Design Team 1A: Create a shared understanding of how HSR impacts health

Author: Danielle DeCosta
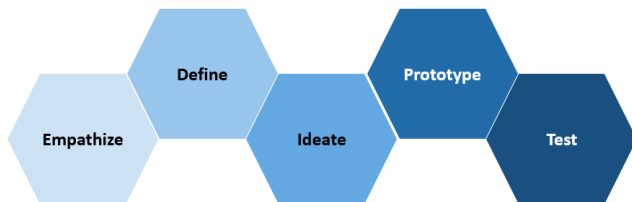
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AcademyHealth

CHALLENGE

Health services researchers often lack a shared sense of common purpose and understanding of how their work could meaningfully impact health.

MAJOR STAKEHOLDERS

- Patients and people
- Health system leaders
- Researchers

IDEA

A video series that demonstrates to health system leaders and other stakeholders how HSR can provide value to their mission to set a tone and vision for the whole field.

PROTOTYPE

Virtual key informant interviews with health system executives in order to solicit their understanding of what HSR is.

The Paradigm Project uses **human-centered design**, an approach to create solutions that address the needs of those experiencing a challenge. It has a bias toward action, celebrates experimentation, and embraces failure.

Design Phases (iterative):

Empathize — Define — Ideate — Prototype — Test

If you have any comments or suggestions, please contact the author.

DESIGN TEAM 1A

LESSONS LEARNED

While HSR aims to improve health care by studying services delivered, patients bring external experiences that affect their health as residents in their communities into health care settings. The challenge and opportunity for HSR is in this intersection of health and health care.

Design Team 1B: Respond more quickly to a changing health care environment

Author: Joe Dudenhoeffer

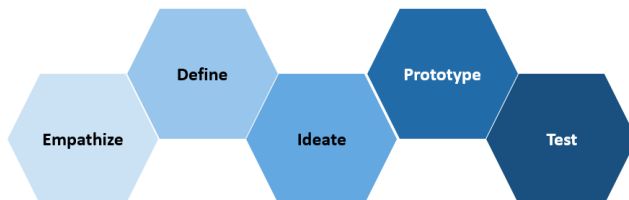Paradigm Project

AcademyHealth

CHALLENGE

Norms and institutions limit the ability of HSR to respond to the generation of large quantities of data and the need for evidence in real time.

MAJOR STAKEHOLDERS

- Researchers
- Health system leaders
- Media/Press

IDEA

An online community where research producers and users (e.g., media) build community, democratize idea-sharing and generation, and disseminate findings.

PROTOTYPE

Screenshots and links to online platforms that promote conversations about science to simulate the idea for an online HSR community.

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Design Phases (iterative):

Empathize — Define — Ideate — Prototype — Test

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LESSONS LEARNED

The team interviewed stakeholders, who reported that traditional research skill sets don't emphasize the value of connecting with people of influence or negotiating for change. They also shared that information is disseminated effectively when using multiple forms of communication.

Design Team 2A: Ensure research responds to the priorities of communities and patients

Author: Maria Gonzalez Millan

Paradigm Project

AcademyHealth

CHALLENGE

Investigator-initiated research leads to studies disconnected from the needs of key audiences, particularly those outside of traditional health care.

MAJOR STAKEHOLDERS

- Researchers
- Communities and patients
- Health care organizations

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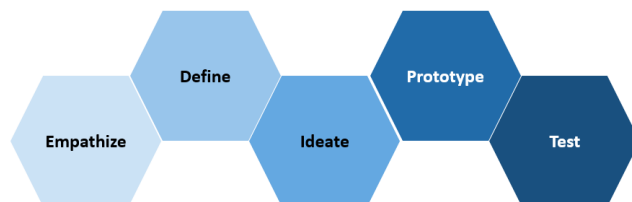
If you have any comments or suggestions, please contact the author.

IDEA

A platform to match researchers with communities in need of improvements in health and health care. The platform would serve as both a directory and a matchmaking service, connecting researchers to communities with unmet HSR needs (communities that researchers don't know need help).

PROTOTYPE

A mockup of the platform:

There is a match!

Name: Jane Smith, PhD	**Name:** Mary Brown, MSW
Position: Senior Researcher	**Position:** Community organizer
Organization: ABC University	**Organization:** Girls of D.C.
Location: Cincinnati, OH	**Location:** Washington, D.C.

Research		Work	
Topics	• Adolescent reproductive health • Behavioral health	Topics	• Adolescent reproductive health • Community development
Interests	Test a behavioral approach to reduce teenage pregnancy	Interests	Improve well-being of families in Washington D.C.
Needs	Looking for research sites to test the approach	Needs	Reduce teenage pregnancy among disadvantaged groups
Resources available	• NIH Funding • Team of phycologists	Resources available	• Contact with families • Partnerships with local schools

Connect

LESSONS LEARNED

Testing the prototype with researchers revealed that they believe they already engage with communities. Tests also suggested that community traumas from past experiences with researchers may make them less willing to participate in the platform.

Design Team 2B: Address the social determinants of health

Author: Joe Dudenhoeffer
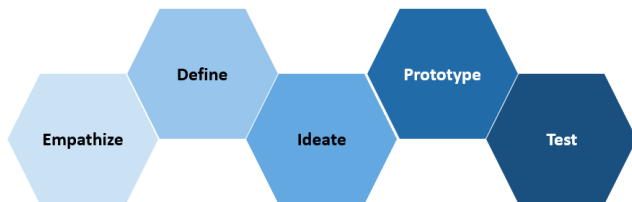
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CHALLENGE

HSR tends to prioritize medical, disease-oriented research over research that explores health and its societal contexts more broadly.

MAJOR STAKEHOLDERS

- Researchers
- Community members
- Funders

IDEA

A community-led listening forum that researchers attend to learn how social and economic needs affect the people of a particular community, such that researchers' subsequent work responds to those voiced needs.

PROTOTYPE

The inclusion of health services researchers in a Boston listening forum that convenes policymakers and funders to listen to Black and Brown women explain the impact of racism on their health.

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Design Phases (iterative):

Empathize — Define — Ideate — Prototype — Test

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LESSONS LEARNED

Communities are left out of the research process because of a lack of funding and the priorities within health services research. In an interview, one researcher reported feeling overwhelmed by the prospect of tackling social determinants of health and enacting sustainable change.

Design Team 2C: Consider emerging technologies and trends and their implications for health and health care

Author: Danielle DeCosta

Paradigm Project

AcademyHealth

CHALLENGE

HSR currently devotes insufficient attention to emerging technologies, societal trends, and their implications for health and health care.

MAJOR STAKEHOLDERS

- The public
- Private sector innovators
- Research universities

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Design Phases (iterative):

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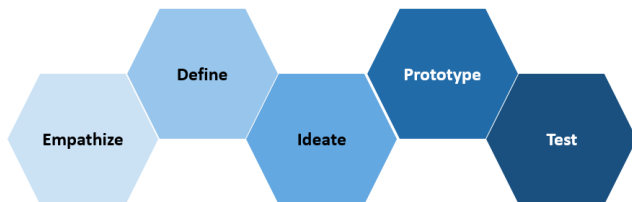
If you have any comments or suggestions, please contact the author.

IDEA

Health services researchers and tech innovators commit to structured collaborations to facilitate (1) consideration of the latest evidence and HSR perspectives throughout development of emerging technological breakthroughs; and (2) timely, appropriate use of technological advancements by HSR.

PROTOTYPE

A pitch to a foundation/funding agency to commit money to new collaborations between health services researchers and technological innovators.

LESSONS LEARNED

A focus on technology requires true interdisciplinary cooperation, which introduces additional challenges. On the other hand, the social impact focus of HSR could attract professionals with specialized skills, like computer science, to the field—if institutions welcomed them.

Design Team 2D: Place a greater emphasis on studies that solve problems

Author: Joe Dudenhoeffer

Paradigm Project

AcademyHealth

CHALLENGE

Due to the complexity of designing system-level interventions, HSR emphasizes descriptive research over interventional studies.

MAJOR STAKEHOLDERS

- Funders
- Researchers
- Health system engineers

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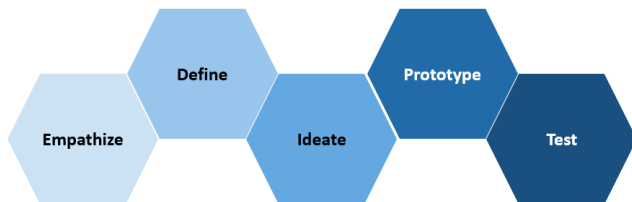
If you have any comments or suggestions, please contact the author.

IDEA

A virtual, open-source, modular toolkit for funders to identify the most relevant real-world health problems and solicit robust and workable solutions. The toolkit includes modules that help researchers and funders assess the scalability, implementation, and policy implications of their research.

PROTOTYPE

A mockup of the toolkit's modules:

Scoping the Problem | Partnerships & Policies | Identifying the Team
Workflow Assessment | Evidence Review
Pilot Sites | Scalability and Sustainability
Competitive and Comparable Analysis | Field Assessment | Data Assessment
Expected Outcomes | Technological Readiness
Proposed Implementation Budget | Policy Analysis

LESSONS LEARNED

The team tested the prototype with funders, who felt like the toolkit was relevant to funders, but might be more helpful as a guide for researchers. To be useful, funders would have to buy into and endorse the toolkit's goals; researchers also shouldn't think the toolkit is just an academic exercise.

Design Team 3A: Value and include perspectives of historically siloed/marginalized communities in the research workforce

Author: Danielle DeCosta
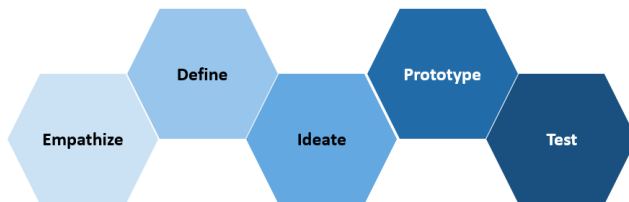
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CHALLENGE

A lack of sufficient diversity in thought and lived experience among researchers can leave important questions and perspectives ignored.

MAJOR STAKEHOLDERS

- HSR community
- Community partners of beneficiaries of research

IDEA

An experience, such as a festival, that demonstrates the value of diversity and inclusion in the workforce and sparks a fundamental shift in perspective that leads to action.

PROTOTYPE

A storytelling video (one example of an interactive experience) that could spark "aha" moments that can change attitudes.

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Design Phases (iterative):

Empathize — Define — Ideate — Prototype — Test

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LESSONS LEARNED

An "aha" moment must be paired with other components that lead to action, whether data, humor, or reflection.
The team is exploring how storytelling, poetry, or another creative experience might spark that shift in attitude—as well as what else is necessary to prompt action.

Design Team 3B: Ensure researchers and end-users collaborate in the production of knowledge

Author: Maria Gonzalez Millan

Paradigm Project
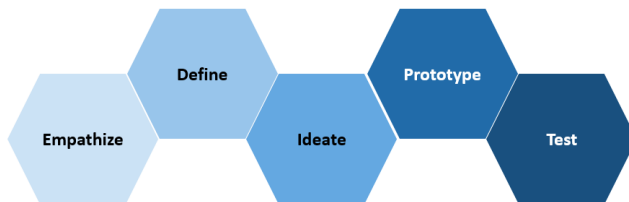
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CHALLENGE

Academic institutions and health care organizations have different evidence needs and often lack the resources and incentives to break these silos.

MAJOR STAKEHOLDERS

- Researchers
- Community-based organizations
- Health care organizations

IDEA

Individuals who serve as "bridgers" communicate bi-directionally with researchers and communities. They help guide researchers' work, such that it accounts for the communities' needs and is presented in ways that resonate with them.

PROTOTYPE

A leaflet and role play to recruit "bridgers":

Help Bridge the Gap between Communities and Researchers to Create Positive Transformation

Benefits
Those producing and using research understand each other's needs and perspectives and support each to ensure strong, quality, timely, catered intelligence that makes a difference for real people. In particular:
- Organizations get the knowledge they need to improve their communities through a support network of trusted partners
- Bridgers get training and resources to meaningfully impact their communities
- Researchers get expertise in community engagement and strengthen their research through community input

Characteristics of a bridger
How do you choose a bridger? The ideal bridger is an individual in your organization who:
- Knows your organization well.
- Is trusted by the community.
- Is an excellent communicator and connector.
- Has a very basic understanding of science and health care services.

How does it work?
- Organizations identify/nominate a person who can serve as a bridger
- Bridgers receive x days of training on working with researchers and conducting research (e.g., setting priorities, study designs, and measuring outcomes); in parallel, researchers receive training on working with communities
- Bridgers meet with other researchers _____ (periodically)
- Bridgers and researchers come up with research questions they can answer together

Take Action!
Sign up now, ask questions or provide comment to make the Bridger program better.
Contact _____

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Design Phases (iterative):

Empathize — Define — Ideate — Prototype — Test

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LESSONS LEARNED

Stakeholders who tested the prototype suggested clarifying the ask as well as the benefits of being a "bridger;" there should be incentives for participation. The team could also consider organizations, in addition to individuals, as potential "bridgers."

Design Team 3C: Ensure researchers have the skills to work in academic and non-academic settings

Author: Danielle DeCosta

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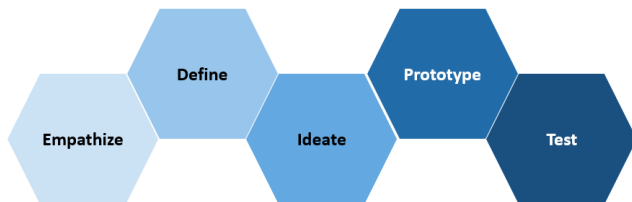
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CHALLENGE

There are insufficient opportunities for new researchers who work in non-academic settings to acquire the skills they need to contribute effectively.

MAJOR STAKEHOLDERS

- HSR trainees
- Teachers and faculty
- Health care delivery systems

IDEA

Redesign HSR curriculum to blend didactic and experiential learning, producing a versatile workforce with the skill set to contribute meaningfully in various settings.

PROTOTYPE

A model of core training, including modules for trainees to add to specialize:

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Design Phases (iterative):

Empathize — Define — Ideate — Prototype — Test

If you have any comments or suggestions, please contact the author.

LESSONS LEARNED

The redesigned HSR curriculum may be able to borrow from other applied training programs, such as medical and business school programs, that use clinical rotations and case studies as experiential learning.

Design Team 3D: Encourage collaboration across disciplines and build partnerships with research users

Author: Joe Dudenhoeffer

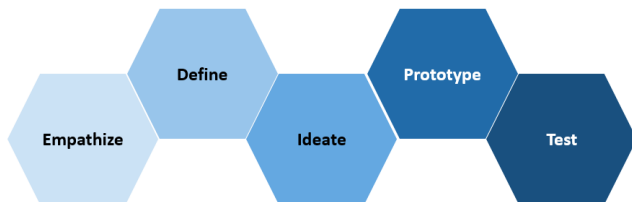Paradigm Project

AcademyHealth

CHALLENGE

Academic norms often silo researchers by discipline and do not encourage cross-disciplinary and cross-sector engagement.

MAJOR STAKEHOLDERS

- Students and research faculty
- Community members
- Grant administrators

IDEA

Develop, test, implement, evaluate, and spread successful models (e.g., grant selection criteria) for equitable and sustainable interdisciplinary and academic and community collaborations.

PROTOTYPE

A potential grant application for academic researchers that utilizes selection criteria like relevance to the community, collaboration across disciplines, and sustainability of collaboration.

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Design Phases (iterative):

Empathize Define Ideate Prototype Test

If you have any comments or suggestions, please contact the author.

LESSONS LEARNED

One insight from interviews was that collaboration in academia isn't incentivized by academic structures. Work with communities is harder to get funded or published. Plus, though students receive an interdisciplinary education, academic institutions hire people with discipline-specific training.

Design Team 4A: Support shared understanding of basic terminology and concepts

Author: Joe Dudenhoeffer

Paradigm Project

AcademyHealth

CHALLENGE

As a field of researchers trained in different disciplines and methods, a lack of common terminology can inhibit shared understanding.

MAJOR STAKEHOLDERS

- Multi-disciplinary researchers
- Students and research faculty
- Health care system leaders

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Design Phases (iterative):

Empathize   Define   Ideate   Prototype   Test
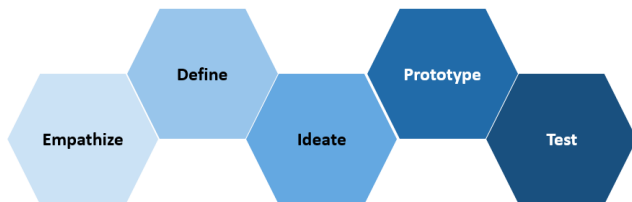
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IDEA

A structured group process that newly-assembled multidisciplinary teams can use to surface implicit preferences and biases (related to terminology, language, research design, methods, and publication outlets) including a virtual profile to elicit the information and a facilitated conversation.

PROTOTYPE

An online survey that simulates some of the questions that this virtual profile might ask.

LESSONS LEARNED

A theme in the team's interviews was that the multidisciplinary nature of HSR might help with defining terms and concepts in the field. One researcher said that by initiating a dialogue to clarify discrepancies in terminology, researchers can better understand the concepts they use.

Design Team 4B: Leverage qualitative and emerging methods to respond to the questions of end-users

Author: Maria Gonzalez Millan

Paradigm Project

AcademyHealth

CHALLENGE

Researchers value quantitative and tightly controlled studies over qualitative and iterative methods that could provide timely insights.

MAJOR STAKEHOLDERS

- Academics
- Funders
- Journals

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Design Phases (iterative):

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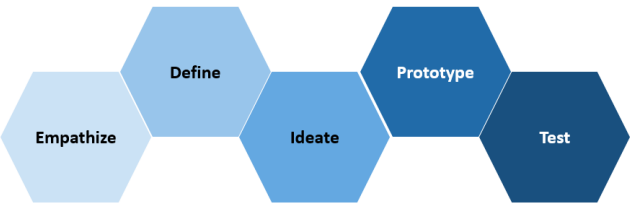
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IDEA

A "qualitative-friendly" designation for HSR entities (e.g., journals, conferences) that meet eligibility criteria, supported by a targeted public relations campaign about the value of qualitative methods for health-oriented research.

PROTOTYPE

The rubric to receive the designation:

RUBRIC
For evaluating organization for "Qualitative-Friendly" seal of approval
(Prototype for journal)

Domain: Qualitative Expertise in Leadership

	Strongly disagree	Somewhat disagree	Neither agree or disagree	Somewhat agree	Strongly agree
Qualitative expertise in review panel leadership (editor)					
High number of qualitative reviewers					

Domain: Guidelines/Criteria for Reviewing Qualitative Work

	Strongly disagree	Somewhat disagree	Neither agree or disagree	Somewhat agree	Strongly agree
Word/page limits adequate for qualitative research articles					
Tailored guidelines for reviewing qualitative submissions, including what should *not* be considered in such evaluation					
Qualitative manuscripts receive at least one reviewer from a qualitative researcher					

LESSONS LEARNED

The team is exploring options for an operating model for the designation. It should incentivize HSR entities to want to earn the designation as a way to attract "customers" (e.g., researchers, funders); the public relations campaign could help recruit these organizations.

Design Team 4C: Harness new computing technologies, as well as "big" and other non-traditional sources of data

Author: Maria Gonzalez Millan
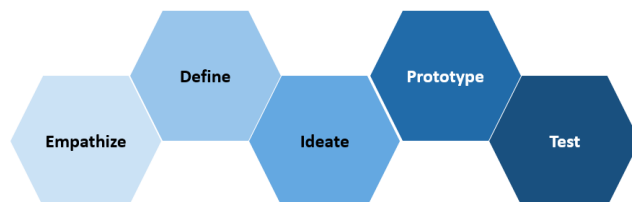
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CHALLENGE

HSR has to better use data innovations alongside traditional methods to reveal new insights and create impact.

MAJOR STAKEHOLDERS

- Researchers
- Data producers
- Patients and communities

IDEA

An open web repository containing resources (e.g., toolkits and case studies) related to research design, data ethics, biases in data analysis, and barriers for data access to help researchers effectively and ethically use emerging technologies, data, and methods.

PROTOTYPE

A mockup of the repository:

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Design Phases (iterative):

If you have any comments or suggestions, please contact the author.

LESSONS LEARNED

Testing the prototype clarified how to modify the site structure and design to make it more intuitive for end-users. The team decided to focus on helping early-stage researchers and to consider bias in big data as a starting point to build the repository.

Design Team 5A: Engage trusted intermediaries to make research more accessible for end-users

Author: Maria Gonzalez Millan

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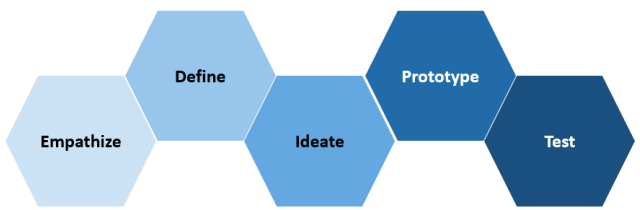
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CHALLENGE

Academics mainly communicate with each other and rarely use intermediaries (e.g., media) to make research more accessible and useful.

MAJOR STAKEHOLDERS

- Researchers
- Media
- Policymakers

IDEA

A system to rate intermediaries that provide HSR-related information to policymakers.

PROTOTYPE

A mockup of the rating system:

Reviews

| Sort by | Type or reviewer |
| | Rating |

Reviewer	Type	Rating	Review
Peter Brown Member, California Legislature	Legislature member/staff	★★★★ Timeliness: Fast Cost: Free Credibility: High Accessibility: Medium Usefulness: High	Dr. Smith's research provided me with important information to draft a bill to curb surprise billing in my state. I contacted her and she explained to my staff what the latest research and data on the topic was.
Mary Collins Leukemia advocate	Patient/consumer	★★ Timeliness: Fast Cost: Free Credibility: High Accessibility: Medium Usefulness: Low	Dr. Smith's articles weren't relevant to my work. They were interesting but didn't help me or my fellow patient advocates know how to deal with our hospital bills.

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Design Phases (iterative):

Empathize → Define → Ideate → Prototype → Test

If you have any comments or suggestions, please contact the author.

LESSONS LEARNED

COVID-19 has highlighted that policymakers have little time to sort through evidence but need to stay informed; there is a need for curated information. The rating system should meet the needs of these users in order to be effective.

Design Team 5B: Balance value of peer-reviewed journals and new or non-traditional communications platforms

Author: Danielle DeCosta

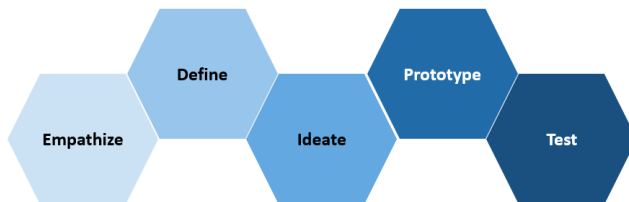**Paradigm Project**

AcademyHealth

CHALLENGE

HSR relies heavily on peer-reviewed publications and other channels that often render findings inaccessible and not useful for those who need them.

MAJOR STAKEHOLDERS

- Policymakers
- Health care practitioners
- Research producers

IDEA

A free, open-access paper-sharing website/platform that produces data visualizations for all submitted manuscripts, tailored for use by various end-user audiences.

PROTOTYPE

A mock website of the platform, paired with a visual abstract example:

HSRxiv Preprints — Create Preprint

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Design Phases (iterative):

Empathize — Define — Ideate — Prototype — Test

If you have any comments or suggestions, please contact the author.

LESSONS LEARNED

The team's innovation intends to work on two levels: 1) opening up research work flows and processes to enhance rigor; and 2) disrupting ingrained research power dynamics to further the aims of inclusivity, transparency, equity, and broader participation in science.

Design Team 5C: Ensure research is actionable for implementation

Author: Maria Gonzalez Millan

Paradigm Project

AcademyHealth

CHALLENGE

HSR studies often lack the information needed by practitioners who want to implement a proven intervention in a specific setting.

MAJOR STAKEHOLDERS

- Researchers
- Health care providers
- Community-based organizations

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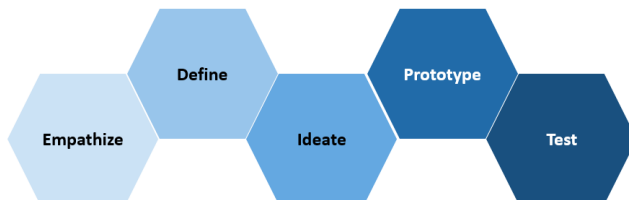
Design Phases (iterative):

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If you have any comments or suggestions, please contact the author.

IDEA

An incubator in which teams of researchers, clinicians, and community members receive funding and support to implement an evidence-based strategy that solves a challenge these teams are experiencing. The incubator shares lessons learned throughout the process in an open-source library.

PROTOTYPE

A brochure explaining the incubator:

Implementation Science for Equity Incubator

Bringing together communities to implement evidence-based health interventions using diverse lived experiences and expertise to solve today's most complex health and health care challenges with an equity lens

Who We Are
Our "open source" incubator provides funding, research, and guidance to support communities in using evidence-based interventions to better the health and health care of the whole population. We want to bring about equity as well as redress past damage.

Who We Help
Teams of decision makers (health services researchers, clinicians, and community members) who are selected based on their capacity to translate health services research to eliminate inequity in communities.

How We Help
In addition to providing funding to help solve health care challenges, the incubator will have a team of subject matter experts, implementation science experts, and experts in the field of health services research to help the selected applicant assess and choose the most applicable strategy to solve their challenge and then provide support throughout the implementation period.

Ongoing Benefits to the Health Services Research Field
New Voices: Selected applicants must commit to engaging diverse audiences and perspectives as well as

LESSONS LEARNED

The team tested the prototype with stakeholders, who found the idea useful but broad. In response, the team decided to narrow the incubator's focus to address health inequities and systemic racism in health care.

Design Team 6A: Craft funding, tenure, promotion, and publication incentives for timely and usable findings

Author: Danielle DeCosta

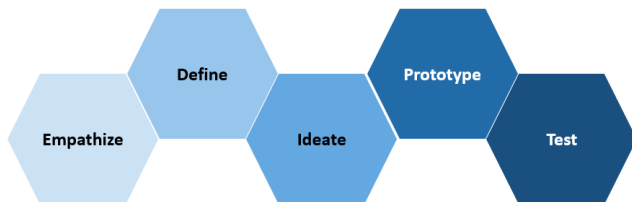Paradigm Project

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CHALLENGE

Incentives driving the HSR workforce do not yield timely, usable findings to promote practice application, measurable impact, and innovation.

MAJOR STAKEHOLDERS

- Health care delivery systems
- HSR investigators
- Clinicians

IDEA

Leverage health delivery systems as the laboratory or setting for conducting health services research, as well as a more frequent employer for researchers themselves.

PROTOTYPE

A mock Request for Proposals to gauge interest in funding partnerships between health care delivery systems and health services research institutes (broadly speaking—not limited to academic institutions).

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Design Phases (iterative):

Empathize — Define — Ideate — Prototype — Test

If you have any comments or suggestions, please contact the author.

LESSONS LEARNED

Before a partnership can identify a project of mutual interest, the idea must win buy-in from both the health system (to provide the environment for research) and a research institution (to provide an investigator team).