



DESIGN FICTIONS

A Toolkit for Imagining
Alternative Digital Health Futures

Toolkit Specs

V3.0 — June 10 2026

Creators

Joseph Donia, PhD

Joseph Donia is a researcher working at the intersection of Science and Technology Studies and governance of data-intensive health innovation. He draws on qualitative, participatory, and design fiction methods to explore how data, infrastructures, and popular expectations shape health systems in Canada and the European Union.

Andrew Dana Hudson, MA, MFA

Andrew Dana Hudson is a speculative fiction writer, researcher, teacher, and critical futurist whose work explores social, technological, and environmental futures. He is the author of *Absence: A Novel* and *Our Shared Storm: A Novel of Five Climate Futures*, as well as dozens of short stories. He has both a MFA in creative writing and a MA in sustainability from Arizona State University, where he now works as an assistant clinical professor in the English department.

Paula Rowland, PhD

Paula Rowland is a social scientist exploring the organizational, technological, and moral dynamics shaping healthcare work. She is an Assistant Professor in the Department of Occupational Science and Occupational Therapy at the University of Toronto, a Senior Fellow with AMS Healthcare, and a Faculty Affiliate with Schwartz Reisman Institute for Technology and Society.

How to Cite This Work

Donia, J., Hudson, AD., Rowland, P. (2026). *Design Fictions: A Toolkit for Imagining Alternative Digital Health Futures*.

Permissions

Design Fictions: A Toolkit for Imagining Alternative Digital Health Futures © 2026 is licensed under Creative Commons Attribution 4.0 International. To view a copy of this license, visit <https://creativecommons.org/licenses/by/4.0/>

Funding Statement

This work was generously supported by the AMS Healthcare Senior Fellows and Executive-in-Residence Program (Senior Fellow Dr. Paula Rowland). AMS is a Canadian charitable organization (#118792084RR0001).

Overview

Design Fictions is a story-driven workshop toolkit that uses vignettes and structured prompt cards to help participants collaboratively enter, question, and re-imagine digital health scenarios. Participants engage with fictional worlds to surface the assumptions, values, and relations that shape what is understood as possible, inevitable, or desirable.

This tool is grounded in design fiction as a collaborative method, sociotechnical imaginaries as an analytic orientation. The six Lens prompt cards draw on Danaher and Saetra's techno-moral change mechanisms, translated into accessible prompts that do not require participants to know the original source literature.

Intended Users

The toolkit is designed for broad use across academic, clinical, policy, and industry settings. It works best when participants bring diverse perspectives to bear.

Group Size: 4 – 24 participants, in small groups of 2 – 5

Audience	Context of Use
Academic researchers	Classroom pedagogy, seminars, research retreats, interdisciplinary workshops
Health system leaders, clinicians, practitioners	Strategic planning sessions, workshops, brainstorming exercises
Policymakers	Consultation exercises, public engagement events, regulatory sandboxes
Technology designers, product managers	Design sprints, responsible innovation exercises

Format & Timing

The toolkit is designed for a minimum 60-minute session (compressed, 1-2 rounds only), with a 90-minute full format that also includes time for share-back.

90-Minute Full Format

Phase	Duration	Activity
Orientation	10 min	Facilitator introduction: goal of the exercise, how it works.
Round 1: Reading & Interrogation	30 min	Groups read their vignette, discuss initial observations, then apply Lens Cards to engage with the fictional world.
Round 2: Role-Taking & Reimagination	30 min	Participants adopt Role Cards within the world and narrate alternative trajectories and their conditions.
Share-Back	15 min	Whole-room exchange: each group shares key insights about desirable and undesirable features of their world.
Closing	5 min	Facilitator synthesis: what expanded, what shifted, what to carry forward.

60-Minute Compressed Format

Phase	Duration	Activity
Orientation	10 min	Abbreviated introduction and distribution of materials
First Impressions	10 min	Groups silently read their story and then share their initial impressions
Lens Analysis	15 min	Groups apply 1 Lens Card (facilitator selects or groups choose)
Role Taking	15 min	Abbreviated Role Card; groups narrate at least one alternative trajectory
Share Back	10 min	Groups take 3-5 mins each to share back their work

Note: For half-day workshops (3+ hours), the toolkit can be run in two rounds with different stories, or groups can swap stories after the first cycle and apply fresh lenses to a world another group has already interrogated.

Tool Components

The toolkit has three primary components: Narrated Vignettes, Lens Cards, and Role Cards. The vignettes provide the fictional world; the Lens Cards structure how participants engage with it; the Role Cards guide how they reimagine it from a particular perspective.

Design Fiction Vignettes

Format: Short printed narratives Count: 3 stories Distribution: 1 copy per person
--

Each story is a short design fiction vignette (~1k words) set in a plausible scenario. Each vignette contains named characters occupying recognizable positions, and each centres a particular experience or problematic.

The stories are designed to be rich enough to sustain multiple rounds of engagement, while ambiguous enough that participants will disagree about what is happening and why.

The stories were developed separately and provided as companion documents to this toolkit.

In the event that you wish to develop your own vignettes, you might consider the following:

- **Fiction vs Empirical Cases:** Fictional scenarios create productive distance from real events or institutions, reducing defensiveness and allowing participants to engage in a more open-ended fashion. They also give you compositional control: you can concentrate several dynamics into a single scene that no real case would offer cleanly.
- **Centre an Embodied Perspective.** Each vignette should be anchored in a specific role (e.g., a clinician, patient, developer) whose experience structures what the reader notices. The world is revealed through what that person knows, sees, and feels.
- **Length:** Around 1,000 words is enough to establish a world, populate it, and introduce a problematic without resolving it. Too short and there's nothing to interrogate; too long and the story does the analysis for the participants. Aim for density.
- **Build in Interpretive Friction:** The most generative vignettes are ones where participants disagree about what is actually happening. Avoid tidy framings; ambiguity is productive.

Lens Cards

Count: 6 Lens Cards | Used in Round 1

Each Lens Card names a dimension of sociotechnical change and poses a question that directs participants' attention to a specific part of the story. The lenses are designed to be complementary: each surfaces something the others miss.

In the 60-minute format, the facilitator may pre-select lenses; in the 90-minute format, groups may choose which lenses to prioritize, or they may work through all six.

The Lens Cards are attached separately, and summarized below:

<p>LENS: Adding Options How does this digital health tool expand what actors can do — and who benefits from those new possibilities? Whose options are not being added?</p>	<p>LENS: Shifting Costs What burdens are being redistributed by this digital health tool? Who absorbs the new costs — in time, risk, liability, or cognitive load?</p>
<p>LENS: Changing Relationships How does this digital health tool alter the structure of care relationships — between clinician and patient, between institution and staff, between vendor and health system?</p>	<p>LENS: Altering Perception How does this digital health tool shape what becomes visible that was invisible before? Whose perceptions of the situation are privileged by the tool's outputs?</p>
<p>LENS: Changing Norms What new standards of practice or accountability does this digital health tool introduce — formally or informally? Who enforces them?</p>	<p>LENS: Transforming Virtues What character traits and professional virtues are rewarded — or eroded — by consistent use of this digital health tool?</p>

Role Cards

Count: 8 cards | Used in Round 2

Role Cards are used in the next round to shift participants into first-person imagination. Each card names a position within the fictional world, and contains a prompt to narrate an alternative trajectory from that position.

Participants are asked to adopt the perspective as an analytic stance, seeing the world's pressures and possibilities through different positionalities.

Roles are assigned to individual members (or pairs). Participants then narrate: from this position, what could happen differently? Under what conditions? What would have to change for the trajectory to shift?

The Role Cards are attached separately, and summarized below:

<p>ROLE: The Clinician</p> <p>You will use this tool daily. What would have to change for you to trust it, or to refuse it? Narrate a moment where you override the system, or a moment where you wish you had.</p>	<p>ROLE: The Family Member</p> <p>You encounter this tool's effects through someone you care for. What do you notice? What questions would you ask if anyone invited you to?</p>
<p>ROLE: The Patient</p> <p>You are on the receiving end of this tool's outputs, though you may not know it. What would meaningful transparency look like from where you stand? What would you want to be different?</p>	<p>ROLE: The Regulator</p> <p>You are responsible for governing this tool but your frameworks were not designed for it. What would you need, in law, in evidence, in political support, to intervene?</p>
<p>ROLE: The Frontline Worker</p> <p>You interact with the tool more than anyone, but your expertise is rarely consulted in its design. What do you see that others don't? What alternative would you design?</p>	<p>ROLE: The Designer</p> <p>You helped build this tool. Looking at how it is actually being used, what surprises you? What would you change if you could go back? What would you change going forward?</p>
<p>ROLE: The Administrator</p> <p>You approved the tool's adoption. What would make you reconsider? Narrate a board meeting where the tool's future is contested.</p>	<p>ROLE: The Advocate</p> <p>You represent a community affected by this tool. What demands would you make? What alliances would you build? What would meaningful consultation look like?</p>

Materials List

Essential Materials

Item	Quantity	Notes
Printed vignettes	1 per person (3 unique stories in the set)	Printed on standard paper.
Lens Cards	1 full set (6 cards) per group	Printed on cardstock. Cards should be approximately 4" × 6" for readability.
Role Cards	1 full set (8 cards) per group	Printed on cardstock. Cards should be approximately 4" × 6" for readability.
Participant Instructions	1 per person	Includes timing, phase descriptions, and debrief prompts.

Facilitator guide	1 per facilitator	Includes timing, phase descriptions, and debrief prompts.
Group response sheet (printed)	1 per group	Structured template for recording observations, lens analysis, and alternative trajectories (see Appendix A).
Pens or markers	2–3 per group	For writing on response sheets and annotating stories.

Optional Materials

Item	Quantity	Notes
Large-format paper or flipchart	1 sheet per group	For visual mapping of relationships, costs, or alternative trajectories.
Sticky notes (multiple colours)	1 pad per group	For non-linear brainstorming during lens analysis.
Timer (digital or projected)	1 per room	Visible countdown for each phase.

References

Coulton, P., Lindley, J., Sturdee, M., & Stead, M. (2017). Design fiction as world building. *Proceedings of the 3rd Biennial Research through Design Conference*, 1–16.

Danaher, J., & Sætra, H. S. (2023). Mechanisms of Techno-Moral Change: A Taxonomy and Overview. *Ethical Theory and Moral Practice*, 26(5), 763–784.

Jasanoff, S., & Kim, S.-H. (2009). Containing the Atom: Sociotechnical Imaginaries and Nuclear Power in the United States and South Korea. *Minerva*, 47(2), 119–146.

Vallor, S. (2016). *Technology and the virtues: A philosophical guide to a future worth wanting*. Oxford University Press.