Paradigm Project

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The Blueprint: Paradigm Project Updates

At a Glance...

- New blog post: AcademyHealth Vice President Michael Gluck takes a look at how recent societal changes have ripened the conditions for innovation in health services research, thereby highlighting the relevance and timeliness of the Paradigm Project.
- In other news:
 - A *Frontiers* article examines three key challenges to interdisciplinary artificial intelligence (AI) research.
 - Recent research shows that "When the scientific establishment gets involved in partisan politics, it decreases people's trust in science, especially among conservatives."
 - Marcus Banks, in an *Undark* op-ed, argues that all prints should be preprints.
 - A webinar series, titled "A Culture of Health Program Listening Workshop: Community Perspectives," is taking place on December 8-10.



Latest Paradigm Project Updates

AcademyHealth Vice President Michael Gluck examines the ways in which COVID-19 and other societal changes have disrupted traditional methods of HSR in favor of new innovations in a recent blog post on the AcademyHealth website. Read more about the "challenges to the traditional way of doing health services research – the ones made most salient by current events –" and how the Paradigm Project is addressing these challenges using the tools of human-centered design.



In Other News...

Below are relevant articles that touch on some of the Paradigm Project's six challenges. We hope you find these useful as you work to make a difference in your own communities and institutions.

NOTE: In keeping with the Paradigm Project's work to foster creative thinking by engaging with uncommon and new perspectives, articles may include provocative or non-traditional points of view. Inclusion of these articles doesn't imply endorsement, and all opinions are the authors' own.



On Scientific Methods...

Below are two articles on artificial intelligence (AI), and what it means for research and health care.

"The use of artificial intelligence in a variety of research fields is speeding up multiple digital revolutions, from shifting paradigms in healthcare... to public services and education offered to the masses around the world.... When a revolution happens, the consequences are not obvious straight away, and to date, there is no uniformly adapted framework to guide AI research to ensure a sustainable societal transition. To answer this need, [here] the authors analyze three key challenges to interdisciplinary AI research, and deliver three broad conclusions: 1) future development of AI should not only impact other scientific domains but should also take inspiration and benefit from other fields of science, 2) AI research must be accompanied by decision explainability, dataset bias transparency as well as development of evaluation methodologies and creation of regulatory agencies to ensure responsibility, and 3) AI education should receive more attention, efforts and innovation from the educational and scientific communities."

"At best, [artificial intelligence] has the potential to make it easier to detect and diagnose diseases, streamline care, and even eliminate some forms of bias in the health care system. But if it's not designed and deployed carefully, AI could also perpetuate existing biases or even exacerbate their impact." Read more here.

In February, the Paradigm Project will convene a small expert meeting to consider several methodological and other issues around the use of complex, unstructured data and AI techniques in health services research. A subsequent issue brief will summarize the discussion. In addition, the Project has commissioned a paper to be published in the first quarter of 2021 by Camille Nebeker at UC San Diego on approaches to assuring the ethical use of complex data by the field.

On Scientific Publishing...



In 2020, several prestigious scientific journals "took the highly unusual step of either endorsing Joe Biden or criticizing Donald Trump in their pages," such as *Scientific American*, which made its first endorsement of a presidential candidate in its 175-year history. Recent research in *The Conversation* shows that "When the scientific establishment gets involved in partisan politics, it decreases people's trust in science, especially among conservatives."

Another notable aspect of scientific publishing in 2020 has been the influx of preprints. "Certainly, there was once a time when pre-publication peer review was the only system that made any sense — a time when scholarly journals were printed and mailed, and when it was essential to do all the intellectual work up front so that the final product on library shelves was as accurate as possible. Today, though, that's all changed," argues Marcus Bank in this *Undark* op-ed on why all prints should be preprints.



On Making Evidence More Useful...

Check out this older compilation by the Bipartisan Policy Center of case studies where evidence meaningfully informed policy. The compilation aligns with the Paradigm Project's goals to ensure that evidence is useful, actionable, and accessible. Case studies range from addressing health care costs with the launch of the Center for Medicare and Medicaid Innovation (CMMI), which "enabled HHS to test innovative payment techniques and service delivery models," to improving literacy in Tennessee K-3 classrooms.



On Science Communication...

This *Frontiers* article compares and analyzes the "development processes of health communication products for pregnant women in Madagascar and for elementary school children in Japan during the COVID-19 pandemic. This study compared these two field experiences in different socioeconomic settings to identify common strategies for the development of communication materials in a health crisis." Click here to learn more about how "collaborative and iterative efforts based on an existing trust relationship with the target communicy can provide the foundation for a rapid communication response in a health crisis."



On Diversity, Equity, and Inclusion in HSR...

"A commitment to diversity in health care leadership must go beyond placing certain people in certain positions. Proportions and percentages matter, but supporting and empowering diverse members of the team is essential to ensure that they are set to succeed and to thrive." Nwando Eze urges us in health care "to commit to hold [ourselves] to a higher bar" in this commentary in the *NEJM Catalyst*.



On Community Engagement in Research...

The National Academy of Medicine Culture of Health Program, funded by the Robert Wood Johnson Foundation, is hosting a webinar series, titled "A Culture of Health Program Listening Workshop: Community Perspectives," on December 8-10. There's still time to register and attend one of the webinars to "understand the current landscape for community-driven efforts to advance health equity, identify and discuss the barriers and gaps experienced by communities and organizations supporting communities, examine promising models of community-driven efforts to change or enact policy," and more.



On Design Thinking...

"Ten years ago, *SSIR* published a seminal article on using design thinking in social innovation... After a decade, the authors of the original piece and SSIR's editors decided it was time for an update." According to Jocelyn Wyatt, Tim Brown and Shauna Carey, "over the past decade, this design-led approach to social innovation has gone from a relatively nascent practice championed by a few organizations to a rich ecosystem of practitioners, academics, and adopters around the world." Click here to read this compilation of resources on design thinking for social innovation to better understand the Paradigm Project's methodology.



Volunteer Opportunity...

Finally, if you are interested in providing feedback to our Design Teams on their prototypes via a virtual video call, please reach out to caitlin.otter@academyhealth.org so that she may match you to a Design Team and schedule a testing conversation with you.

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