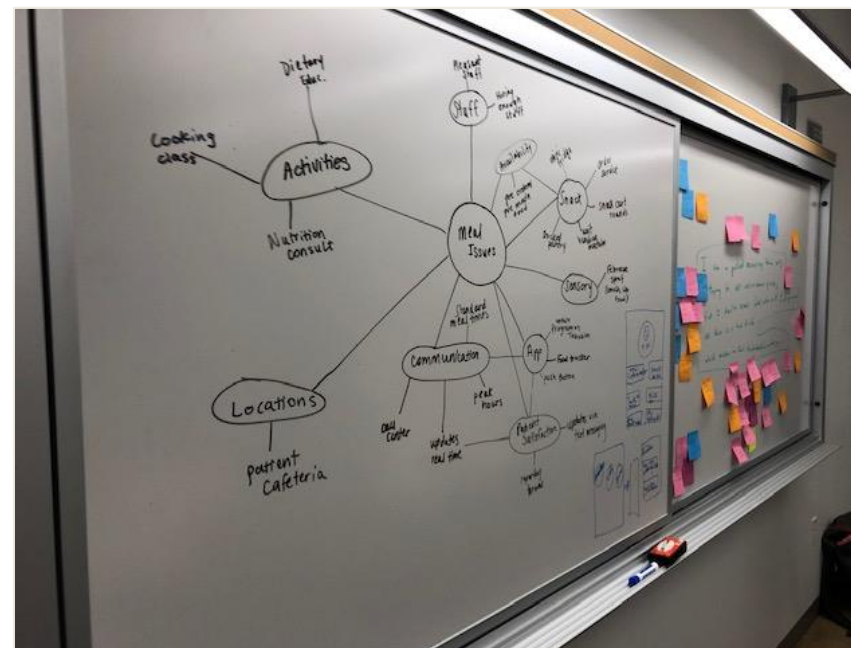
## Bundle Ideas

Now that you've got lots of ideas, it's time to combine them into robust solutions.

Bundling Ideas takes you from strong individual concepts to solutions of substance. Think of it as a game of mix and match, with the end goal of putting the best parts of several ideas together to create more complex concepts. You've probably noticed that many ideas start to resemble each other—which is a good thing. Try different combinations; keep the best parts of some, get rid of the ones that aren't working, and consolidate your thinking into a few concepts you can start to share.

## STEPS

- 01 You've got lots of drawings and ideas up on the wall, so now it's time to start moving them around and forming them into more complex solutions.
- 02 Start by clustering similar ideas into groups. Talk about the best elements of those clusters and combine them with other clusters.
- 03 Now, start building groupings out of the themes and patterns you've found. Focus on translating what you've heard into practice, rather than just identifying similar ideas.
- 04 Once you've got a few idea groupings, ask yourself how the best elements of your thinking might live in a system. Now you're moving from individual ideas to full-on solutions!



**TIME**  
60-90 minutes

**DIFFICULTY**  
Hard

**WHAT YOU'LL NEED**  
Pens, Post-its, boards

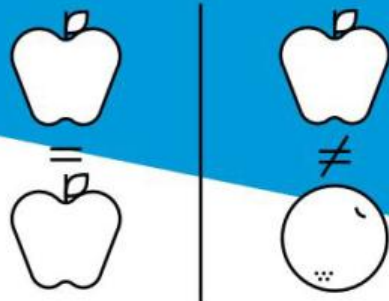
## PARTICIPANTS



MAKE SOMETHING REAL

IT'S LIKE, IT'S NOT LIKE

Share your ideas with other people in a way that relates new concepts to real-world examples.



- TIME**

1 hr. for a group of 10
- ROLES**

Participants  
1 facilitator  
1 recorder
- MATERIALS**


Printer paper and pens  
Optional: camera, markers

**► WHERE TO NEXT?**

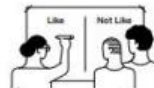
Try another Make Something Real activity like 'Four Square Story' to transform your idea into a visual story to share with others.



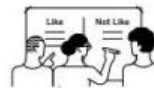
MAKE SOMETHING REAL / IT'S LIKE, IT'S NOT LIKE

- 


**1. Split the group into teams**

Split into teams of two or three, and ask each team to select an idea they want to focus on. Multiple teams can work on the same idea or different ideas at the same time.
- 

**2. Select an idea**

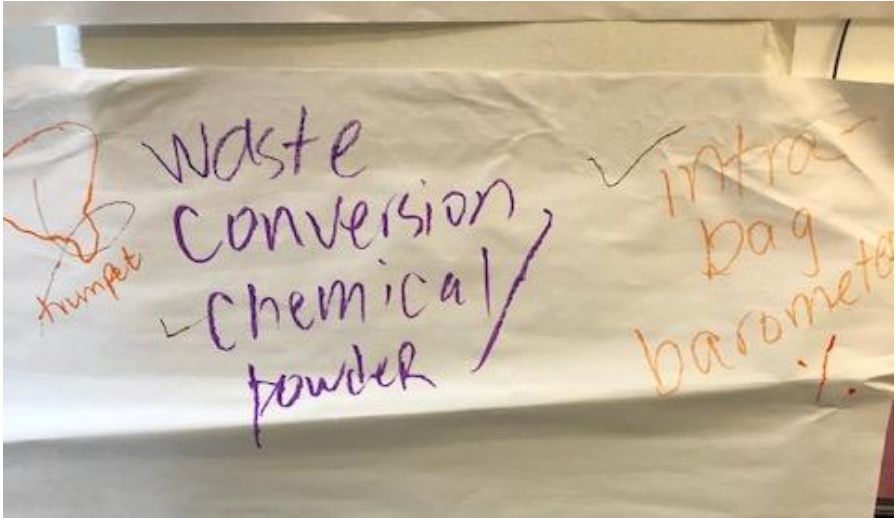
Each team should write their idea's name on the top of a piece of paper. Draw a vertical line down the center of the page. Write "It's Like" on the left side of the page and "It's Not Like" on the right side of the page.
- 

**3. Share what is similar or different**

Ask the team to discuss other ideas related to their idea. If the idea is similar, write it in the "It's Like" column. Dissimilar ideas are written in the "It's Not Like" column. "Not Likes" are just as powerful as "Likes," because they provide concrete examples for your team.
- 

**4. Vote for the best**

Ask each team to vote on the best "Likes" and "Not Likes" and write down the number of votes. Get back together into your entire group and write your "Likes" and "Not Likes" for your ideas on a clean sheet of paper. Post these up for reference when talking about your ideas in the future.



# FlexC



## Get Visual

Incorporating drawing, sculpting, and building into the Ideation phase can unlock all kinds of innovative solutions.

A typical IDEO.org Brainstorm (p. 94) or synthesis session is a flurry of charts, drawings, cartoons, and words. Even though some people are naturally more visual and will express themselves easily through pictures, everyone can benefit from thinking visually. Getting visual makes ideas more tangible, and helps clarify your thoughts for your team. Even a super low-resolution drawing of an idea will help others understand and build upon it. And don't limit your visual thinking to just pictures. Sculpt, build, or Collage (p. 61)—anything that helps get your ideas out!

### STEPS

#### TIME

Throughout the entire process

#### DIFFICULTY

Easy

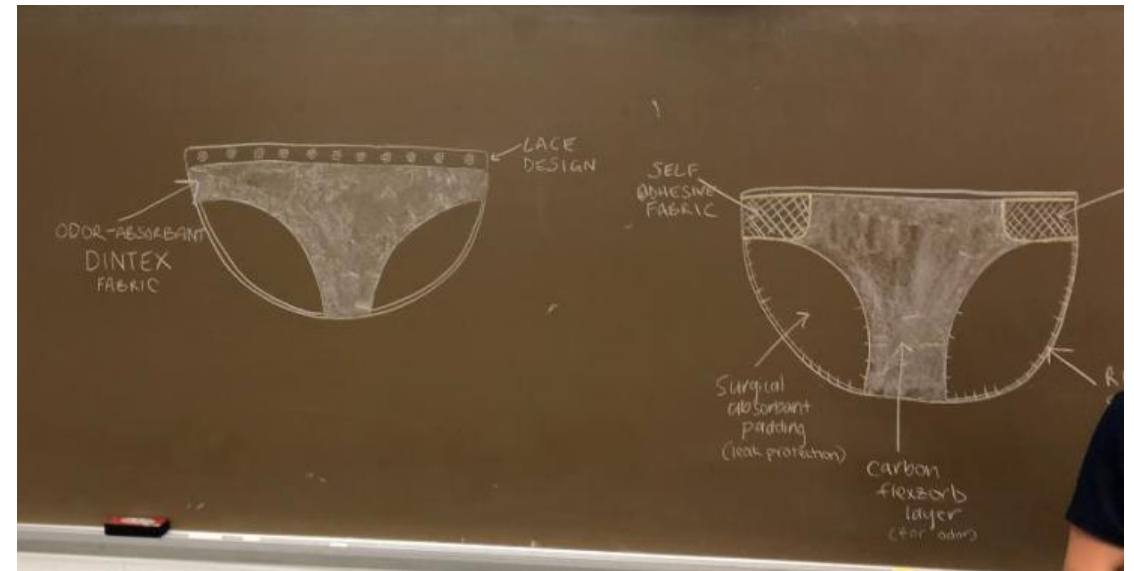
#### WHAT YOU'LL NEED

Pen, paper, notebook, art supplies

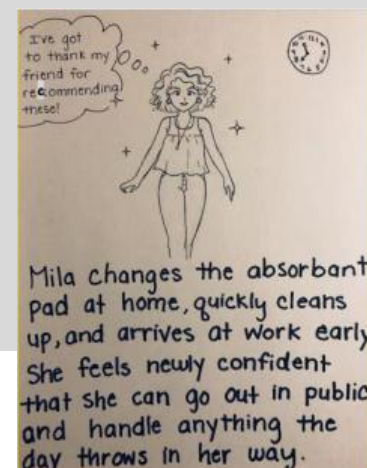
#### PARTICIPANTS

Design team

- 01** | This is more of a general approach than a one-off activity, so always keep Post-its, paper, and pens handy in case the urge strikes to draw, graph, chart, or make.
- 02** | Drawings may need a bit of additional explanation, so take time to talk through your visuals with the team.
- 03** | If you're having trouble explaining an idea, consider drawing it. You'll be surprised at how quickly it comes into focus.



# FlexC: Mid-semester Storyboard



# Prototype

Time to get building!



Prototyping allows designers to test the feasibility of their designs. In this stage, you will build real life, low fidelity, models of your solution. Design Thinking emphasizes starting with a low-fidelity prototype as it allows you to quickly and cheaply test and improve your design.

Design Thinking for Health







Prototyping allows designers to test the feasibility of their designs. In this stage, you will build real life, low fidelity, models of your solution. Design Thinking emphasizes starting with a low-fidelity prototype as it allows you to quickly and cheaply test and improve your design.

Watch this video first to learn about Prototype (4:08).

To learn more about Prototype, Watch, Read, Listen and Do!

01

WATCH

Watch the videos to see what is possible

(83:39 min)

02

READ

Read the selected materials to solidify your knowledge

(40 min)

03

LISTEN

Listen to hear stories about design thinking in practice

(12:27 min)

04

DO

Do the selected activities to show yourself that you can DO this!

(2 hrs 45 min)



# FlexC



## Rapid Prototyping

Build your prototypes quickly, share them immediately, keep learning.

### STATS

#### Suggested Time

120 Minutes

#### Level of Difficulty

Hard

#### Materials Needed

Pens, paper, supplies

#### Participants

Design team

### PROCESS PHASE



INSPIRATION

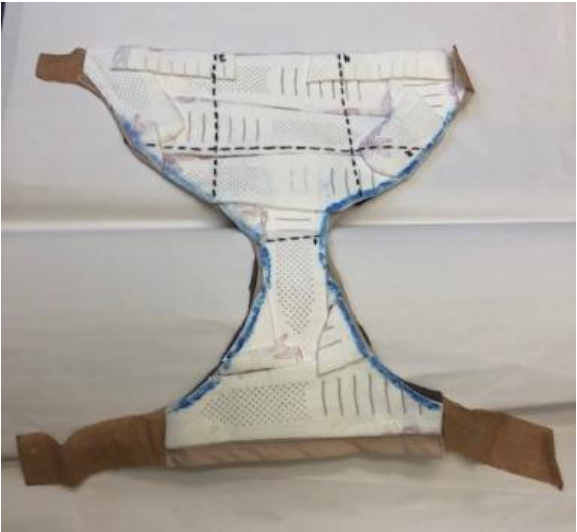
IDEATION

IMPLEMENTATION

For human-centered designers, Rapid Prototyping is an incredibly effective way to make ideas tangible, to learn through making, and to quickly get key feedback from the people you're designing for. Because prototypes are meant only to convey an idea—not to be perfect—you can quickly move through a variety of iterations, building on what you've learned from the people you're designing for. Rapid Prototyping makes sure that you're building only enough to test your idea, and that you're right back in there making it better once you've gotten the feedback you need.

### STEPS

- 01 | Once you've Determined What to Prototype, the time has come to build it.
- 02 | You can make any number of types of prototypes: Storyboards, Role Plays, models, mock-ups. The goal here is to make something tangible that conveys the idea you want to test. No need to make it perfect, just make it good enough to get the idea across.
- 03 | Now take your prototype out and test it with people you're designing for. Put it in their hands and ask them what they make of it. Make sure to Get Feedback.
- 04 | Here is where you can now Integrate Feedback and Iterate. Once you've quickly built another prototype you'll do it all over again until it's just right.



# Test



Test, Re-test, Repeat.

This is an iterative process. In this stage, designers test (and retest) their solution on users. You must continually refine your solution based on user feedback and further insights gained.

Design Thinking for Health





This is an iterative process. In this stage, designers test (and retest) their solution on users. You must continually refine your solution based on user feedback and further insights gained.

Watch this video first to learn about Test (4:17).

To learn more about Test, Watch, Read, Listen and Do!

01

WATCH

Watch the videos to see what is possible

(17:58 min)

02

READ

Read the selected materials to solidify your knowledge

(19 min)

03

LISTEN

Listen to hear stories about design thinking in practice

(12:37 min)

04

DO

Do the selected activities to show yourself that you can DO this!

(3 hrs)

# FlexC



## Live Prototyping

## STATS

**Suggested Time**

A few days to multiple weeks

### Level of Difficulty

Hard

### Materials Needed

Space, staff, permits, or whatever it takes to run your solution in real market conditions

## Participants

Design team, key partners,  
additional staff

### PROCESS PHASE



INSPIRATION

## IDEATION

## IMPLEMENTATION

## STEPS

- 01 The first thing to do is to determine what it is you want to test in your Live Prototype. It could be the way that people find out about your solution or how your service will run or how your distribution model works. For example, will you be running a business out of a kiosk for a week to test a channel strategy?
- 02 Once you've decided on what you're testing, sort out the logistics of your Live Prototype. Do you need a physical space, additional staff, uniforms, a permit, or anything else?
- 03 If you have the capacity, think about running a few Live Prototypes at once. This will allow you to test a variety of ideas quickly, and see how they work together, which may also be important
- 04 Never stop iterating. If something went wrong on Day 1, try a new approach on Day 2. Live Prototypes are all about learning quickly, iterating on the fly, and pushing your solution closer and closer to the real thing.
- 05 As always, capture feedback from the people you're designing for.



## 1. Feedback Capture Grid



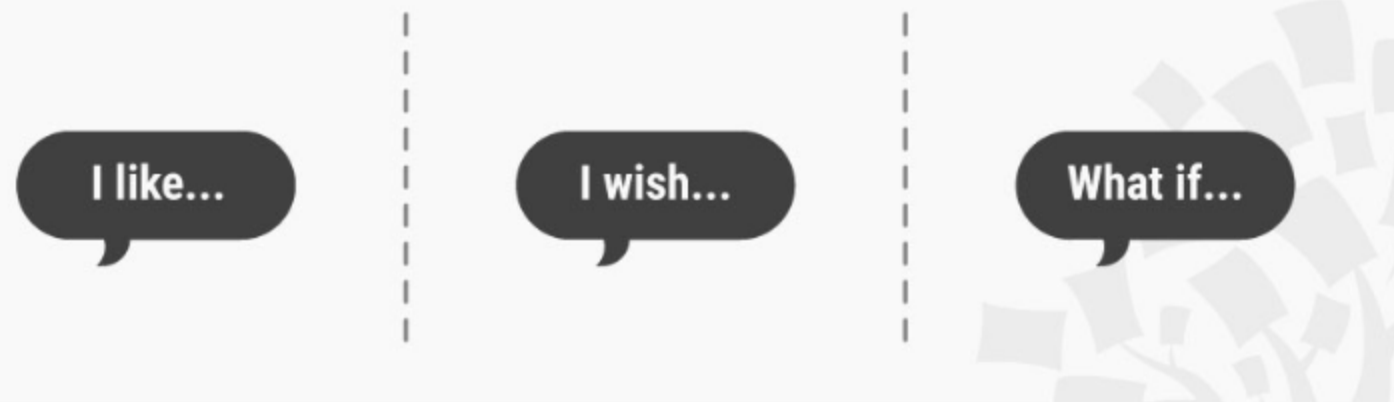
INTERACTION DESIGN  
FOUNDATION

INTERACTION-DESIGN.ORG

Author/Copyright holder: Teo Yu Siang and [Interaction Design Foundation](https://www.interaction-design.org). Copyright terms and licence: CC BY-NC-SA 3.0



## 2. I Like, I Wish, What If



INTERACTION DESIGN  
FOUNDATION

INTERACTION-DESIGN.ORG

Author/Copyright holder: Teo Yu Siang and Interaction Design Foundation. Copyright terms and licence: CC BY-NC-SA 3.0

Like the “Feedback Capture Grid” method, the “I Like, I Wish, What If” method provides a structure from which you can collect feedback from your users. Quite simply, the “I Like, I Wish, What If” method invites the user (or your team-mates, during a discussion session) to provide open feedback by coming up with three kinds of statements.

# FlexC




**FlexC**  
Get back to your life




**FlexC**  
Get back to your life


Imagine being too afraid to leave your home...




### The Problem



Over 3 million patients with IBD



74% of patient report an episode of bowel incontinence



Decreased quality of life

### Cutting-Edge Textile Technology



### SO IS IT A DIAPER?



**ADULT DIAPERS**

- Bulky
- Crinkly, loud
- Non-odor containing
- Medical design



**FLEXC**

- Form-fitting, sleek
- Silent, easy to change
- Absorbs and contains odor
- Various stylish designs

### Comparables

PRODUCT	ABSORBS URINE	FORM-FITTING	CUSTOMIZABLE	ODOR CONTAINING	ABSORBS STOOL
Always Discreet Pull-Up	✓				
Confitex	✓	✓			
Speax	✓	✓	✓		
FlexC	✓	✓	✓	✓	✓

### Future Iterations



**CROHN'S & COLITIS FOUNDATION**

 **IMPROVECARENOW™**

## Case Study: A Poem

'Twas a sunny afternoon, the clock just striking four  
 Students sauntered into class, all strangers heretofore  
 Up and down, and side to side, the chalkboard overflowed  
 With healthcare topics to consider, our eyes all now aglow  
 We self-selected into groups, but they were all lopsided  
 To even the asymmetry, **my team** was then decided  
 Was it chance, luck, or maybe fate that brought us four together?  
 Likely we will never know, but soon we embarked on our endeavor  
*Transparency of healthcare costs* originally was slated  
 But far too plump this topic was, thus, it, we abrogated  
 Becca's an accelerated nursing student, her mind always ablaze  
 At Pennsy's cardiac cath lab, Ashley spends her days  
 Emily is a nursing student, but you'll also find her in the pool  
 And as for me, I'm an oncology nurse, and toiling in grad school  
 Over to the side we sat, pondering fresh topics as a group  
 And suddenly, in a eureka moment, we went ahead with poop!  
 "I have Crohn's disease," Becca said. "It's a population in need"  
 And just like that, on IBD we settled, planted was the proverbial seed  
 Above all, to **empathize**, our stakeholders we sought out  
 First there was an ostomy nurse, and IBD she knew all about  
 Body image, hernias, social media pressures galore  
 Troubles of IBD-ostomy patients were difficult to ignore  
 We then asked friends with IBD to share afflictions of their disease  
 Sparse support groups and bowel accidents generated unease  
 In stepping into others' shoes, a **problem** became clear  
 Urgency and incontinence were causing intense fear  
 Belly grumbling, no john in sight, what if there's an urge?  
 In that moment, undeniably, the problem did emerge  
 Distilling the information, the problem we then **defined**  
 Active folks with IBD, anxious and ashamed, running out of time  
 To make it to the bathroom before there's a mishap  
 So it was time to brainstorm this problem we'd attack  
 As we began to **ideate**, some thoughts came into view  
 An intestinal barometer to warn of number two  
 Or what about a solution built into a mobile app  
 With bathroom sites listed in an interactive map?  
 Maybe you needn't worry about making it to the loo  
 With absorbent panties, to anxiety, say too-da-loo  
 Then we asked our stakeholders which idea they liked best  
 Bowel incontinence undies, they said, and history were the rest  
 At Penn's Materials Library, our **prototype** first saw light  
 Textile swatches, big and small, all to our delight  
 First we'd make an inner shell of which you could dispose  
 For leak protection it would serve, no mucking up of clothes  
 We used sanitary pads to simulate absorption of high grade  
 And with Flexsorb, made of charcoal, many smells you could blockade  
 An outer shell made of Dintex could be worn on repeat

Customizable and waterproof, and, of course, discreet  
 For Flexsorb we subbed felt; for Dintex, stretchy underwear  
 A low-fidelity prototype, no matter, because it still had flair  
 To put our product to the **test**, we made some brownie mix  
 Peers surveyed our underwear and shared details we could fix  
 How to roll the pad up was a mystery, we were told  
 Hence we drew lines, so, it, like origami, you could fold  
 Our IBD friends also said, "Where do you trash the soiled inner shell?"  
 Thus we repurposed the outer packaging—in it the mess you could dispel  
 At last we made our pitch, and put in our two cents  
 But, oh, it isn't over, the process must recommence  
 Because with innovation, iteration is a spree  
 Until the time you can best serve your constituency  
 Design thinking is a process, so if again we rendezvous  
 We can revisit our topic, and our magnum opus, again pursue

-Lizzie Dietzek

## Meet The Team



**Becca Lipstein**

Accelerated Nursing Student



**Emily Layne**

Undergraduate Nursing Student



**Lizzie Dietzek**

BSN, RN, BMTN  
Graduate Nursing Student



**Ashley Niu**

BSN, RN-BC, CCRN  
Graduate Nursing Student

# Student Comments

*"I have found myself believing that years of traditional schooling, and even nursing school, have "driven out the creativity" in me. However, this class, along with my participation in a recent nursing hackathon, have proven me otherwise."*

*"This class was far from my school and major, yet I'm so glad to have learned many new things from it. I had a great time challenging myself with new ways of innovative thinking, and it was great to explore this area and get a taste of what it's like."*

*"I loved this class! I was not sure going into the class, but I really felt that it helped me to think more broadly about my career and how innovation fits into healthcare. THANK YOU so much for a great semester! Really eye-opening and mind-expanding!"*

*"I loved this class, one of my favorites throughout my whole time at Penn"*





# Design Thinking for Health Platform

## Additional Resources

### Watch

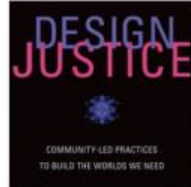


The Art of Innovation

GUY KAWASAKI

[LEARN MORE](#)

### Read



Design Justice

SASHA COSTANZA-CHOCK

An exploration of how design might be led by marginalized communities, dismantle structural inequality, and advance collective liberation and ecological survival.

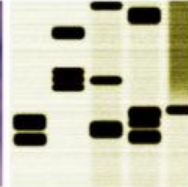
[LEARN MORE](#)



"What innovation and design resources, courses, certificates or fellowships exist today for nurses?"

DEBBIE GREGORY, DNP, RN

[LEARN MORE](#)



The Innovator's DNA  
HARVARD BUSINESS REVIEW

"How do I find innovative people for my organization? And how can I become more innovative myself?"

[LEARN MORE](#)

### Listen



At the Core of Care  
PENNSYLVANIA ACTION COALITION

At the Core of Care shares the incredible stories of nurses in Pennsylvania and the people that they help. Learn about innovative ways that nurses are making a difference in so many lives every day.

[LEARN MORE](#)



See you Now Podcast

[LEARN MORE](#)



AmplifyNursing Podcast

[LEARN MORE](#)

### Do

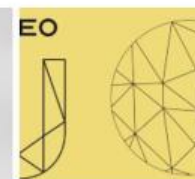


Equity-Centered Community Design Field Guide

CREATIVE REACTION LAB

Systems of oppression, inequalities and inequities are by design. Should we use design to dismantle them?

[LEARN MORE](#)



IDEO U

Learn IDEO's approach to design thinking and creative leadership through IDEO U—an online school that equips individuals with the tools and mindsets necessary to ignite creative confidence and tackle complex challenges.

[LEARN MORE](#)



Design Thinking Bootleg

STANFORD UNIVERSITY

Some of dschool's most-used tools in a convenient deck, developed by designers from around the world. (Creative Commons 4.0 CC-BY-NC-SA International)

[LEARN MORE](#)

# Design Thinking for Health Platform

## Who is this course for?

No matter your background or experience, this course is for you. We welcome clinical nurses, nurse researchers, students, administrators, policymakers and more!



### **Clinicians**

Use these modules to help bring your idea out from the bedside. Share it with your colleagues in the hospital, the community or wherever you practice!



### **Educators**

Use the entire course or pull from different modules to teach the next generation of nurse innovators how design thinking can create innovative solutions!

# Design Thinking for Health Platform

## Join Our Nursing Innovation Community

Be the first to learn about any updates to the site, events in your area, or upcoming developments in nursing innovation!

Email Address

---

**SIGN UP**

**Are you an aspiring nursing innovator interested in connecting with other nurse innovators? Have you created an innovation and would like to share it with our community? Fill out the form below to tell us all about it! Feel free to share a bit about yourself and your interests in innovation.**

# Penn Nursing Innovation Accelerator

*The Penn Nursing Innovation Accelerator provides funding to assist students and faculty with the creation and testing of early stage solutions to improve health and health care outcomes with a priority on populations of greatest need.*

The Penn Nursing Innovation Accelerator will provide:

- Up to **\$10K** for research and development of a proposed innovation idea that has an existing prototype which has been minimally tested.
- Mentorship & coaching will be provided by members of the Penn Innovation & Entrepreneurship ecosystem.
- Educational opportunities related to innovation and entrepreneurship will be provided.



## Accelerate *your* Innovative Solution



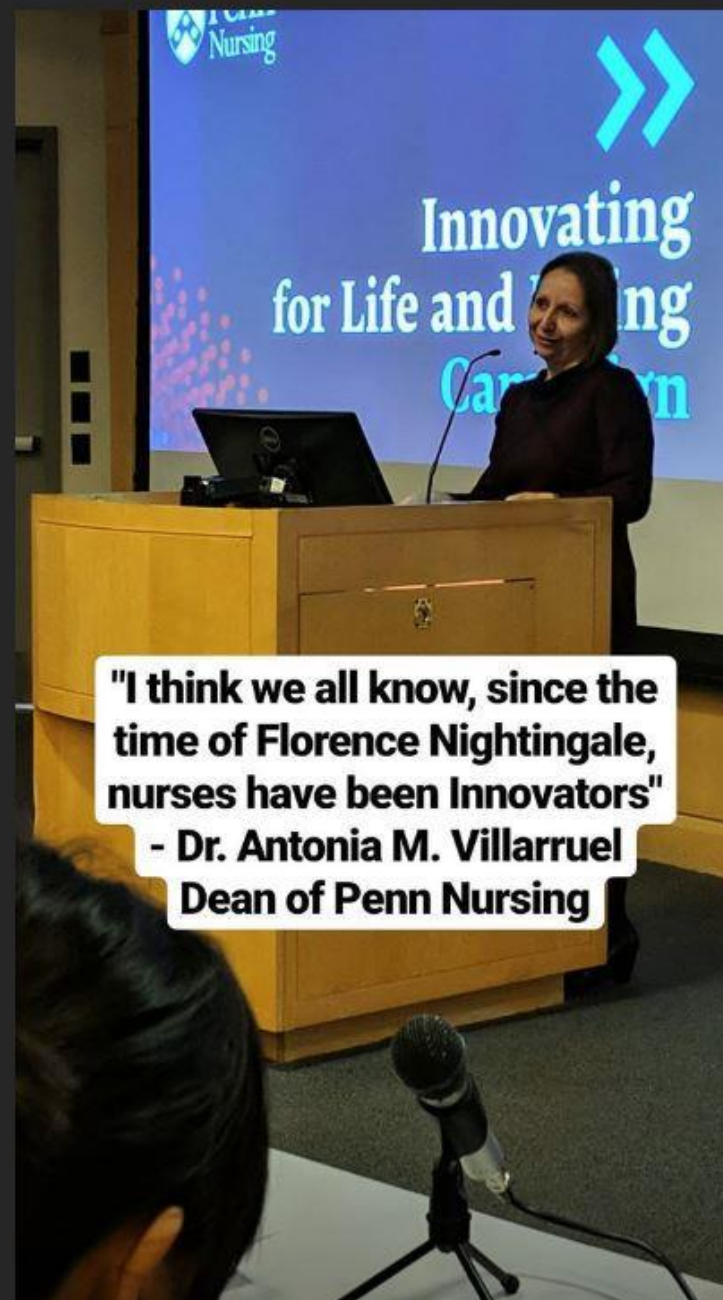
@uofpenn

@pennnursing

#2020yearofthenurseandmidwife

## IT'S PITCH DAY!

We're watching Penn Nursing students and faculty pitch their ideas to improve health and health care outcomes.



**"I think we all know, since the time of Florence Nightingale, nurses have been Innovators"**

**- Dr. Antonia M. Villarruel  
Dean of Penn Nursing**



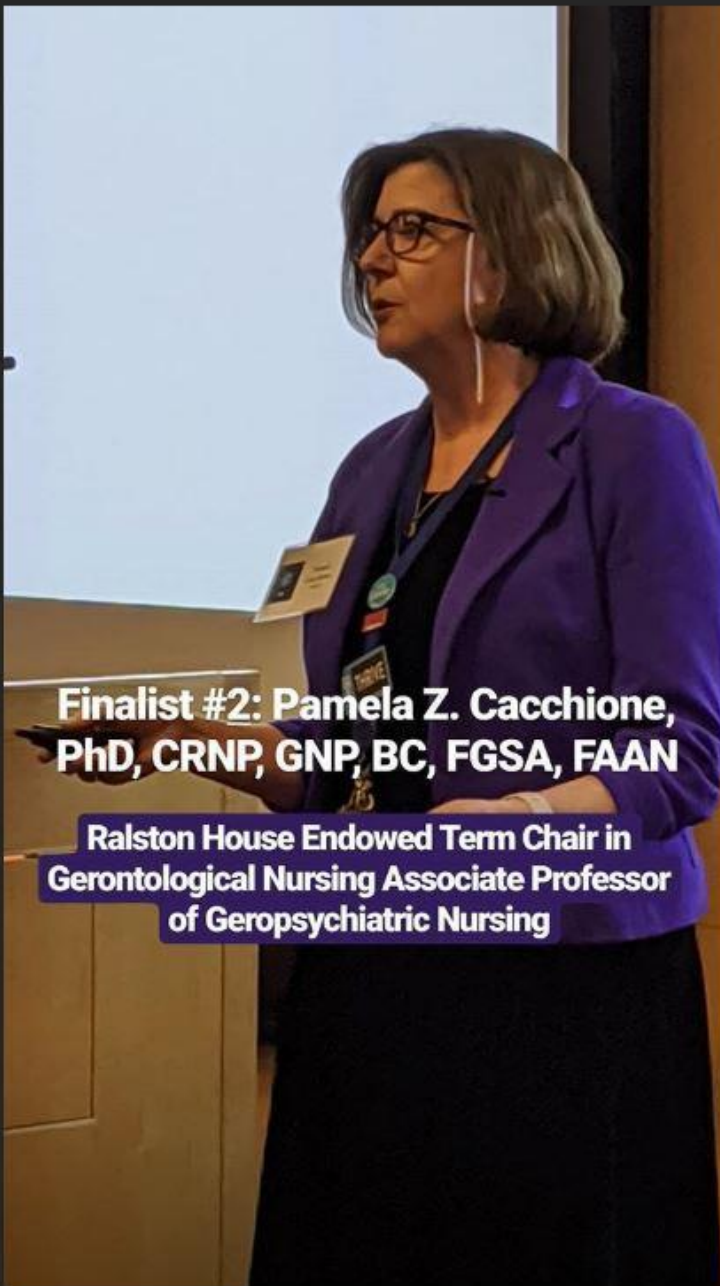


**Finalist #1: Anthony Scarpone-Lambert**

**Penn Nursing undergraduate and Hillman Scholar**



**Inspired by his Nonna, Scarpone-Lambert pitches Nonna: a personalized health care environment**



**Finalist #2: Pamela Z. Cacchione,  
PhD, CRNP, GNP, BC, FGSA, FAAN**

**Ralston House Endowed Term Chair in  
Gerontological Nursing Associate Professor  
of Geropsychiatric Nursing**



**Inspired by her brother,  
Dr. Cacchione pitches  
specialized heart failure  
monitoring socks**



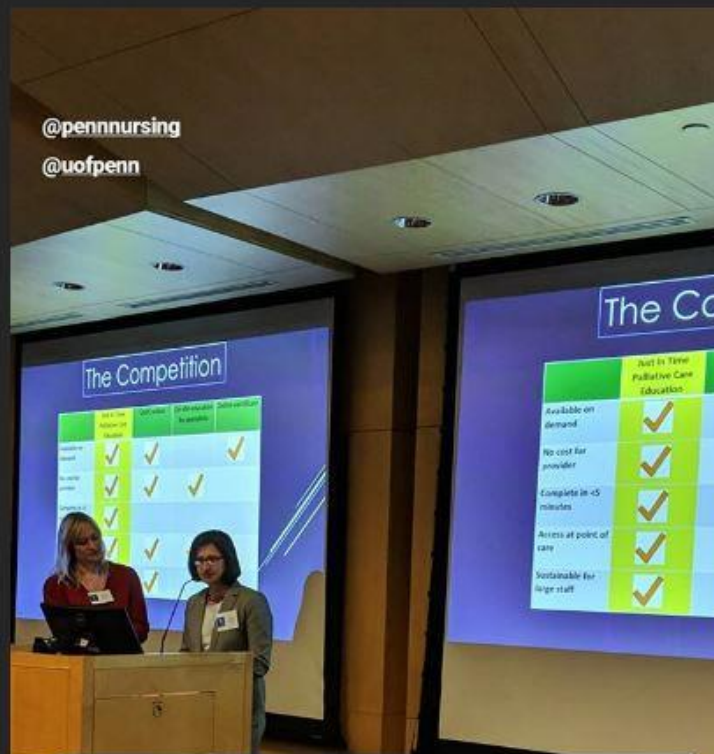


**Finalists #2 & #3:  
Carrie Doherty, MSN,  
AGACNP, BC, AACC**

Advanced Senior Lecturer A for the Adult  
Gerontology Acute Care NO Program and  
Program Coordinator of the Palliative Care  
Minor at Penn Nursing

**Rachel Klinedinst,  
DNO, CRNP, ACHPN**

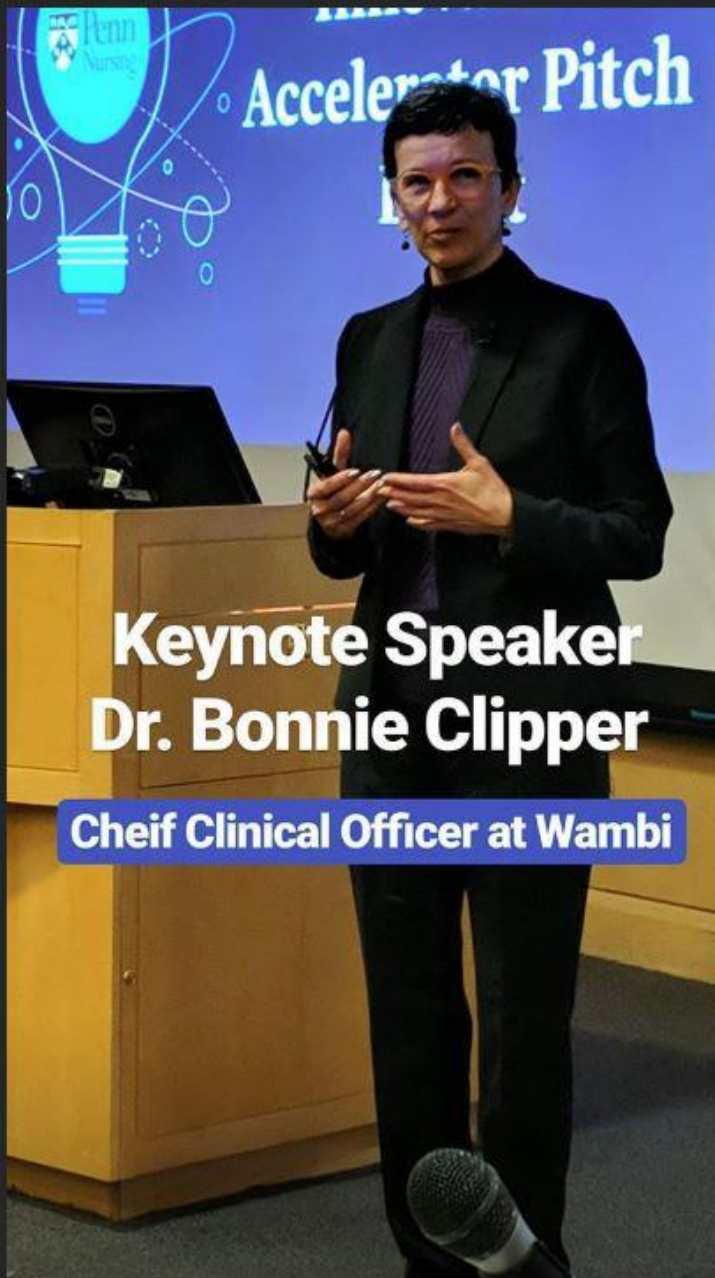
Nurse Practitioner and Advance Practice  
Manager for Palliative Care at HUP and Penn  
Presbyterian Medical Center



**The team pitches Just  
in Time Palliative Care,  
inspired by their  
experience working  
with patients**



powerofpenn • Follow 19h

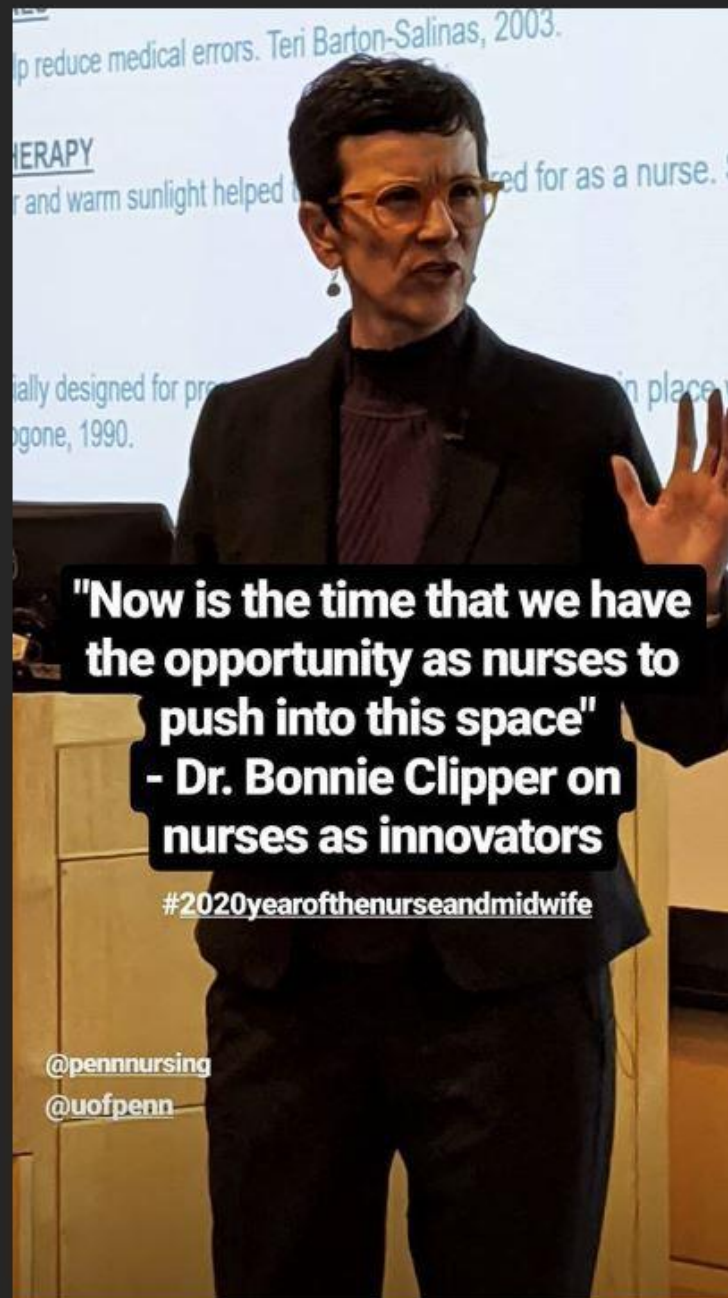


**Keynote Speaker  
Dr. Bonnie Clipper**

**Cheif Clinical Officer at Wambi**



powerofpenn • Follow 19h



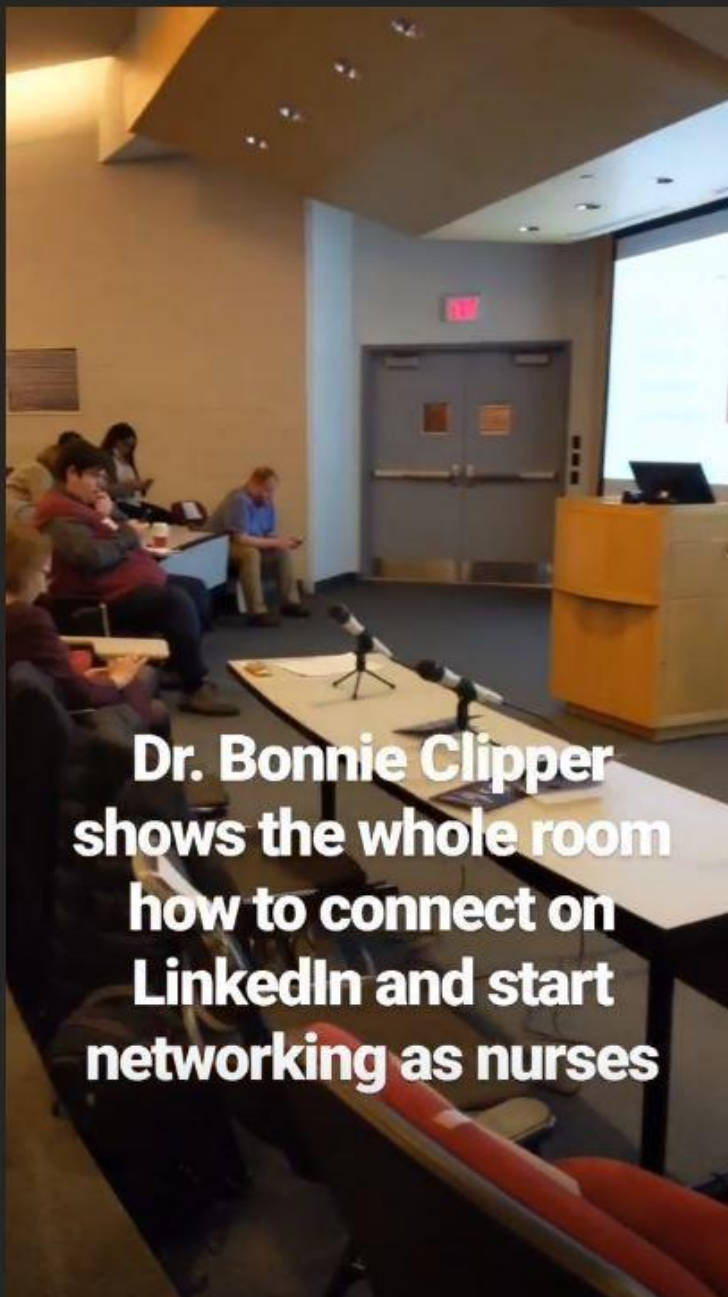
**"Now is the time that we have  
the opportunity as nurses to  
push into this space"  
- Dr. Bonnie Clipper on  
nurses as innovators**

**#2020yearofthenurseandmidwife**

@pennnursing

@uofpenn





**Dr. Bonnie Clipper  
shows the whole room  
how to connect on  
LinkedIn and start  
networking as nurses**

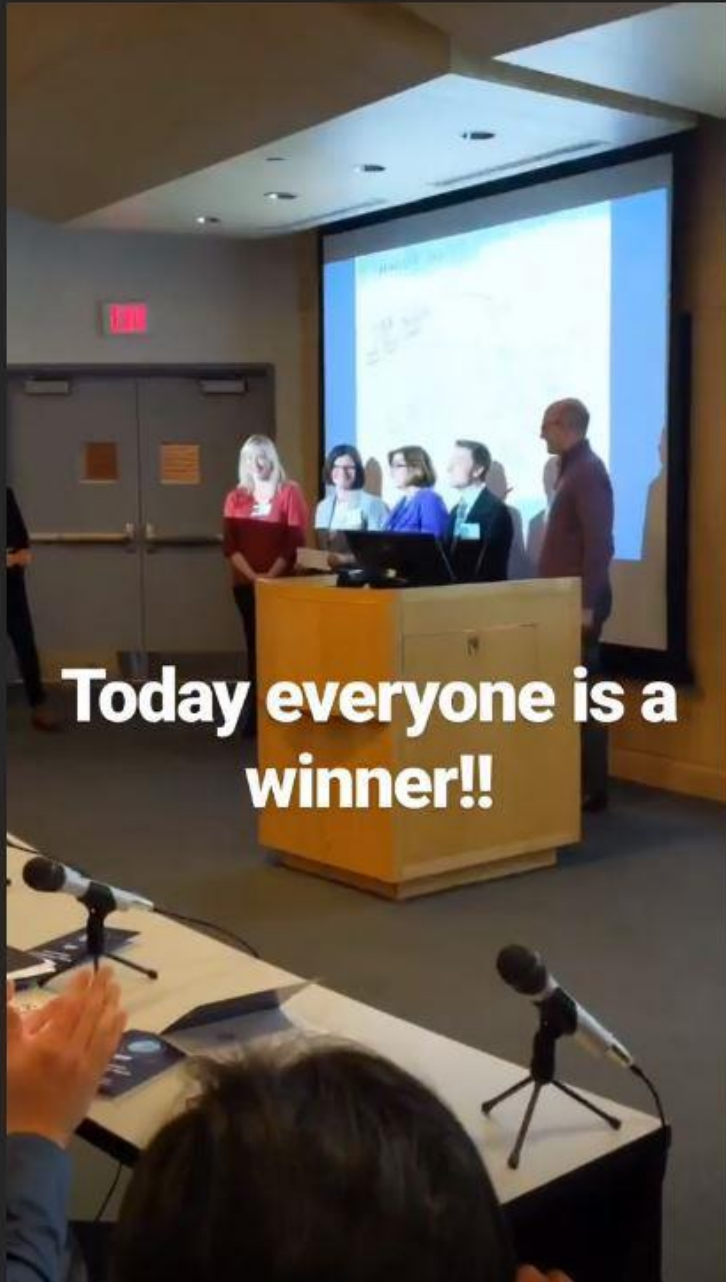


**The judges have  
returned!!**





powerofpenn • Follow 18h



**Today everyone is a winner!!**



powerofpenn • Follow 18h



**The judges have awarded each finalist funding for their innovative ideas**

@pennnursing

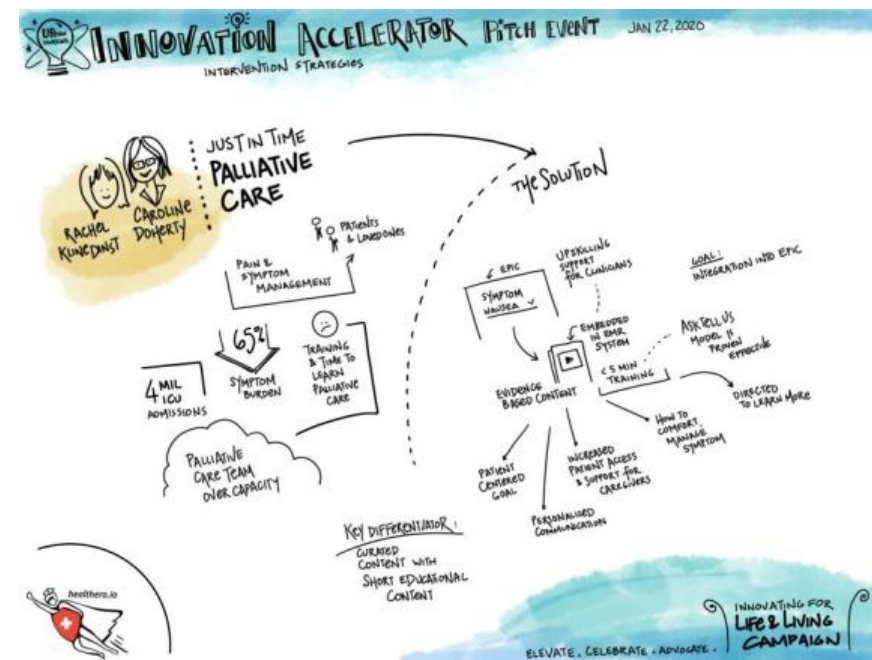
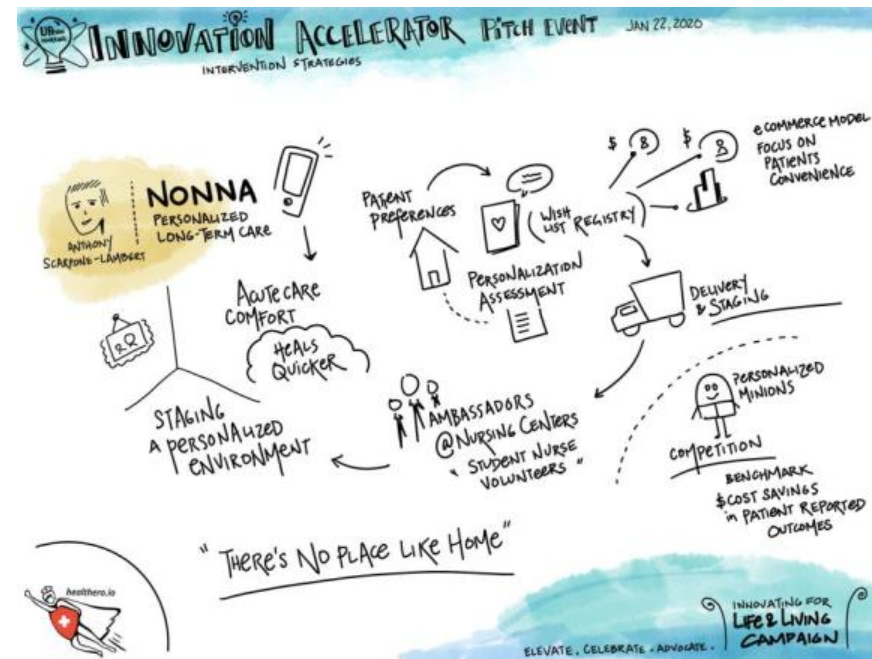
@uofpenn

# Innovation Accelerator





# Innovation Accelerator



# Nurse Hackathon



**Marion Leary** @marionleary · Nov 17, 2019

Great energy and great people breed great innovation! Good luck to all the [#SONSIEL](#) [#JnJ](#) [#NurseHackathon](#) teams! [#nursinginnovation](#) @JNJNursing @NurseInnovation



**Marion Leary** @marionleary · Nov 17, 2019

I'm just sayin', two of the three winners out of 19 teams at the [#SONSIEL](#) [#JnJ](#) [#NurseHackathon](#) include @PennNursing students and @PennMedicine [#nurses](#)! Nursing innovation happens here! Congratulations to them and all the teams! [#PennNursingInnovation](#)





# Nurse Hack for Health



## Nurse Hackathon

**Save the Date** – September 11-13, 2020

📍 New Brunswick, NJ

Registration opens on May 12, 2020

Sponsored by *Johnson & Johnson*



[https://www.youtube.com/watch?time\\_continue=4&v=IILStF55wDg&feature=emb\\_logo](https://www.youtube.com/watch?time_continue=4&v=IILStF55wDg&feature=emb_logo)

#NurseHack4Health



# 5 Hackathon Challenge Areas

**CHALLENGE:  
TECHNOLOGY /  
REMOTE PATIENT  
MONITORING - ACUTE  
CARE**

Patients in the hospital are becoming more acutely ill by the day during this crisis. How do we integrate technology to improve workflows and overall care, and ensure providers are properly equipped to handle?

**CHALLENGE:  
TECHNOLOGY /  
REMOTE PATIENT  
MONITORING - HOME  
SETTING**

With healthcare delivery transitioning to the home setting, accelerated by COVID and stay-at-home standards how can technology improve access, efficiency and overall quality of care?

**CHALLENGE: PATIENT  
TRANSFER, HAND-  
OFF, & HUDDLE**

Key patient data is exchanged at multiple points during a patient's stay at a healthcare facility, resulting in many inefficiencies. How can technology help to optimize data utilization and ensure vital info is not overlooked?

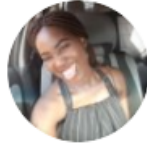
**CHALLENGE: DATA &  
REPORTING**

Frontline staff are asked to track copious amounts of data and patient information within workflows; current tools are inefficient. How can tech help providers manage data and improve interoperability across platforms?

**CHALLENGE:  
RESILIENCY AND  
SELF-CARE**

During this crisis, frontline health workers are stressed and being asked to do things no one was prepared for. How can technology support staff self-care within their practice and everyday lives?

# Design Thinking: IDEO



**Opeyemi** @ope\_boyyyy · May 15

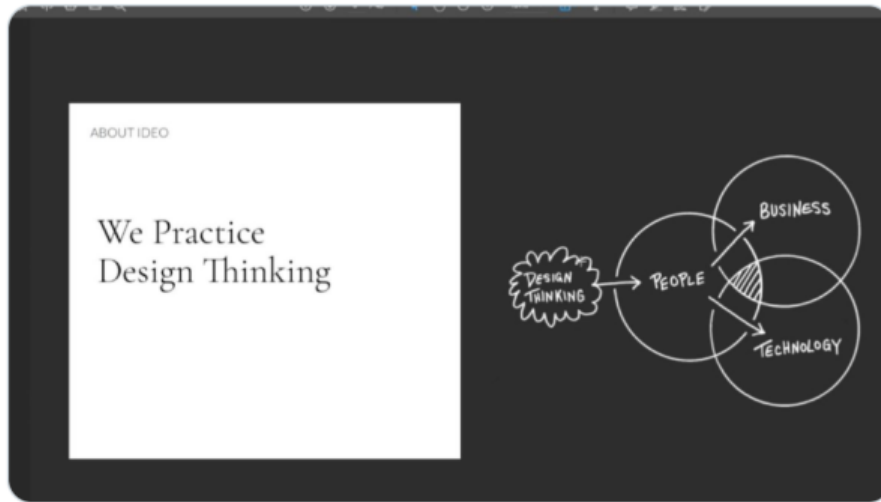
"Nurses must rise up and redesign the future of healthcare."

@dennisjboyle on Design Thinking [#nursehack4health](#)



**Marion Leary MSN MPH RN** @marionleary · May 13

Thx to @ideo for doing a quick [#designthinking](#) session for our [#NurseHack4Health](#) attendees tonight. If you missed it, we are doing another session tomorrow night, same time 7p EST. Hackers, check your email for the invite!



SONSIEL and 5 others



**Mary Lou Ackerman** @mackerman123 · May 15

The whole world is hacking right now! @dennisjboyle @SONSIEL2 [#NurseHack4Health](#)



[#NurseHack4Health](#)

# Design Thinking: Empathy



**Briana White MSN, RN, CPN, CCRN-K, CNL** @Innovatio... · May 15

Alright [#nurse](#) [#innovators](#) I'm phoning friends for our team 19 at [#NurseHack4Health](#)... what are the issues you want us to solve for [#pediatric](#) patients and [#COVID19](#) ? @JennifferRn and I want to know "what keeps you up at night?"



2



1



6



**Sheila Caldwell** @SCaldwell7201 · May 16

Share your perspective.... [@NJSNurses](#) [@NJSSNA1](#) [@ANANursingWorld](#) [@schoolnurses](#) [#NurseHack4Health](#)



**Rachael Acker** @rachaelacker · May 16

One weekend. 5 challenges. Almost 1000 participants and 30 virtual cross functional teams. Support this community of health hero's by sharing your perspective of what's important to solve: [healthero.typeform.com/to/ygaUIb](https://healthero.typeform.com/to/ygaUIb) [#NurseHack4Health](#)



**Robin Cogan** @RobinCogan · May 16

Calling [@schoolnurses](#) [@CoSchoolNurses](#) [@TxSchlNurses](#) [@NJSSNA1](#) [@SNOO\\_RN](#) [@SNOWashington](#) [@INschoolnurse](#) [@fasnchatter](#) [@NHSNA1](#) Starts today, Sat 5/16  
Sharing this immediate opportunity to join [#NurseHack4Health](#) [@SeltzerUribe](#) is creating a [#SchoolNurse](#) team!

[relentlesschoolnurse.com/2020/05/16/the...](https://relentlesschoolnurse.com/2020/05/16/the...)

**"AS SCHOOLS ACROSS THE COUNTRY CONSIDER WHEN TO RE-OPEN, I'M LEADING A [#NURSEHACK4HEALTH](#) TEAM TO EXPLORE WAYS WE CAN LEVERAGE THE CRITICAL ROLE OF SCHOOL NURSES AND PROVIDE INTEGRATED TOOLS THAT CONNECT VALUABLE FRONT LINE INFORMATION ON STUDENT HEALTH WITH LOCAL COMMUNITIES AND PUBLIC HEALTH OFFICIALS"**

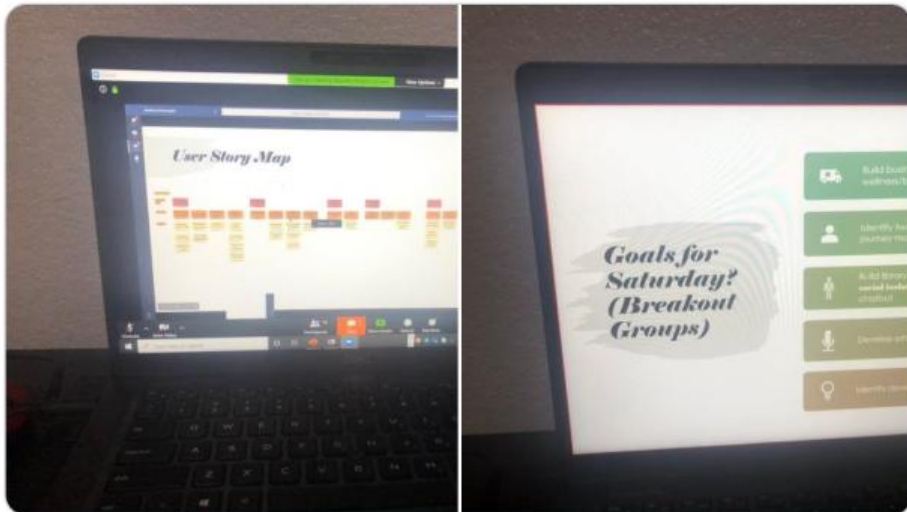
**#NurseHack4Health**

# Design Thinking: Empathy



Serena Bumpus, DNP, RN, NEA-BC  
@SerenaBumpus

Team Lighthouse hacking away to create a tool for [#nurses](#) that reduces emotional isolation and promotes social and emotional connectedness. Nurse resilience is critical to patient care. We want to be the light for you during these dark times. [#NurseHack4Health](#) [#Innovate](#)

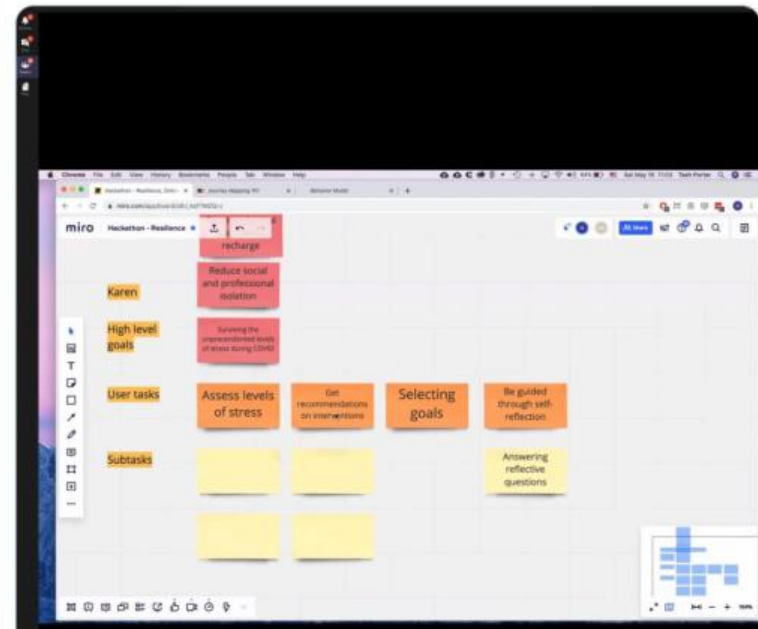


12:22 PM · May 16, 2020 from Texas, USA · Twitter for iPhone



Rob Fraser  
@rdjfraser

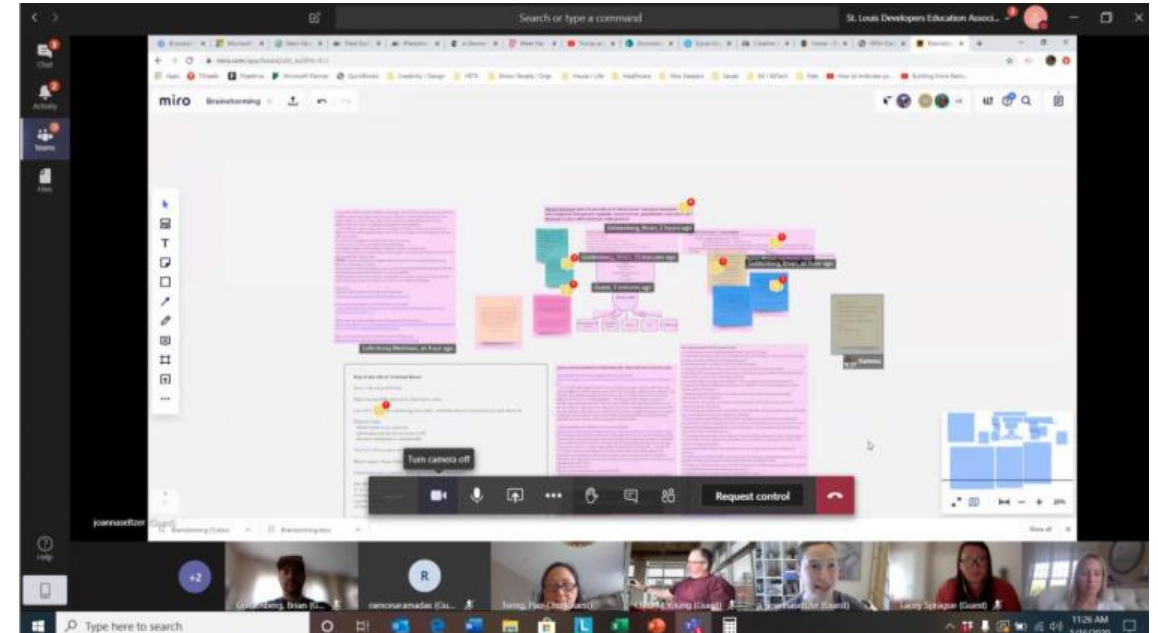
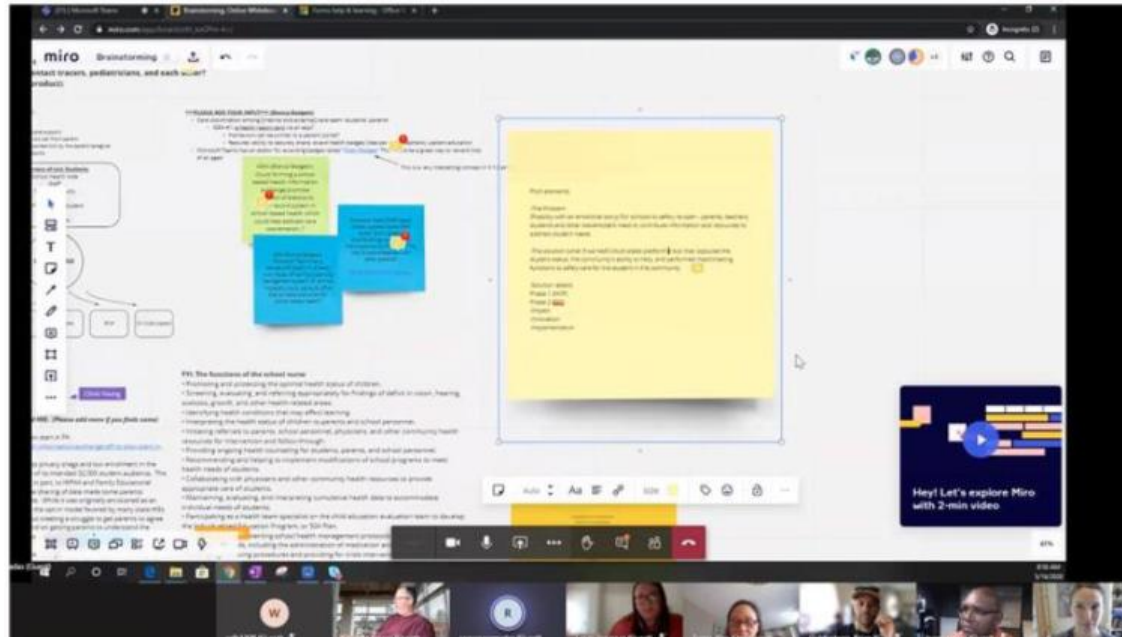
So glad I joined [@Design4AHS](#) design thinking [#VDS2020](#). Learning translating to practice this weekend at [#NurseHack4Health](#) Just did persona and journey mapping work with newly formed team and having a great time!



[#NurseHack4Health](#)



# Design Thinking: Define



#NurseHack4Health



# Design Thinking: Ideate



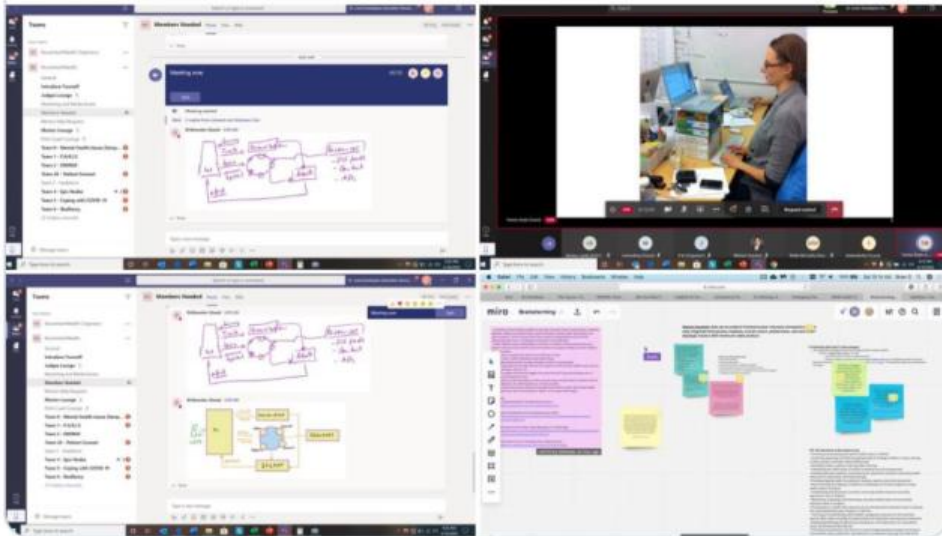
**Marion Leary MSN MPH RN** @marionleary · May 16

What does a virtual [#nurse](#) [#hackathon](#) look like you ask? Here is a great example! Thx for sharing @MSFTMollyRN and [#NurseHack4Health](#)!

**Molly K. McCarthy MBA, RN-BC** @MSFTMollyRN · May 16

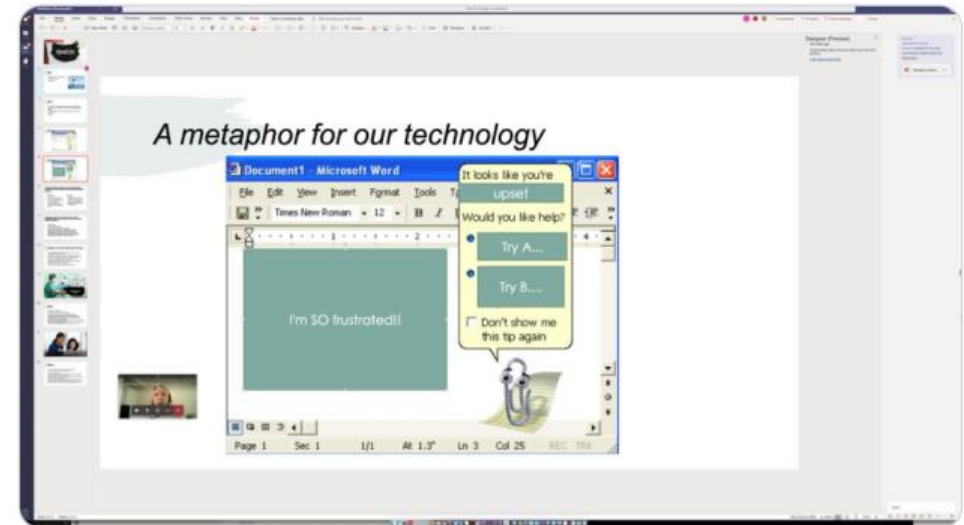
This is my 1st [#virtualhackathon](#) so want to share what it looks like from [#cyberspace](#)! [#NurseHack4Health](#) [#heathgeeks](#) [#Nurses4HIT](#)

[Show this thread](#)



**Rob Fraser**  
@rdjfraser

After a late night, back to [#NursesHack4Health](#) this am with @AlexHarrisRN getting ready to dive back in with [#Team6](#). Having fun with Teams and current @Microsoft product and using old MS tech for an analogy. Is there clippy for teams?



**#NurseHack4Health**

# Design Thinking: Prototype



**Lee Englestone** 🧠💡🚀 @LeeEnglestone · May 17  
Team P.A.R.I.S - QR code activation Patient Augmented Reality Information System [#nursehack4health](#) [#hackathon](#) [#AugmentedReality](#) [#xamarin](#)



**Lee Englestone** 🧠💡🚀 @LeeEnglestone

Team P.A.R.I.S - Bed location. Patient Augmented Reality Information System [#nursehack4health](#) [#hackathon](#) [#AugmentedReality](#) [#xamarin](#)



4:26 AM · May 17, 2020 · Twitter for iPhone

**#NurseHack4Health**

# Design Thinking: Test



**#NurseHack4Health**



# Design Thinking: Pitch Day

**Marion Leary MSN MPH RN** @marionleary · May 17  
Tune in at 3p EST to hear the 5 winning [#NurseHack4Health](#) pitches!  
[bit.ly/3bFKouq](https://bit.ly/3bFKouq)



**NurseHack4Health:**  
**COVID-19 Virtual Hackathon**

**May 15-17, 2020**

Follow Along – [#NurseHack4Health](#)

Presented by    

**Molly K. McCarthy MBA, RN-BC** @MSFTMollyRN · May 17  
[#NurseHack4Health](#) pitches underway—amazing ideas & [#innovations](#) happening this wknd. [#pitchperfect](#)



The collage shows various virtual meeting screens. One screen displays a pitch presentation titled "Solution: Hear Now" with a circular diagram. Another screen shows a pitch presentation titled "EMERGE: AN INTEGRATED REMOTE TEACHING PLATFORM" with a photo of a nurse and a patient. Other screens show participants in a virtual meeting.

**Nurse Innovation** @NurseInnovation · May 17  
[#NurseHack4Health](#) Final [#Team](#) [#Pitches](#) are on!! Tune into today at 3pm ET for the top 5 winners presentations: [bit.ly/3bFKouq](https://bit.ly/3bFKouq)



The screenshot shows a virtual meeting screen with multiple participants in a grid. The screen also displays a pitch presentation with a circular diagram.

**Kathryn Shaffer** @teachingrn · May 17  
It's PITCH DAY. Team 5 wrapped up last night of Day#2 of the [#SONSIEL](#) [#NurseHack4Health](#) on such a high note. Amazing minds coming together for [#NurseHack4Health](#) literally [#virtually](#) coming together from coast-to-coast. [#microsoft](#) platform @JeffCollegeNur



The screenshot shows a virtual meeting screen with multiple participants in a grid. Some participants are waving their hands.

**#NurseHack4Health**

# Design Thinking: Winners

 Johnson & Johnson Nursing  
@JNNursing

From a digital tool to improve telehealth in rural areas, to an app providing nurse-specific mental health strategies. Congratulations to the amazing winning teams in the [#NurseHack4Health: #COVID19](#) Virtual Hackathon, who have blown us away with their innovative solutions!



 Johnson & Johnson Nursing  
@JNNursing

Meet two more of the winning teams from the [#NurseHack4Health: #COVID19](#) Virtual Hackathon - an app to reduce the time spent searching for hospital equipment and a platform for family members to communicate with their loved ones in the hospital. [#NursesChangeLives](#)



 Johnson & Johnson Nursing  
@JNNursing

Meet our final winning team from the [#NurseHack4Health: #COVID19](#) Virtual Hackathon - a digital platform that can help alleviate some of the burden on school [#nurses](#) by leveraging nursing students to help children return to school! An incredible weekend of [#nurse #innovation!](#)



**#NurseHack4Health**

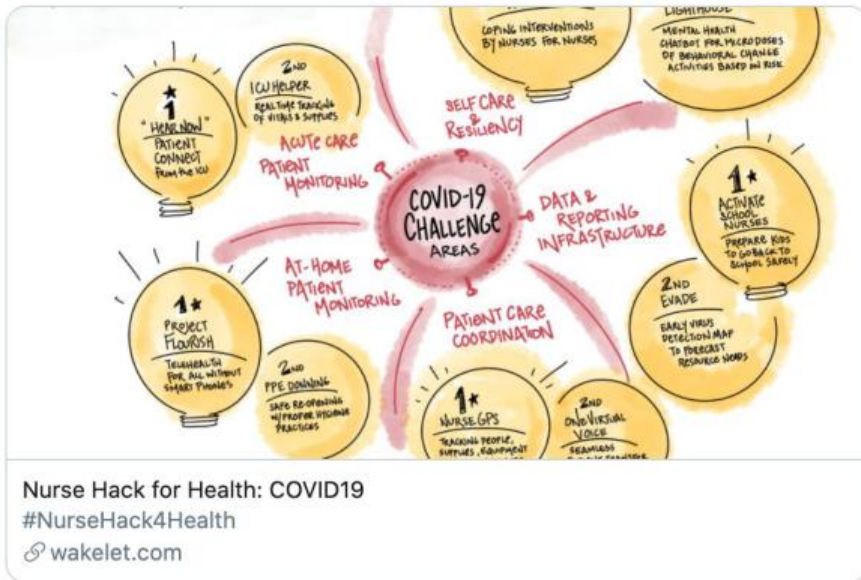


# Design Thinking: Nurse Hack for Health



Marion Leary MSN MPH RN  
@marionleary

If you missed the [#NurseHack4Health](#): COVID19 virtual hackathon, or just want to review the amazing work all of the teams did over the weekend, check out the Twitter achieve here: [wakelet.com/wake/1Kuw5kZfR...](#)  
[@SONSIEL2](#) [@JNJNI Nursing](#) [@Microsoft](#) [@devupconf](#) [#techforgood](#)



Nurse Hack for Health: COVID19  
[#NurseHack4Health](#)  
[wakelet.com](#)



Marion Leary MSN MPH RN @marionleary · May 22

Want to be inspired by [#nurseinnovators](#) doing their thing? Check out the winning pitches from the 1st ever [#NurseHack4Health](#): COVID19 virtual hackathon. [#techforgood](#) [@microsoft](#) [@JNJNI Nursing](#) [@SONSIEL2](#) [@devupconf](#)



[#NurseHack4Health Results!](#)  
[techcommunity.microsoft.com](#)

# Twitter Chat



**Penn Nursing**

**Twitter Chat**  
On Innovation

In honor of Ben Franklin's birthday, join @PennNursing on January 17th from 2-3pm EST as we host our first Nursing Innovation Twitter Chat. Moderated by resident innovation specialist @marionleary, we'll be joined by leaders in the health care innovation field including:

 Pamela Nuss, PhD @PamNussPhD	 Wendy Quinn, PhD @WendyQuinnPhD
 Stephan Butler, PhD @StephanButlerPhD	 Antoinette Novakoff, PhD @AntoinetteNovakoff
 Nancy Valentine, PhD @NancyValentinePhD	 Sarah H. Grey, PhD @SarahHGreyPhD

We'll be asking the biggest, boldest questions. To follow along and participate, follow us on Twitter @PennNursing and use the hashtag #PennNursingInnovation.

January 17th from 2-3pm EST | @PennNursing | #PennNursingInnovation

**Penn Nursing**

**Twitter Chat**  
Design Thinking

Join nursing innovation and design thinking leaders on Twitter, May 2nd 1-2pm EST as they discuss design thinking's human-centered approach to create solutions for health and health care problems.

 Catherine Shi, PhD, RN Assistant Professor & Former Associate Dean The College of Nursing and Innovation @CShiRN	 Kathryn Shaffer, EdD, RN, MN, CNE Assistant Professor & Former Associate Dean The College of Nursing and Innovation @KShafferRN
 Danielle Starn, MSN, RN Nursing Information Specialist @DanielleStarn	 Erica Lewis, PhD, RN Associate Professor The College of Nursing and Innovation @EricaLewisRN
 Michael Ackerman, PhD, RN Breast Cancer Medicine in Healthcare Innovation Program, The Ohio State University College of Nursing @MichaelAckerman	 Ashley Eberhart, MA Design Fellow, James H. McGraw Center for Innovation in Health Care, The Ohio State University College of Nursing @AshEberhart

Hosted by Penn Nursing's Director of Innovation, Marion Leary (@marionleary).

May 2nd from 1-2pm EST | @PennNursing | #PennNursingInnovation

**Penn Nursing**

**Twitter Chat**  
Hackathons

Hackathons: what are they and why should nurses get involved? Join nursing innovation and hackathon experts on Twitter March 5th, 2020, 1-2pm EST as they discuss the ever-growing interest in nurse hackathons.

 Bonnie Clapper, DNP, MA, MBA, RN Chief Clinical Officer, World @BonnieClapperRN	 Roberta Love, MSN, RN President, NNN @RobertaLoveRN
 Bongi Nkomo, MSN, NNP, PHA, RN Advanced Nurse Practitioner, Educator, Healthcare Consultant @BongiNkomo	 Dyann Nadeau, MBA, RN Director for the Center of Innovation in Care Delivery, Massachusetts General Hospital @DyannNadeau

Hosted by Penn Nursing's Director of Innovation, Marion Leary (@marionleary).

March 5th from 1-2pm EST | @PennNursing | #PennNursingInnovation

**Penn Nursing**

**Twitter Chat**  
On Creativity

Join nursing innovation and design thinking leaders on Twitter, July 25th 3-4pm EST as they discuss the use of creativity for solving problems in health and health care.

 Natalie Nuss, PhD University of Pennsylvania and Figure 1 Thinking LLC @NatalieNuss	 Robert Pugh, PhD Business Professor @RJPugh
 Rachel Walker, PhD, RN University of Massachusetts Lowell @RachelWalkerRN	 Joanna Seltzer Uribe, MSN, RN New York University @JoannaUribe

Hosted by Penn Nursing's Director of Innovation, Marion Leary (@marionleary).

July 25th from 3-4pm EST | @PennNursing | #PennNursingInnovation

**Penn Nursing**

**Twitter Chat**  
Using storytelling to innovate how we tackle problems in Health and Healthcare

Join nursing innovation and design thinking leaders on Twitter November 5, 2019, 3-4pm EST as they discuss the use of storytelling for tackling problems in health and health care.

 Theresa Brown, PhD, RN, MN @TheresaBrownRN	 Neil Barshan, PhD @NeilBarshanPhD
 Beth Toner, MSN, RN @BethTonerRN	 Kendra Rantan, PhD, RN @ProfessorRantan
 Pamela Phamichant, MSN @PamPhamichant	 Susan Magness, PhD, RN FAANP, FAAN @SusanMagness

We'll be asking the biggest, boldest questions. To follow along and participate, follow us on Twitter @PennNursing and use the hashtag #PennNursingInnovation.

Hosted by Penn Nursing's Director of Innovation, Marion Leary (@marionleary).

November 5, 2019, 3-4pm EST | @PennNursing | #PennNursingInnovation

**Penn Nursing**

**Twitter Chat**  
Nurse-Led Podcasting

Join nursing innovation and podcasting leaders on Twitter, June 16, 2020 at 1pm EST, as they discuss the topic of nursing led podcasts.

 Tobi Tjornarson, BSN, RN Tobi Talks @TobiTjornarson	 Sarah Henson Hubbard, JD At The Core of Care @SarahHHubbard
 Kris K. Weng, PhD, RN, CPNP-PC Health's Up @KrisWengPhD	 Angela D'Amico, DNP, CRNA Angie's Nursing @AngieD2318
 Shawna Butler, RN, MBA SEE YOU NOW @ShawnaButlerRN	 Dan Weberg, PhD, RN The Handoff @DanWebergRN
 Kathie Carlson, BSN, RN, NE-BC The Nurse Keith Show @NurseKeith	 Erin Pessillo, RN, MSN, PhD Nurses and Hypochondriacs @NursesandHypo

Hosted by Penn Nursing's Director of Innovation, Marion Leary (@marionleary).

June 16, 2020 at 1pm EST | @PennNursing | #PennNursingInnovation

**@PennNursing**  
**#PennNursingInnovation**

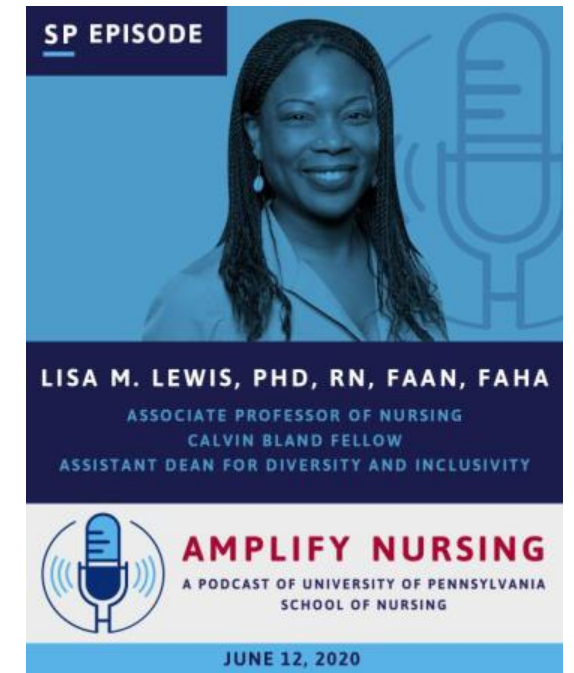
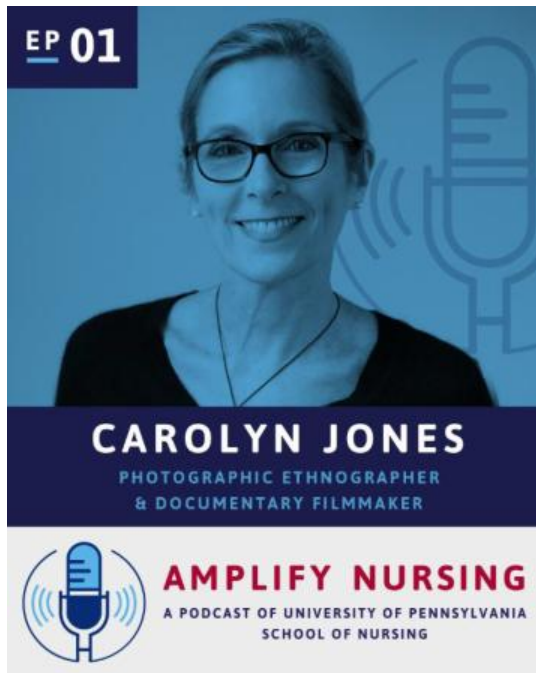


# Story Slam



The Nursing Story Slam is supported through the generosity of Sandy Samberg, Nu'94, GNu'95, and her husband, Joe Samberg.


# AmplifyNursing Podcast



*With support from the Krista and Rich Pinola Fund*



# Podcasts



JOHNSON & JOHNSON  
**SEE  
YOU  
NOW**  
ANA

## See You Now Podcast

On a daily basis, we trust nurses with billions of dollars of equipment, critical procedures, and our most important assets: the people we love. But they're doing so much more behind the scenes. SEE YOU NOW is a podcast that shines a light on the real people changing the status quo in health: from nurses working in labor &... [More](#)

Listen to our Trailer:

04:15

Listen on Apple Podcasts

Listen on Google Podcasts

Listen on STITCHER

Listen On Spotify



# thehandoff

A Podcast About Innovation In Healthcare

Start Listening

# Design Thinking 101

Learn  
Lead  
Apply

  
Hosted by  
Dawan Stanford

40 episodes

Design Thinking 101: Learning, Leading, and Applying Design Thinking

Design Thinking 101 helps listeners learn about design-driven innovation, connect design thinking to strategy and action, and explore learning from challenges overcome while applying design thinking and related innovation approaches.

You'll hear design practitioners' stories, lessons, ideas, resources, and tips. Our guests share insights on how to deliver results with design thinking in business, social innovation, education, design, government, healthcare and other fields.

## Introducing At the Core of Care - Trailer



AT THE CORE OF CARE  
PENNSYLVANIA ACTION COALITION



At the Core of Care  
Introducing At the Core of Care

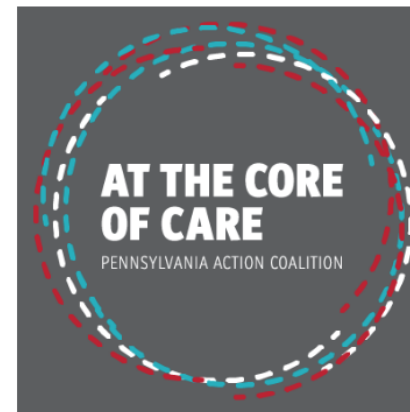
7:00

▶ 329



Share

We are excited to announce the **At the Core of Care** podcast series. At the Core of Care highlights the consumer experience of patients, families, and communities and the creative efforts of nurses and other partners to better meet their health and healthcare needs through diversity, leadership, and practice innovation.



At the Core of Care highlights the

# Podcasts

Name	Description	Link
American Association of Nurse Practitioners	A podcast that summarizes each monthly issue of the Journal of the American Association of Nurse Practitioners	<a href="https://podcasts.apple.com/us/podcast/journal-american-association-nurse-practitioners/id1451363364">https://podcasts.apple.com/us/podcast/journal-american-association-nurse-practitioners/id1451363364</a>
Amplify Nursing	Our Amplify Nursing guests defy stereotypes, define practice, and disrupt the status quo	<a href="https://www.nursing.upenn.edu/research/innovation/amplify-nursing-podcast/">https://www.nursing.upenn.edu/research/innovation/amplify-nursing-podcast/</a>
At the Core of Care	At the Core of Care highlights the consumer experience of patients, families, and communities	<a href="https://www.paactioncoalition.org/about/podcast/item/514-introducing-at-the-core-of-care">https://www.paactioncoalition.org/about/podcast/item/514-introducing-at-the-core-of-care</a>
Cup of Nurses	A nursing podcast, where we tackle current events and hot nursing related topics	<a href="https://podcasts.apple.com/us/podcast/cup-of-nurses/id1451363364">https://podcasts.apple.com/us/podcast/cup-of-nurses/id1451363364</a>
Good Nurse Bad Nurse	A light-hearted, fun podcast hosted by a registered nurse and her special guest	<a href="https://goodnursebadnurse.com/">https://goodnursebadnurse.com/</a>
Mommy Labor Nurse	Welcome to the Mommy Labor Nurse Podcast, where we firmly believe in the power of nursing	<a href="https://podcasts.apple.com/us/podcast/mommy-labor-nurse/id1481120044">https://podcasts.apple.com/us/podcast/mommy-labor-nurse/id1481120044</a>
Nursing Neumonics	Take NURSING.com with you wherever you go. This nursing podcast covers all the latest in nursing	<a href="https://podcasts.apple.com/us/podcast/nursing-mnemonics-show-by-nursing-com/id1451363364">https://podcasts.apple.com/us/podcast/nursing-mnemonics-show-by-nursing-com/id1451363364</a>
Nurse Keith Show	Nurse Keith is a holistic career coach for nurses, as well as a professional speaker	<a href="https://nursekeithshow.libsyn.com/">https://nursekeithshow.libsyn.com/</a>
NurseEM	Current conversations and evidence-based practice issues related to Emergency Nursing	<a href="https://podcasts.apple.com/ca/podcast/nurse-em-nursing-in-emergency/id1451363364">https://podcasts.apple.com/ca/podcast/nurse-em-nursing-in-emergency/id1451363364</a>
See you Now	On a daily basis, we trust nurses with billions of dollars of equipment, critical care, and more	<a href="https://podcasts.apple.com/us/podcast/see-you-now/id1488523483">https://podcasts.apple.com/us/podcast/see-you-now/id1488523483</a>
Straight A Nursing	Get useful tips, clinical wisdom, nursing inspiration and exploration of key topics in nursing	<a href="https://podcasts.apple.com/us/podcast/straight-a-nursing/id1210975738">https://podcasts.apple.com/us/podcast/straight-a-nursing/id1210975738</a>
The Daily Nurse Podcast	Nursecasts, the DailyNurse.com podcast, aims to provide a deep dive on the latest in nursing	<a href="https://podcasts.apple.com/us/podcast/the-dailynurse-podcast-a-podcast-by-dailynurse-com/id1451363364">https://podcasts.apple.com/us/podcast/the-dailynurse-podcast-a-podcast-by-dailynurse-com/id1451363364</a>
The Handoff	A podcast about innovation in healthcare.	<a href="https://www.trustedhealth.com/thehandoff-podcast">https://www.trustedhealth.com/thehandoff-podcast</a>
The Lab Values Podcast	This podcast covers one essential lab value for episode including normal ranges, clinical significance, and more	<a href="https://podcasts.apple.com/us/podcast/lab-values-podcast-nursing-podcast/id1451363364">https://podcasts.apple.com/us/podcast/lab-values-podcast-nursing-podcast/id1451363364</a>
The Oncology Nurse Podcast	Where ONS Voices Talk Cancer. Join oncology nurses as they sit down to discuss the latest in oncology nursing	<a href="https://onsvoice.libsyn.com/">https://onsvoice.libsyn.com/</a>
The Q nurse	My name is Swardiq 'Q' Mayanja and on this podcast I bring to you news, insights, and more	<a href="https://podcasts.apple.com/us/podcast/q-the-nurse/id1312675906">https://podcasts.apple.com/us/podcast/q-the-nurse/id1312675906</a>
The Q word podcast	Conversations about the tips, tricks, trends, and taboos of emergency nursing	<a href="https://podcasts.apple.com/us/podcast/the-q-word-podcast/id140752380">https://podcasts.apple.com/us/podcast/the-q-word-podcast/id140752380</a>
The Scrubcheats podcast	Learn essential clinical nursing information in easy to digest episodes. Each episode is hosted by a nursing expert	<a href="https://podcasts.apple.com/us/podcast/scrubcheats-by-nursing-com-nurses/id1451363364">https://podcasts.apple.com/us/podcast/scrubcheats-by-nursing-com-nurses/id1451363364</a>
The stay at home nurse	Discover how you can create a nursing career that works for you so that you can stay at home	<a href="https://podcasts.apple.com/us/podcast/the-stay-at-home-nurse/id1495084444">https://podcasts.apple.com/us/podcast/the-stay-at-home-nurse/id1495084444</a>
TobiTalks- A Nursing Career Guide For Millennials	Tobi Talks offers engaging dialogues for nurses and aspiring nurses who are looking for a career guide	<a href="https://podcasts.apple.com/us/podcast/tobitalks-a-nursing-career-guide-for-millennials/id1451363364">https://podcasts.apple.com/us/podcast/tobitalks-a-nursing-career-guide-for-millennials/id1451363364</a>
Your Next Shift	Your Next Shift offers a dynamic listening experience. Host Elizabeth Scalapino	<a href="https://podcasts.apple.com/us/podcast/your-next-shift-a-nursing-career-guide/id1451363364">https://podcasts.apple.com/us/podcast/your-next-shift-a-nursing-career-guide/id1451363364</a>

# Questions?



**Marion Leary**  
Director, Innovation  
Fagin Hall  
215-746-3951  
[mleary@nursing.upenn.edu](mailto:mleary@nursing.upenn.edu)



<http://marionleary.strikingly.com/>



# Penn Nursing

UNIVERSITY *of* PENNSYLVANIA

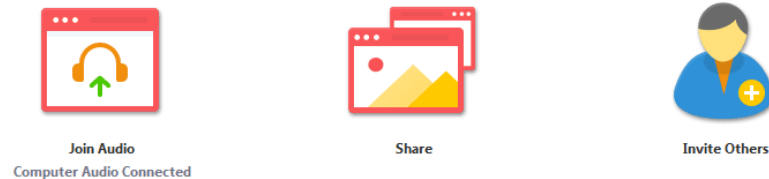
SCHOOL *of* NURSING



# Any Questions??

Please **submit questions** via the question pane in your zoom control panel.

**Meeting Topic:** Care Coordination: Understanding the Team Based Care & Rev  
**Host:** National Nurse Led Care Consortium (NNCC)  
**Invitation URL:** [https://zoom.us/webinar/register/WN\\_gNrN6fc4SDicTdDcb...](https://zoom.us/webinar/register/WN_gNrN6fc4SDicTdDcb...)  
[Copy URL](#)  
**Participant ID:** 53



# Other Questions?

For more information on the **Nursing Practice and Transformation:**

- Email **Jillian Bird** at [jbird@phmc.org](mailto:jbird@phmc.org)
- Visit us **online** at <http://nurseledcare.phmc.org/programs/npsan.html>
- **Stay up to date** on the latest CE opportunities by subscribing to our [Nursing Practice and Transformation Newsletter](#)

## *Hepatitis Awareness*

# Evaluating Vaccination and Treatment of Hepatitis B for People Who Use Drugs

Monday, July 27, 2020 at 12:00 pm ET



**NATIONAL  
NURSE-LED CARE  
CONSORTIUM**

a **PHMC** affiliate

*Institutionalizing a Culture of Moral Resiliency*

**Part 4: A Patient-Centered Scaffolding for  
Reopening Your Practice in the Time of COVID-19**

Wednesday, July 29, 2020 at 3:00 pm ET

