the **Design Society**
a worldwide community

Health Systems Design

HEALTH
SYSTEMS
DESIGN

HSD

Health Systems Design Special Interest Group (SIG): Launch Report

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REPORT

Healthcare is a major industrial sector that faces important issues across the globe. It poses specific challenges to designers, in terms of engaging and collaborating with healthcare professionals, interfacing with the dominant research methods in health sciences, defining value, or dealing with ethical challenges.

In recent years, more and more contributions on health systems design have been presented at Design Society events. To better promote and support the engagement of designers and Design Society members with healthcare systems, and to offer a forum for discussing issues relating to health systems design, a Special Interest Group (SIG) on Health Systems Design has been created in the Design Society. This workshop, at DESIGN 2020, was an opportunity to introduce this SIG to those interested, to identify and recruit interested members, and to shape collaboratively the agenda and the roadmap for the SIG.

Members of the SIG's steering committee were introduced, the vision for health systems design and the rationale for creating a SIG were presented. After this brief introduction, workshop participants worked together with the steering committee to define the initiatives that the SIG will support in the coming years. The launch workshop was open to conference participants, whether they were already working in health systems design or not. We take a broad view on health systems design, including wellbeing and medical technologies, drug development, the organization of healthcare delivery and the design of healthcare environments. The agenda of the workshop is reproduced below.

Agenda

Venue: DESIGN 2020, Online
Date: Monday 26th October 2020
Time: 13:00-16:00 CEST

Workshop Chairs:

1. Professor Anja Maier, DTU – Technical University of Denmark, Denmark
2. Dr Maaike Kleinsmann, TU Delft, Netherlands
3. Professor P. John Clarkson, University of Cambridge, UK

Hosted by: Health Systems Design SIG

Agenda

1. Welcome
2. Background
3. A vision of Health Systems Design from three perspectives
   a. Professor Anja Maier – DTU-Technical University of Denmark, Denmark
   b. Dr Maaike Kleinsmann – TU Delft, Netherlands
   c. Professor P. John Clarkson – University of Cambridge, UK
4. A 4yr Road Map: Interactive session
5. Next steps and wrap up

The full presentation of the SIG background and three visions are available on our website but extracts from each of the vision presentations are presented below to provide a flavour of their complementarity.

Vision 1

Vision 2

DTU

Health Systems Design @ DESIGN2020
Special Interest Group worldwide Design Society

Professor Anja Maier

26 October 2020   Engineering Systems Design   1

DTU

Balancing technology, behaviour, health delivery system for designing value-effective healthcare solutions

- System
- Technology
- Behaviour
- Value-effective

Ciccone, N., Patou, F., & Maier, A. (2019).
Designing for better healthcare: A systemic approach utilising behavioural theory, technology and an understanding of healthcare delivery systems.
22nd International Conference on Engineering Design (ICED19), Design Society.

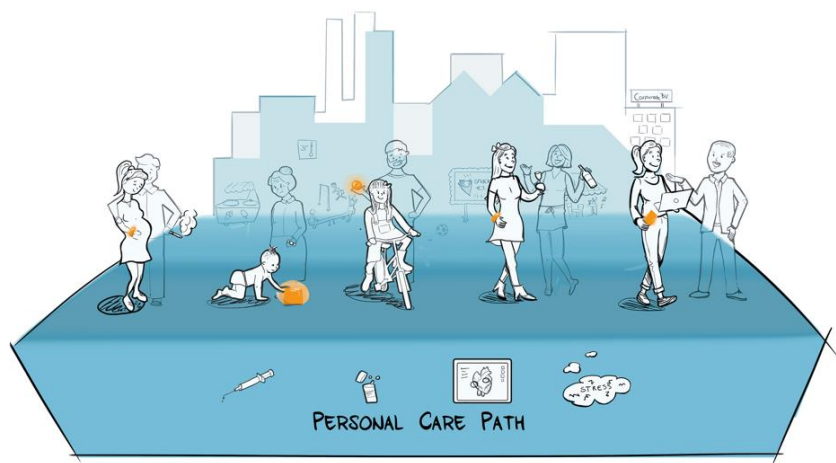26 October 2020   Engineering Systems Design   14

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Vision 3

Cardio Lab

T U Delft

Health Systems Design

Maaike Kleinsmann
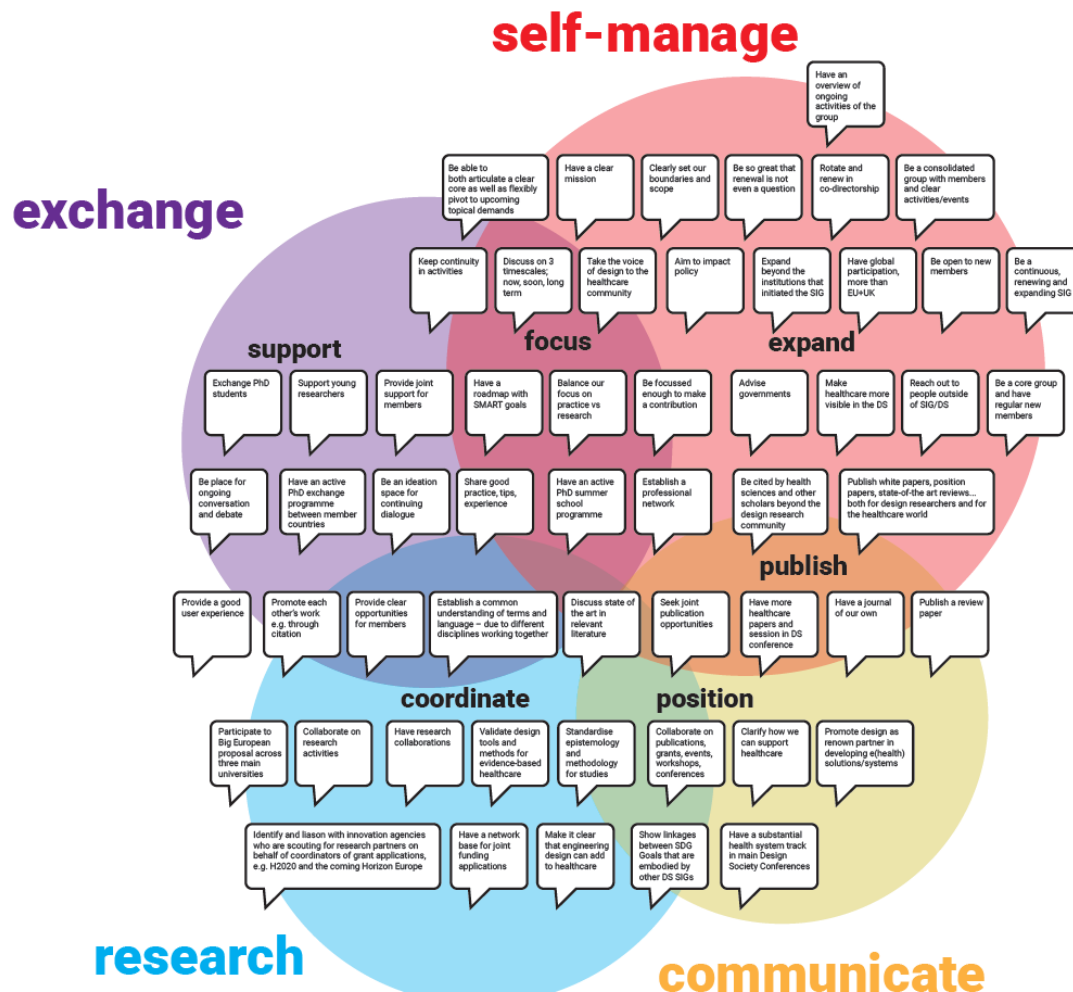

Life course approach

PERSONAL CARE PATH
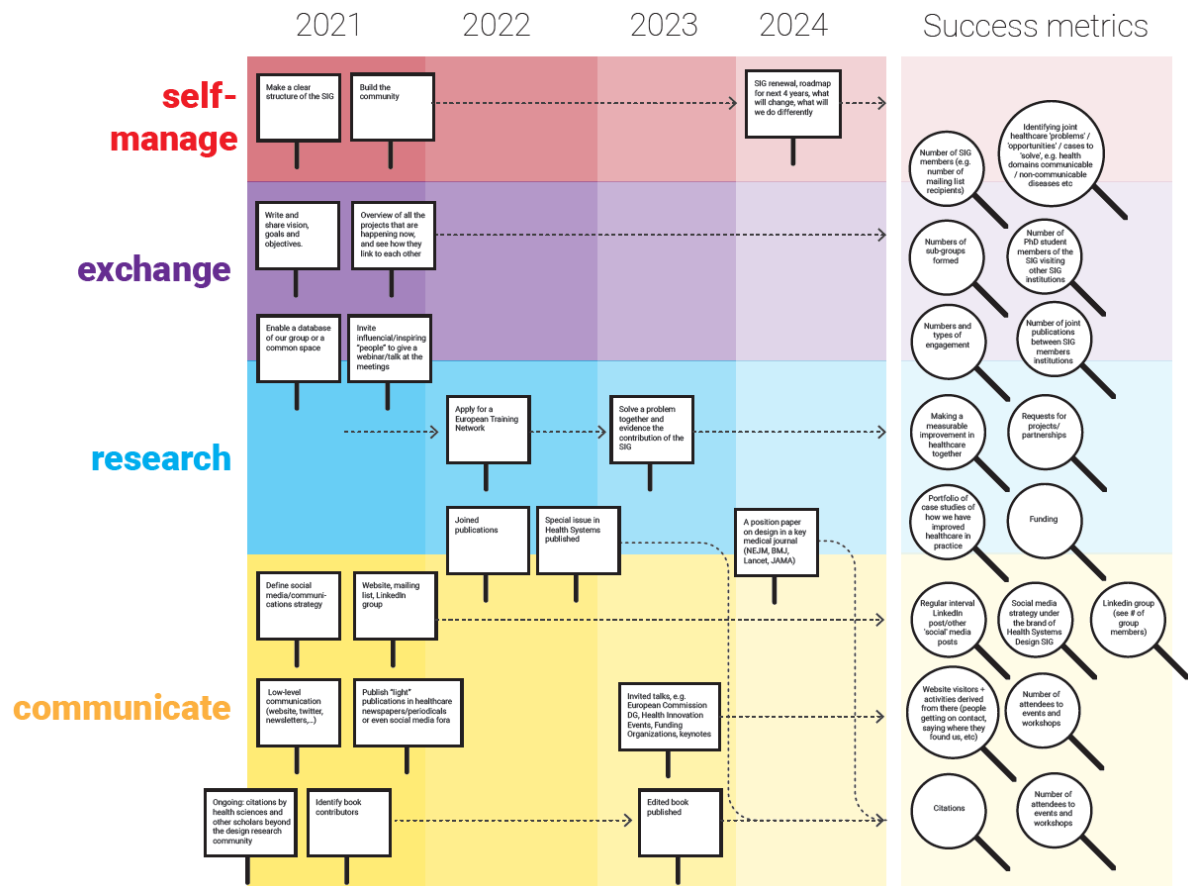
Summary of outputs from group activities

The group activities were focused on three areas: 1. Collectively exploring what a good Health Systems Design (HSD) SIG should look like 2. Exploring the objectives and activities the SIG should undertake and 3. Developing a roadmap for the next four years and the measures of success.

What does good look like? The first group looked at what good looks like and led to a long list of characteristics. The list includes the SIG as a place for ongoing conversation and debate on HSD, maintaining continuity of activities, engaging with like communities beyond the Design Society, driving research and focusing on real impact within the DS and society at large. The full list of these characteristics is also available at the end of this report.

Objectives and activities: The second group work focused on the activities that participants wanted to see the SIG undertake. A very long list of activities emerged from this session which has been summaries in the figure below. The raw list of activities is also provided at the end of this report.

Timeline of activities and measures of success: In the third group work, we began to develop a timeline of the activities as participants desired for them to occur. This timeline, shown below, will be further revised by the steering committee into a working plan for the SIG.

Raw data from group activities

Board 1 What does a good healthcare SIG look like?

- Taking the voice of design to the healthcare community
- Sharing good practice, tips, experience
- Clear mission
- A famous SIG!
- Big European proposal across three main universities
- Have a roadmap with SMART goals
- Discussing state of the art in relevant literature
- Network base for joint funding applications
- Ideation space for continuing dialogue
- Joint support for its members
- Reach out to people outside of SIG/DS

- Joint publication opportunities
- Good user experience
- Promote each other's work e.g. through citation
- Discuss on three timescales: now, soon, long term
- Overview of ongoing activities of the group
- Establish a common understanding of terms and language – due to different disciplines working together
- Being able to both articulate a clear core as well as flexibly pivot to upcoming topical demands
- Identifying and liaising with innovation agencies who are scouting for research partners on behalf of coordinators of grant applications, e.g. H2020 and the coming Horizon Europe
  DELIVERABLES
- SMART objectives
- Joint funding proposals
- Aim to impact policy
- Collaborative research activities
- White papers, position papers, state-of-the art reviews... both for design researchers and for the healthcare world
  INITIATIVES
- Support for young researchers
- Research collaborations
- Clear opportunities for members
  CONNECTIONS
- Make healthcare more visible in the DS
- A professional network
- Be open to new members
  OTHER/GENERAL
- Research focused
- Practice focused
- ↑ Try to balance
- A continuous, renewing and expanding SIG
- be focussed enough to make a contribution
- Keep continuity in activities
- Place for ongoing conversation and debate
- Set boundaries and scope

Board 2 Where do we want to be in 4 years?

- Show linkages between SDG Goals that are embodied by other DS SIGs.
- What is it that others (e.g. Design Society Presidency/BM, funding scouts, clinical researchers etc) need to spread the word?
- Have spokespeople on our behalf (Boomerang effect)
- An active PhD summer school programme
- A journal of our own
- Successful rotation and renewal in co-directorship
- Citations by health sciences and other scholars beyond the design research community
- Publications, grants, events, workshops, conferences
- Participant joined globally, more than EU+UK
- Visible online (not only in science community)
- Secured funding
- Advising governments
- Exchange of PhD students
- In the most visited/known SIG of the Design Society
- Visible online (not only in the science community!)
- Active PhD exchange programme between member countries
- Having clear how we can support healthcare
- A consolidated group with members and clear activities/events
- Providing impact cases for the Design Society as a whole
- Visible publications in Lancet, NEJM, BMJ…
- Recognised as a body of knowledge by others (outside the DS community)
- Recognised by health systems community (outside of DS)

- Design as renown partner in developing e(health) solutions/systems
- Validate design tools and methods for evidence-based healthcare
- Publish a review paper
- Articulate the contribution of the SIG group
- Established a channel for communication in addition to DS
- More healthcare papers and session in DS conference
- Have a substantial health system track in main Design Society Conferences
- A core group and regular new members
- Make it clear that engineering design can add to healthcare
- So great that renewal is not even a question
- Standardisation of epistemology and methodology for studies
- Expanding beyond the institutions that initiated the SIG

Board 3 How do we get there?

2021

- Build the community ☺
- Make a clear structure of the SIG
- Define social media/communications strategy
- Website, mailing list
- Low-level communication (website, twitter, newsletters,…)
- Publish "light" publications in healthcare newspapers/periodicals or even social media for a
- Overview of all the projects that are happening now, and see how they link to each other
- Invite influential/inspiring "people" to give a webinar/talk at the meetings
- LinkedIn group

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- First joined publications
- There are two join publications already ☺
- Write and share vision, goals and objectives,
- Enable a database of our group or a common space
- Ongoing: citations by health sciences and other scholars beyond the design research community
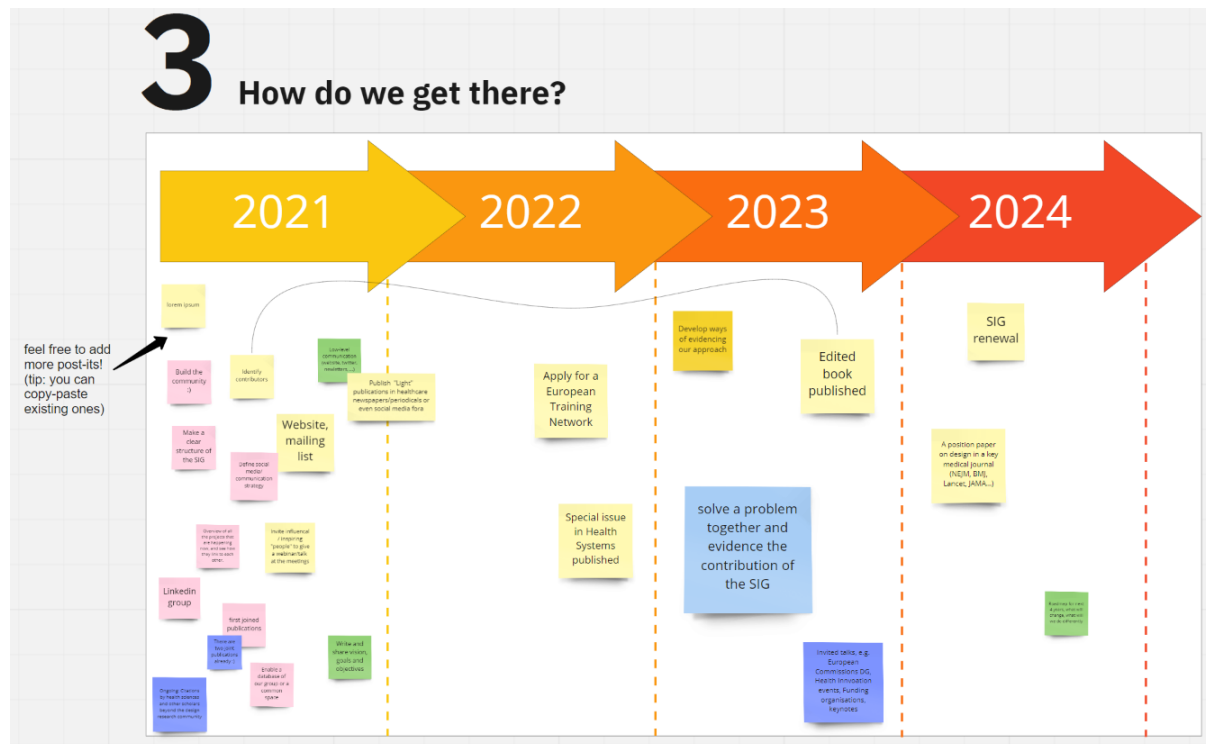- Identify book contributors

2022

- Apply for a European Training Network
- Special issue in Health Systems published

2023

- Edited book published
- Develop ways of evidencing our approach
- Solve a problem together and evidence the contribution of the SIG
- Invited talks, e.g. European Commission DG, Health Innovation Events, Funding Organizations, keynotes

2024

- SIG renewal
- A position paper on design in a key medical journal (NEJM, BMJ, Lancet, JAMA)
- Roadmap for next 4 years, what will change, what will we do differently

3 How do we get there?

Board 4 How do we get there?

- Distinction success measures group-within and for respective target-audience, including DS Leadership, academically, clinical / patient-reported outcomes
- Regular interval LinkedIn post/other 'social' media posts --> Social media strategy under the brand of Health Systems Design SIG / Design Society in the body of text and posted by individual researchers/research teams?
- Identifying joint healthcare 'problems' / 'opportunities' / cases to 'solve', e.g. health domains communicable / non-communicable diseases etc
- website visitors + activities derived from there (people getting on contact, saying where they found us, etc)
- More people become DS members, as they want to be a member in the Health Systems Design SIG
- LinkedIn group (see # of group members)
- Making a measurable improvement in healthcare together
- Requests for projects/partnerships
- Numbers and types of engagement
- The number of sub-groups formed
- Citations
- Funding
- Funding acquired
- Number of SIG members (e.g. number of mailing list recipients)
- # shared publications
- Number of joint publications between SIG members institutions
- Number of PhD student members of the SIG visiting other SIG institutions
- Large portfolio of case studies of how we have improved healthcare in practice
- SIG representatives invited to share their work in the SIG
- Number of attendees to events and workshops
- Workshop (ICED/DESIGN) participants