

# Design thinking as a tool for health care innovation (and education)



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# Background

- Increasing complexity
- Scarce resources
- Reforms
- Introduction of new parties
- ...

Increasing uncertainty and importance of ability to adapt



“The half-life of medical knowledge is around 7 years”

**The best way to predict the future is to design it.**

— Buckminster Fuller, American engineer, author, designer, inventor, and futurist (1895-1983)

# Design thinking as a mindset



Design as aesthetics



Design as process.

- Problem solving skills
- Empathy
- Creativity
- Collaboration
- Agency
- ...

## **Design Thinking as a Tool for Interdisciplinary Education in Health Care**

Tim C. van de Grift, MD, MSc, and Renske Kroeze, MSc

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van de Grift, T. C., & Kroeze, R. (2016). Design thinking as a tool for Interdisciplinary education in health care. *Academic Medicine*, 91(9), 1234-1238.

# Design thinking methodology



# Design thinking methodology

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## INSPIRATION

I have a design challenge.  
How do I get started?  
How do I conduct an interview?  
How do I stay human-centered?

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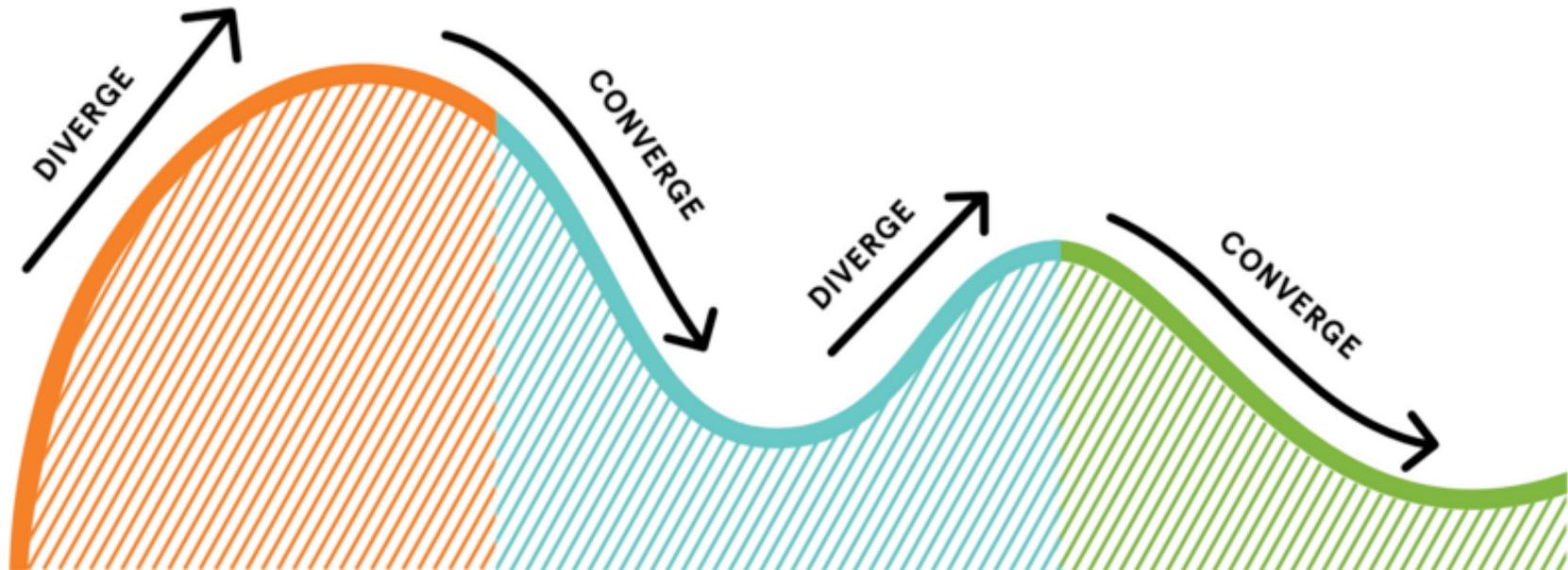
## IDEATION

I have an opportunity for design.  
How do I interpret what I've learned?  
How do I turn my insights into tangible ideas?  
How do I make a prototype?

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## IMPLEMENTATION

I have an innovative solution.  
How do I make my concept real?  
How do I assess if it's working?  
How do I plan for sustainability?

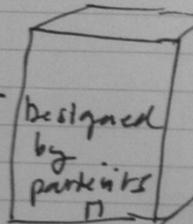
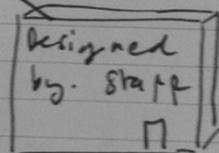
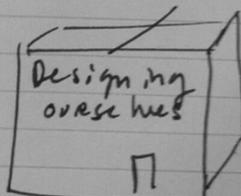


# Inspiration

- **Aim: defining problems and needs, becoming intuitive with your user**
  - Problem statement & user profile
- **Tools**
  - Emphasize (interviews, shadowing)
  - Mind mapping
  - Participatory research
- **Pitfalls**
  - Confirming predefined perspectives
  - Involving the most accessible groups only
  - Interpret without involving the actual users

# PRACTICAL PLAN

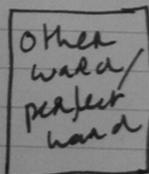
Redesigning three rooms and test those



Questionnaire

Open

translated.



Have a version.

- ① Staff
  - ② Patients
  - ③ Family/Friends
  - ④ Former patients.
- clean and therapeutic waves

Stay over 2 or 3 days.

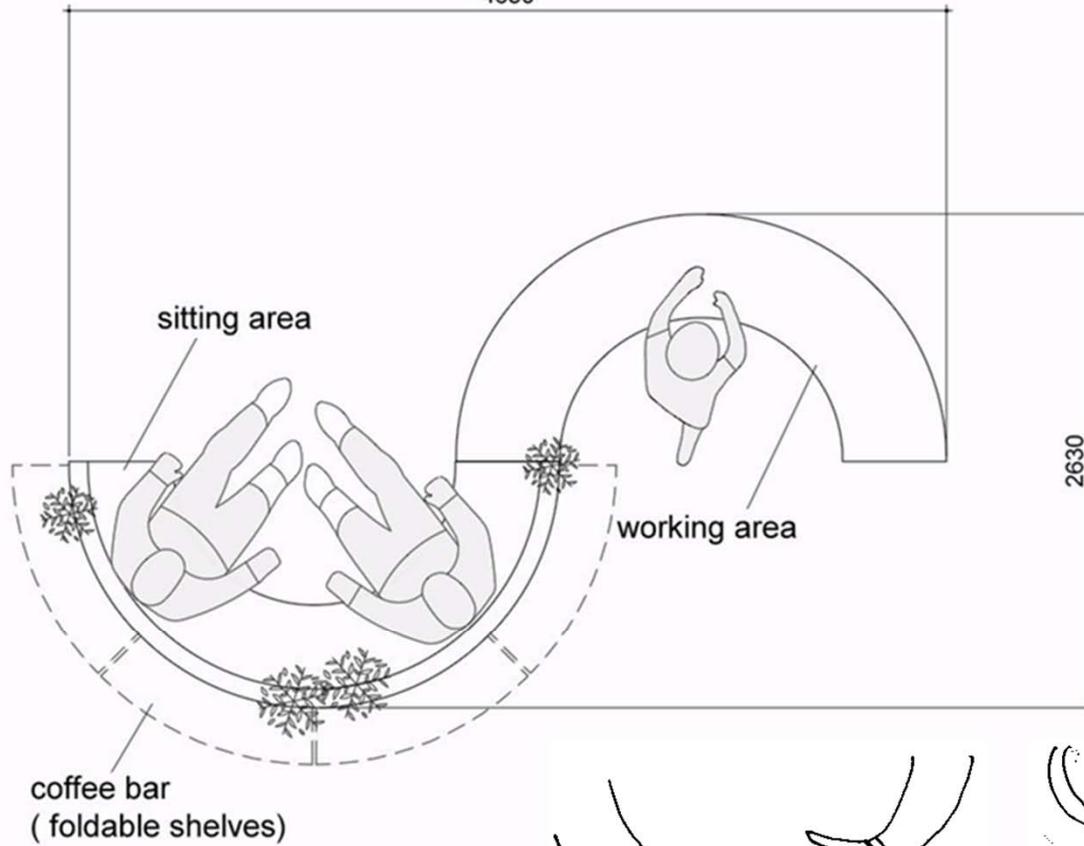
Field trip

~~2 or 3 days.~~

Haarlem  
ward  
Dolkhuis  
museum.

- plan C -

4650

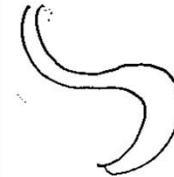


2630

coffee bar  
(foldable shelves)



HUG



organic  
nature

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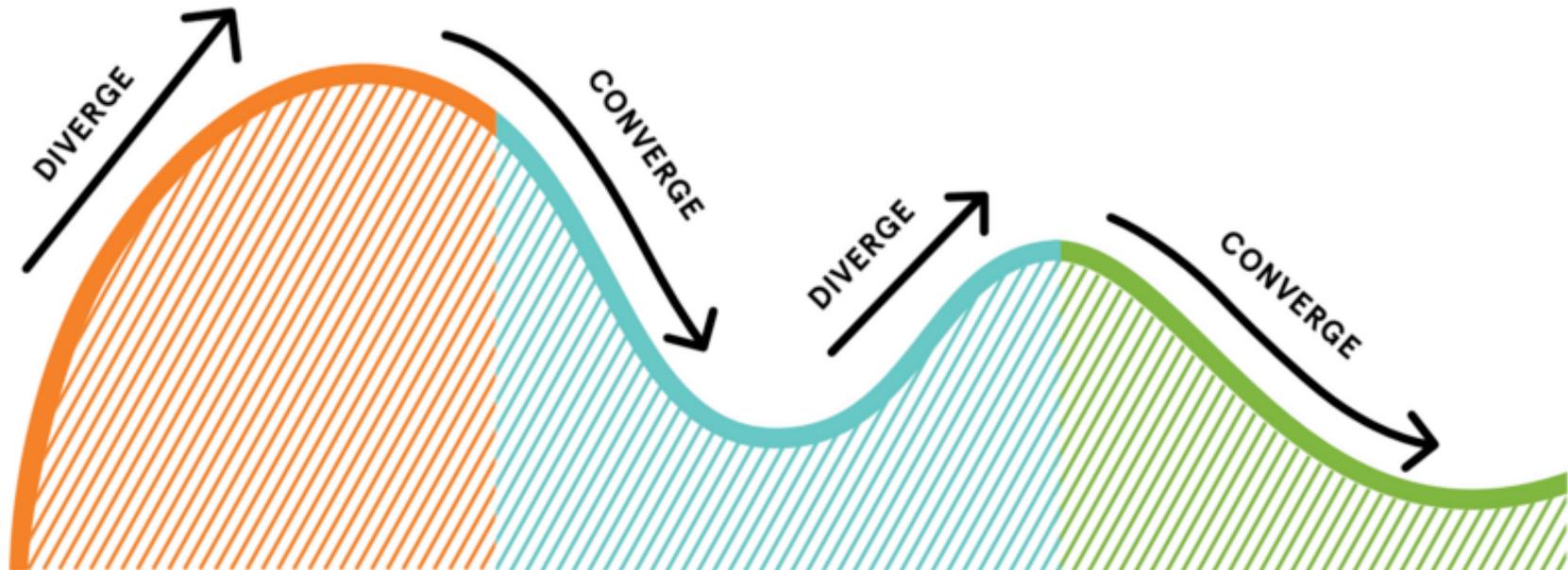
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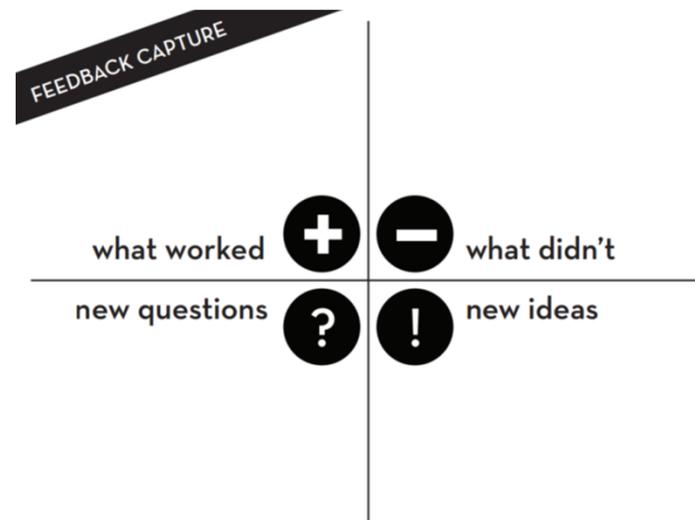
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# Ideation

- **Aim: generating (concept) solutions for the defined needs**
  - Solution(s)
- **Tools**
  - Panic design/prototyping
  - Brainstorming
  - Co-design sessions
  - Feedback interviews
- **Pitfalls**
  - Testing fully developed ideas only
  - Trying to find one solution for all needs
  - Overemphasizing feasibility and restrictions







# Design thinking methodology

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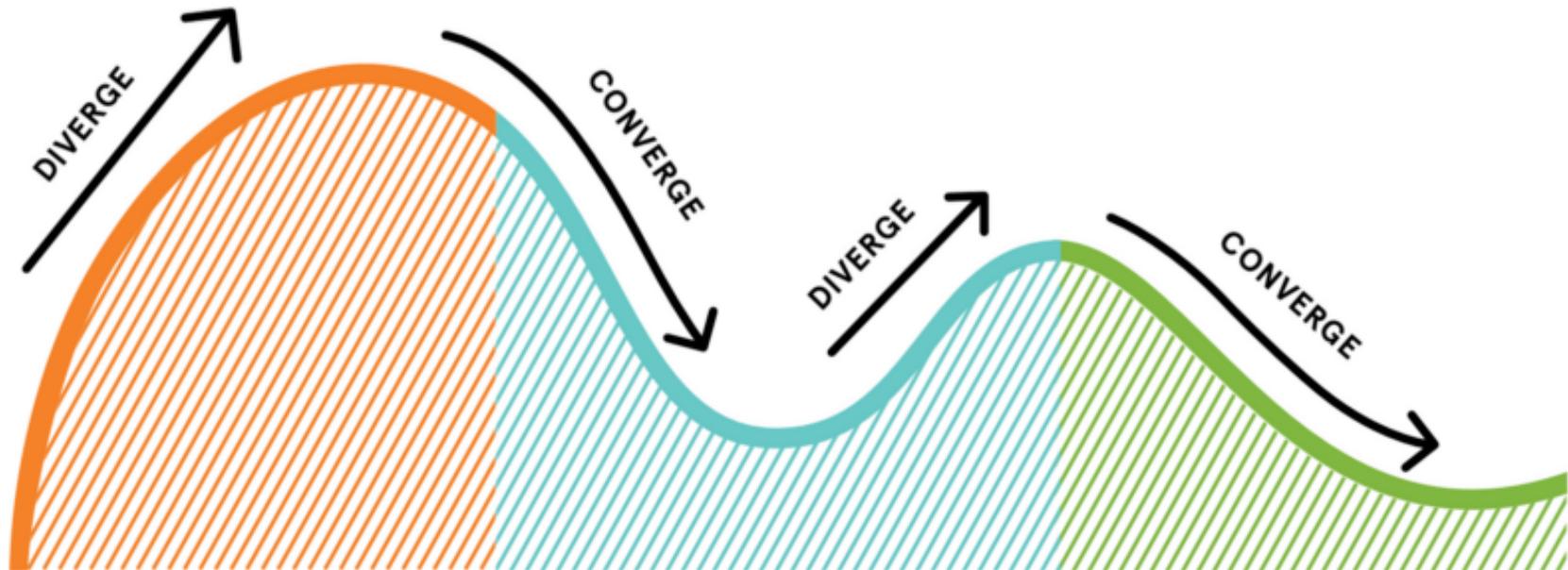
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# Implementation

- **Aim: maximizing impact, create sustainable change with your solution**
  - Business or implementation plan
- **Tools**
  - Pitching
  - Patient/user journey
  - Business model canvas
- **Pitfalls**
  - Not taking a holistic view (bottlenecks!)
  - User vs. financier vs. prescriber
  - Evidence based?





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Patient-focused management program being developed to optimize care delivery for patients with serious mental illness

# Running a design thinking course

- **Gains**
  - Development of skills
  - Establishing networks
  - Generating solutions
  - Supporting agency/ownership
- **Resources to mobilize**
  - Interdisciplinary partners
  - Clinical advocates, group facilitators and patients/users
  - Supportive faculty staff (e.g., credits, assignments)
  - Technical resources
  - ...

# Conclusion

Design thinking is a **structured method** to apply human-centered innovation in health care (education) while supporting **agency** amongst staff.

## Want to know more?

- Design Thinking for Educators - <http://www.designthinkingforeducators.com>
- van de Grift, T. C., & Kroeze, R. (2016). Design thinking as a tool for Interdisciplinary education in health care. *Academic Medicine*, 91(9), 1234-1238.
- IDEO, Human-Centered Design - <http://www.designkit.org/>
- Brown, T. (2008). Design thinking. *Harvard business review*, 86(6), 84.

# Thank you for your attention



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