



## Design thinking

Design thinking can improve the quality of internships for students by fostering a human-centered approach to healthcare challenges. This methodology encourages empathy, creativity, and innovation, enabling students to develop practical, patient-focused solutions. Through the iterative process of empathizing with users, defining problems, ideating, prototyping, and testing, students learn to approach complex healthcare issues with a fresh perspective.



## How:

Objective; introduce students to the design thinking process in clinical settings to innovate solutions for healthcare challenges.

- 1. Empathize; encourage students to observe and engage with patients, staff, and the healthcare environment to understand experiences, needs, and challenges from multiple perspectives.
- 2. Define; guide students to articulate the healthcare challenges identified during the empathy phase clearly and concisely, focusing on the human element of these challenges.
- 3. Ideate; facilitate brainstorming sessions where students generate a wide range of creative solutions to the defined problem, encouraging wild ideas and deferring judgment.
- 4. Prototype; assist students in developing tangible prototypes or models of their solutions. These can be as simple as sketches or as complex as functional models, depending on resources.
- 5. Test; organize opportunities for students to test their prototypes with actual users or in simulated environments, gathering feedback to refine and improve the solution.
- 6. Reflect and iterate; encourage reflective discussions on the design thinking process, focusing on what the students learned and how to iterate solutions based on feedback.

## Special requirements:

Promote collaboration with students and professionals from various healthcare disciplines to enrich the design thinking process with diverse perspectives.

Ensure to meet ethical considerations when involving patients and staff in the process, including consent and confidentiality.

Clinical teachers should be familiar with the design thinking process and capable of guiding students through its stages effectively.

## Time required:

Spend 1-2 hours introducing the design thinking process and identifying a challenge to address.

Allocate 2-4 hours for students to conduct observations, interviews, and define the problem.

Dedicate 2-4 hours for students to develop prototypes of their solutions.

Allow 2-4 hours for testing prototypes with users and reflecting on the process and feedback for iteration.

Basil Badwan, Roshit Bothara, Mieke Latijnhouwers, Alisdair Smithies & John Sandars, 2018: The importance of design thinking in medical education, Medical Teacher vol. 40