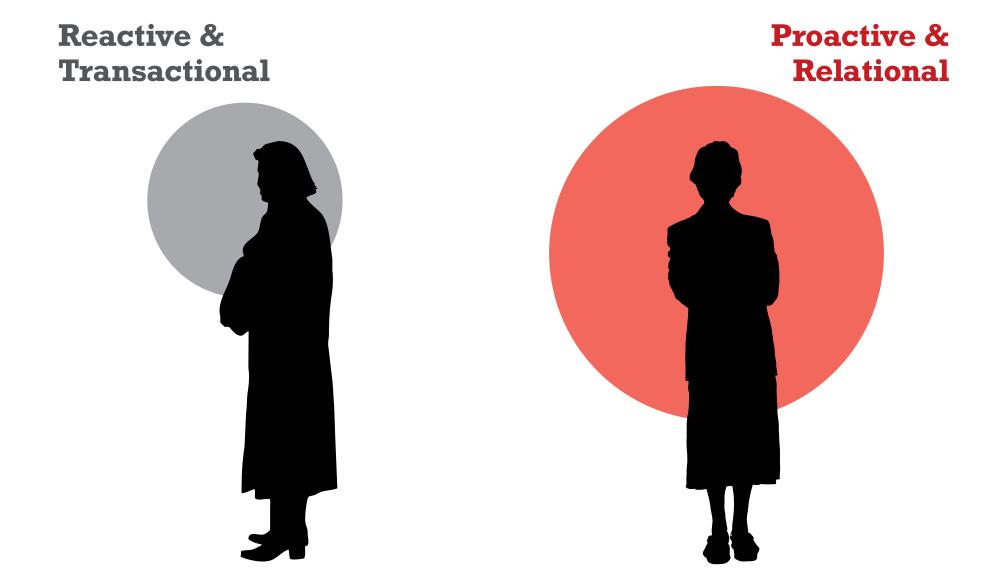


# **Design Thinking for Proactive Care**

May 5, 2023 Population Health Research Institute (PHRI), MetroHealth

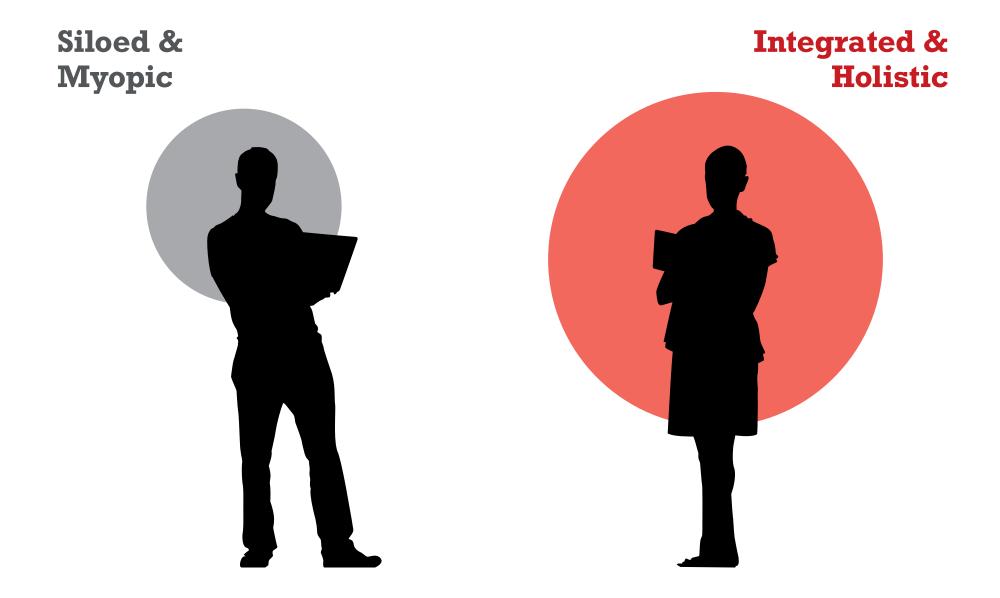
**Kipum Lee, PhD** Vice President, Innovation & Product Strategy University Hospitals





**Two Caregiver Experiences** 





An Opportunity for System Change



How might we ...

Make care more **proactive** & **relational**?

Make caring more **integrated** & **holistic**?

### **Two Transformation Orientations**



### **Process Improvement**

Prioritizes evaluation of limited set of possible solutions

Well suited to address problems that have predictable solutions

Promotes consensus building (convergent)

Aims to uncover what is important to consumers within a particular experience

Empathy research focuses on what people *think* to reveal improved outcomes

### **Design Thinking**

Prioritizes comprehensive understanding of underlying problems

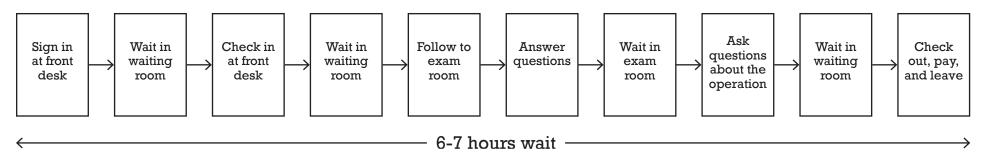
Well suited to address problems that have unpredictable solutions (wicked problems)

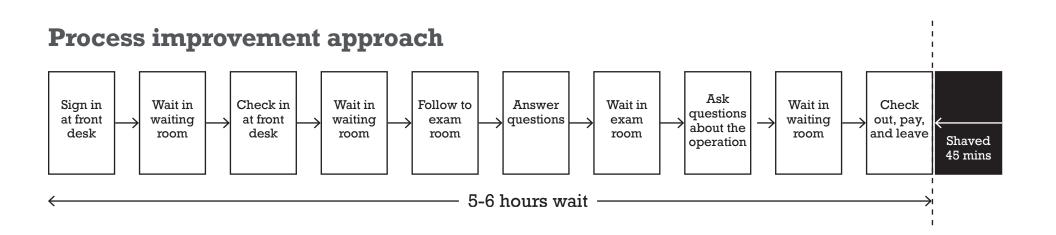
Promotes opposing ideas and debate (divergent)

Aims to uncover what is important to consumers in their everyday lives

Empathy research focuses on what people *feel* to reveal new/disruptive outcomes

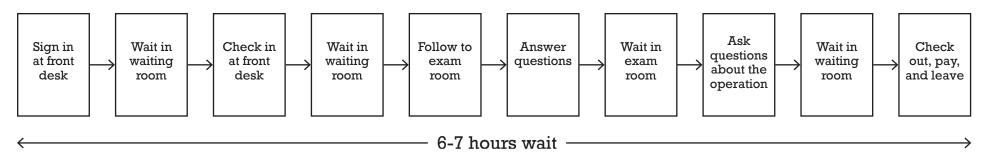
### Patient journey during the diagnosis/first visit



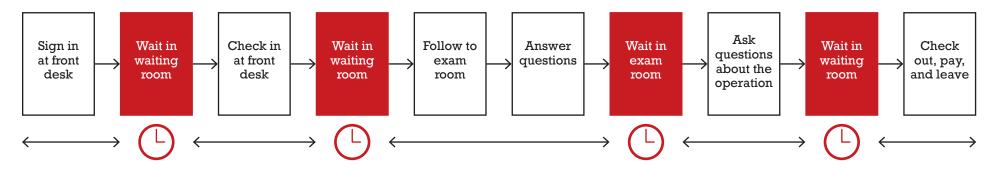


I. Bellos & S. Kavadias. 2020. "Service Design for a Holistic Customer Experience: A Process Framework." *Management Science*. See also "UPMC: Neurosurgery Clinic Experience" at https://www.architekton.org/works/upmc.

### Patient journey during the diagnosis/first visit



### **Design thinking approach**



I. Bellos & S. Kavadias. 2020. "Service Design for a Holistic Customer Experience: A Process Framework." *Management Science*. See also "UPMC: Neurosurgery Clinic Experience" at https://www.architekton.org/works/upmc.

### Example: Process Improvement versus Design



### Problem:

However way you slice the visit, it barely moves the needle.

### Proposal:

**Embrace the waiting with positive micro-interactions.** 



I. Bellos & S. Kavadias. 2020. "Service Design for a Holistic Customer Experience: A Process Framework." *Management Science*. See also S. Chang. 2019. "Nobody Wants a Waiting Room." *NEJM Catalyst* and https://www.architekton.org/works/upmc.



# **Design thinking is ...**

"... a systematic innovation process that prioritizes deep empathy for end-user desires, needs and challenges to fully understand a problem in hopes of developing more comprehensive and effective solutions."<sup>1</sup>

"... the logics and practices associated with designers."<sup>2</sup>

<sup>1</sup> J.P. Roberts, et al. 2016. "A Design Thinking Framework for Healthcare Management and Innovation." Healthcare.
 <sup>2</sup> M.B. Beverland, et al. 2015. "Reconciling the Tension Between Consistency and Relevance." Journal of the Academy of Marketing Science.
 9

### Design Thinking has Gone Mainstream



# Harvard Business Review



44 The Big Idea The Organizational "I'm Sorry" Maurice E. Schweitzer et al.

#### 86 Risk Management

Cybersecurity: Lessons from the Pentagon James A. "Sandy" Winnefeld Jr. et al.

#### 108 Managing Yourself

How to Embrace Complex Change Linda Brimm

THE EVOLUTION OF DESIGN OF DESIGN DESIGN THINKING IT'S NO LONGER JUST FOR PRODUCTS. EXECUTIVES ARE USING THIS APPROACH TO DEVISE STRATEGY AND MANAGE CHANGE. The New Hork Times https://nyti.ms/2hpHJhp

#### WELL | LIVE

#### Design Thinking for Doctors and Nurses

By AMITHA KALAICHANDRAN AUG. 3, 2017

The trauma area at my hospital is similar to thousands of others. When a patient with a gunshot wound or a motor vehicle accident arrives, a bed is prepped, the right

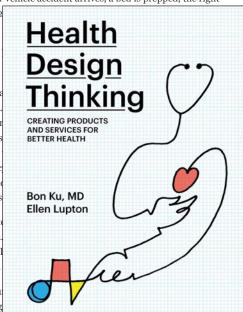
supplies are on hand, and up to 2 ready to spring into action.

There is one difference: The vest.

The easy-to-spot garment, ca clearly identifies who's in charge. nurse after a hectic gunshot traur emergency room staff members s roles. In particular, no one knew became routine part of emergence trauma team reports it has helped communication among members

The innovation also illustrate members of the health care team. because they work in the hospital positioned to come up with fresh

In recent years, a growing nu to create innovations by applying



"The great ... corporations should include in their activities the work of craftsmen and designers."

- Alfred N. Whitehead, 1933, Harvard Business Review

### **Cleveland Institutions Leading Design in Healthcare**



#### NEJM Cataly

**Catalyst** Innovations in Care Delivery

#### IN DEPTH

#### Designing for Value in Specialty Referrals: A New Framework for Eliminating Defects and Wicked Problems



Patrick Runnels, MD, MBA, Heather Wobbe, DO, MBA, Kipum Lee, MDes, Randy Jernejcic, MD, MMM, Peter Pronovost, MD, PhD Vol. 2 No. 6 | June 2021 DOI: 10.1056/CAT.21.0062

Defects in care, including errors, oversights, and inefficiencies, cost more than \$1 trillion annually in the United States. While health systems are increasingly focused on eliminating defects, traditional approaches to quality improvement may not be sufficient. Particularly stubborn are aggregated defects. Each one arises as a solution to a specific problem, and they accumulate to create barriers that are remarkably complex and challenging to dismantle. Here, the authors propose a new framework, Designing for Value, that applies design-based thinking to prevent these complex, "wicked" defects. This framework seeks to move beyond simply eliminating defects and instead reimagine processes and care pathways for providers and patients alike that offer exceptional user experiences. The authors apply this paradigm to a specific "wicked" problem in our health system: primary care referrals to psychiatry. The authors share their initial results, consider future directions and implications, and explore how this paradigm could be applied to other disciplines for specialty referral.

No one sets out to design defects. Rather, defects typically appear as byproducts of well-intentioned solutions to other problems that optimize the part while compromising the whole. For example, waiting rooms, one of the least loved areas in health care, largely remain unquestioned as a necessary evil that helps feed a ready supply of patients to providers like staging materials in a factory production line.<sup>1</sup> Although they theoretically help caregivers be more efficient, they make the patient feel like a cog, rather than like the center of a holistic care experience.

NEJM Catalyst is produced by NEJM Group, a division of the Massachusetts Medical Society, Downloaded from catalyst.nejm.org by Lisa Gordon on May 20, 2021. For personal use only. No other uses without permission. Copyright © 2021 Massachusetts Medical Society. All rights reserved.

#### **NEJM** Catalyst

#### COMMENTARY

#### Guided Care: What Patients and Employees Actually Want from an Access Strategy

Adrienne Renee Boissy, MD, MA, Julie M. Rish, PhD DOI: 10.1056/CAT.21.0315

The Covid-19 pandemic accelerated the adoption of tools like telehealth and has invigorated innovative and comprehensive approaches to health care access. At Cleveland Clinic, the Office of Patient Experience led an enterprise-wide, multidisciplinary, humancentered design project to imagine what access could be; here, the authors describe Cleveland Clinic's efforts and share early results so that it might help others as they embark on this journey. Times and tools change, but what matters to patients and to care team members (clinical and otherwise) is consistent and enduring: access to the kind of care they want (and need), by the kind of providers they want, at the time and place they want it.

For many years patients have been telling us that health care access is broken. Cleveland Clinic's former president and CEO, Toby Cosgrove, MD, recognized this many years ago and asked the organization to offer same-day appointments. He had heard a story wherein a gentleman had called several times regarding pelvic discomfort and got shuffled around several times by phone, ultimately creating an unnecessary delay of several days. The problem? Acute urinary retention, which requires immediate attention and could have been easily managed with appropriate care. Cleveland Clinic created same-day access and more than 1 million patients take advantage of these appointments annually. But then we heard from patients that same-day timing wasn't enough — they wanted to see *their* physician or be seen in*their* community. We knew there was more work to be done.

#### **The Recent State**

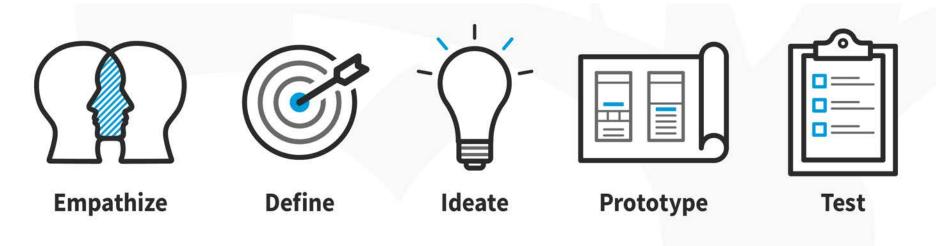
At the Cleveland Clinic, 14% of our grievances — direct complaints from patients — are about access. In addition, 33% of our patients report that they are not completely satisfied with the

NEJM Catalyst is produced by NEJM Group, a division of the Massachusetts Medical Society. Downloaded from catalyst.nejm.org at University Hospitals of Cleveland on December 1, 2021. For personal use only. No other uses without permission. Copyright © 2021 Massachusetts Medical Society. All rights reserved. Design Thinking, Abridged



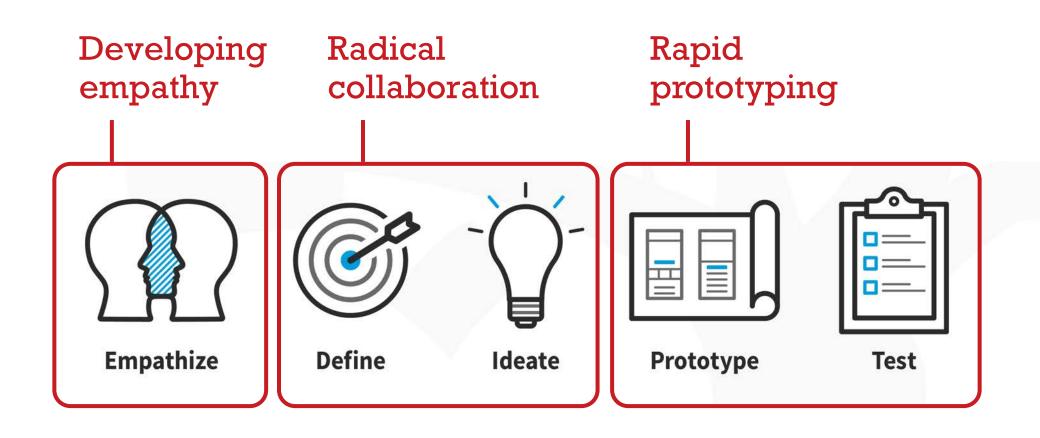


INTERACTION DESIGN FOUNDATION



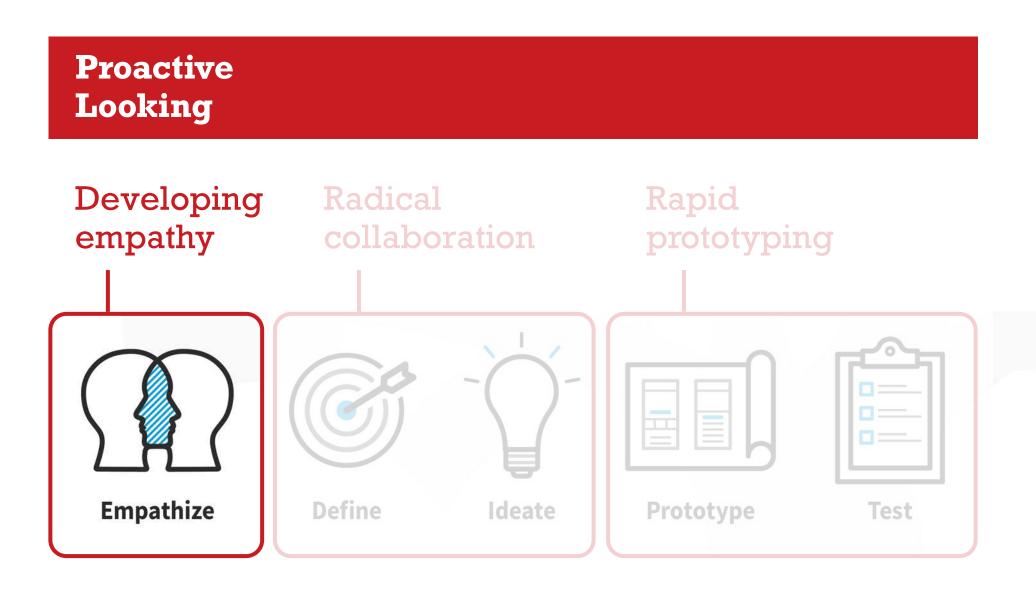


## **Proactive design by ...**



Design Thinking: Lesson #1





### Empathy: **Proactive Looking**





### Empathy: What People Say versus Why They Do



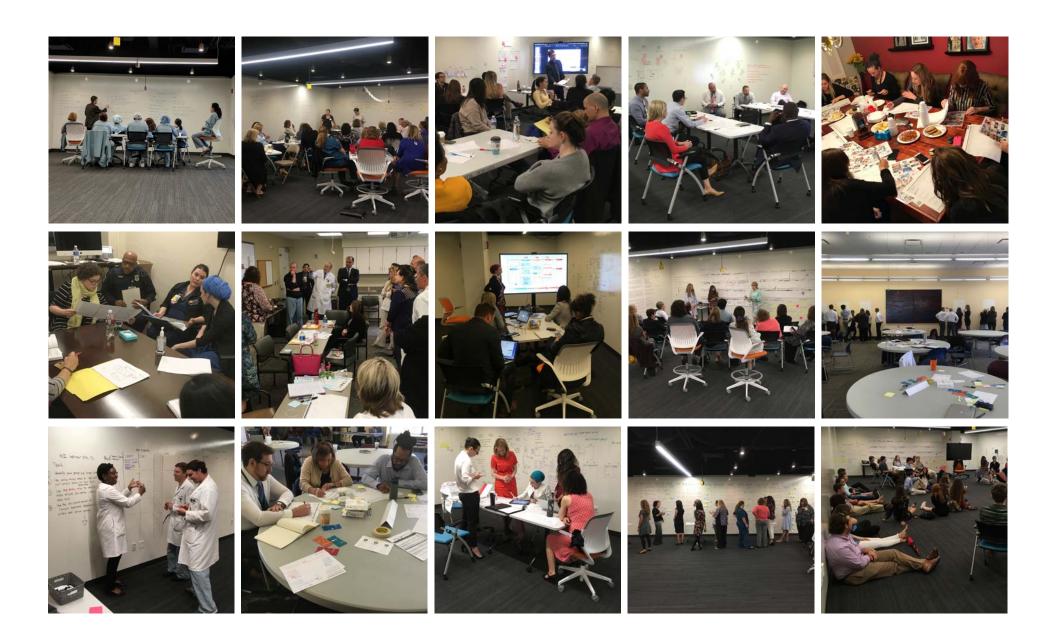




Proactive Looking	Proactive Linking	
Developing empathy	Radical collaboration	Rapid prototyping

### Collaboration: **Proactive Linking**





### Collaboration: Narrow versus Diverse Perspectives







Proactive	Proactive	Proactive
Looking	Linking	Learning
Developing	Radical	Rapid
empathy	collaboration	prototyping
Empathize	Define Ideate	Prototype Test

### Prototyping: **Proactive Learning**











		November 22, 2020; 4:00pm		November 18, 2020; 4:00pm	
Rank Zip Code	PO Name	City/Other	Zip Code	PO Name	
1	44047	Jefferson	New Lytte	64047	Jefferson
2	44040	Gates Mills		44010	Austinburg
3	44004	Ashtabula		44040	Gates Mills
4	44064	Rock Creek	Roaming Shores, Roaming Shrs	44004	Ashtabula
5	44010	Austinburg		64092	Wickiffe
6	44048	Kingsville		64143	Cleveland
7	44092	Wickliffe	Wiloughby Hills, Wiloughby His	44084	Rock Creek
8	44117	Euclid	Geveland	64117	Euclid
9	44143	Cirveland	Euclid, Highland Heights, Highland Hgts, Highland Hts, Mayfield, Mayfield Hts, Mayfield Village, Mayfield Vilg, Richmond Heights, Richmond Hts	64048	Kogsvile
10	44119	Cirveland	Euclid	44275	Spencer
11	44137	Maple Heights	Geveland	44D41	Geneva
12	44140	Rey Village	Geveland	44290	Valley City
13	44030	Conneaut		44060	Mentor
14	44026	Chesterland		64622	Dover
15	44141	Brecksville	Geveland	44094	Wilcughby
16	44290	Valley City		44057	Madison
17	44286	Richfeld		64026	Chesterland
18	44622	Dover		44095	Eastiske
19	44012	August Lake		44663	New Philadelphia



Aggregate Chain of Custody Form - PPE Decontamination Treatme Battelle Workflow

Location		Number of boxe
CLE Medical Center (main) CMC	CMC	1
Rainbow Babies & Children	RBC	
MacDonald Women's	MAC	
Seidman Cancer Center	SCC	
University Circle Police Dept	UCI	
St John	STJ	/
Parma	PAR	
Elyria	ELY	
Ahuja	HUJ	2
Portage	POR	2
Geauga	GEA	3
Richmond	RIC	
Bedford	BED	
Geneva	GEN	1
Conneaut	CON	1
Samaritan	SAM	1
TOTAL # OF BOXES WITH M	1515	12
264 1	-11-20	10:15 64



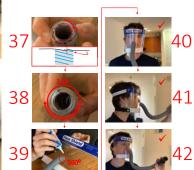
















### Prototyping: Doing-to-think versus Thinking-to-do







### How might you use design thinking to ensure residents ...

- Proactively
  Go directly to observe problems and discover insights, i.e., learn by going
  - Consider *why* people do what they do
- **Proactively** Link
- Ask *whose* perspective is missing
  - Invite collaborators from unlikely industries and domains
- Proactively Learn
- Build and test prototypes, even if knowledge is partial
  - Engage "end users" in the process



Thank you.

# https://ventures.uhhospitals.org

**Kipum Lee, PhD** Kip.Lee@UHhospitals.org