

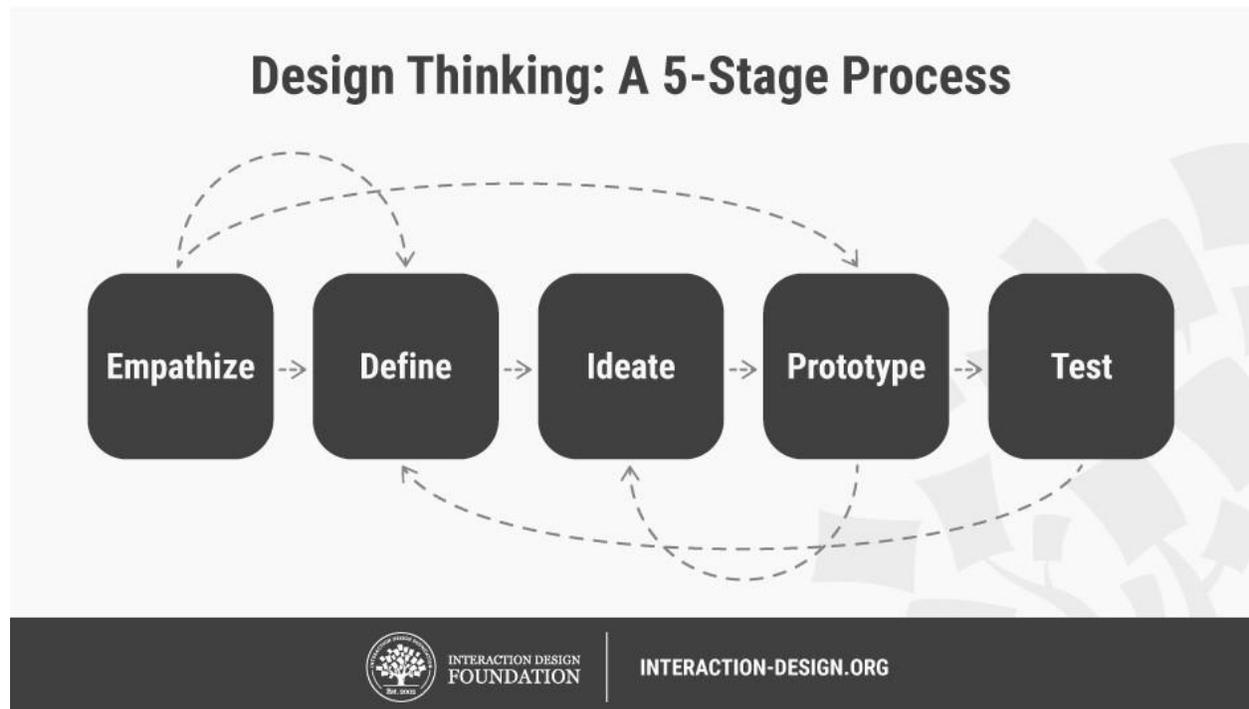
Learning Objectives

- 1) Define design thinking and its 5 phases
- 2) Articulate the need for design thinking in Healthcare
- 3) Outline a design thinking implementation plan

Over a decade ago Donald Berwick, MD (President Emeritus and Senior Fellow, Institute for Healthcare Improvement), suggested that healthcare “workers and leaders can often best find the gaps that matter by listening very carefully to the people they serve: patients and families.”¹ One framework that aims to leverage the wants, needs and desires of patients is Design Thinking (DT).

DT is a systematic innovation process that prioritizes deep empathy for end-user experiences and challenges improvement team members to fully understand a problem, with the ultimate goal of developing more comprehensive and effective solutions. There are five phases that combine to make up the process of DT; Empathize, Define, Ideate, Prototype and Test.² One of the unique aspects of DT is that unlike other sequential improvement frameworks, DT is an iterative process (figure 1) based on new levels of understanding.

Figure 1. Design Thinking Stages



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Within the healthcare industry, it’s easy to find those who desire the best for the patients that they serve. With that in mind, why is the industry still littered with opportunities to clarify confusion, improve experiences and eliminate waste? One reason may lie in the fact that the healthcare profession is

populated with highly educated professionals working in high stress environments to solve the most complex of medical issues. When we embark on process improvement and systems redesign aimed to improve efficiency of the end-user experience, it's natural to believe that we know best. However, DT allows us to acknowledge and adapt to the evolving, complex nature of the healthcare landscape in a way that goes beyond our internal biases.

So where do we begin? The answer lies in stage 1 (Empathy) of the DT process, developing the sincerest levels of empathy for the problem you are trying to solve through the lens of the end-user's experience. This is done by obtaining the voice of the customer, both through patient interviews and by observing the challenge at hand. These steps are crucial to allowing us to set aside our own biases and assumptions to gain the insight needed. Stage 2 (Define) is characterized by collating the information obtained through voice of the customer into problem definitions. These definitions should be framed as the core problem statements, written from the perspective of the end-user, which the team aims to improve. Stage 3 (Ideate) of DT begins the process of challenging assumptions and generating ideas within a multidisciplinary team. The power of this stage is in leveraging diversity of perspectives which provides a broad framework that sets the course for stage 4 (Prototype), an innovative solution design that embraces all possibilities. This stage is highlighted by prototyping solutions that we believe are the most likely to address the problem statements we created. Next is stage 5 (Test), testing our solutions. From this point we will either have success or we will gain new knowledge. In turn, this knowledge is what fuels this iterative process to continually adjust our assumptions and further improve. This process may sound very familiar to another improvement methodology, Plan-Do-Study-Act (PDSA), which is the driver of continuous improvement. In DT, once we clear stage 5, PDSA is utilized to convert the learnings into new tests of change.

References:

1. Berwick DM Improvement, trust, and the healthcare workforce *BMJ Quality & Safety* 2003;12:i2-i6 [Improvement, trust, and the healthcare workforce | BMJ Quality & Safety](#)
2. Interaction Design Foundation, Design Thinking, viewed 3 January 2021, <https://www.interaction-design.org/literature/topics/design-thinking>.
3. Healthcare Financial Management Association, How design thinking in healthcare can improve customer service 2019, viewed 3 January 2021, <https://www.hfma.org/topics/finance-and-business-strategy/article/how-design-thinking-in-healthcare-can-improve-customer-service.html>