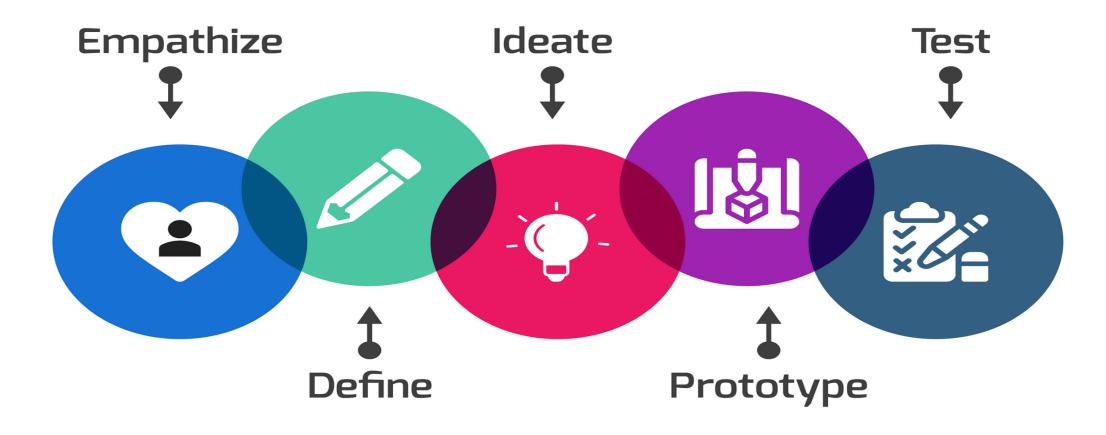
# Experiences in Applying Human-Centered Innovation to Health Care

Prof. Alva Taylor, Chris Awtrey, Andrew Martin

#### HUMAN CENTERED INNOVATION (BASED ON DESIGN THINKING)





## Poll

Have you been involved in a project that used human centered innovation or design thinking principles?

- Yes
- No



#### **Understand What People Do and Need**





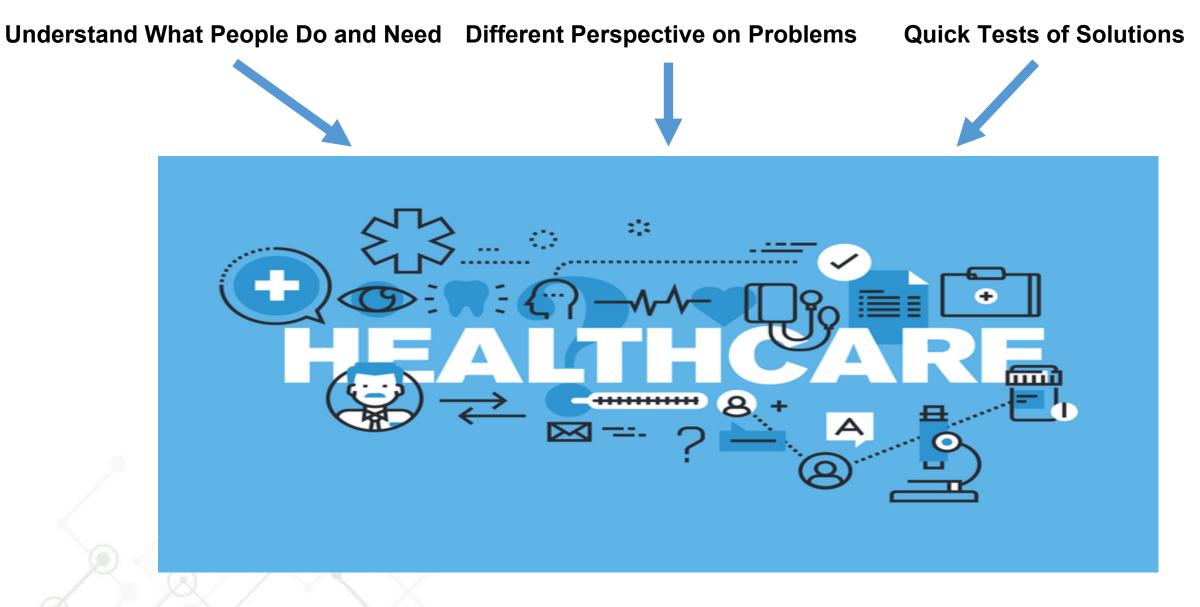
#### Understand What People Do and Need Different Perspective on Problems











WHY HCI: traditional solutions aren't working, human involvement important, ambiguous environments, payoff to great answers is high



## Key Challenges in Healthcare

- Privacy
- Deep Viewpoints and Experience
- Mission Critical Outcomes
- Multiple Players to Satisfy
- Heterogeneous Customer Population
- Long Outcome Parameters



Poll: What are/would be the biggest challenges to apply HCI in your organization?

- Privacy
- Deeply Held Viewpoints and Experience
- Mission Critical Outcomes
- Multiple Players to Satisfy
- Heterogeneous Customer Population
- Long Outcome Parameters



# Some Experiences



Implementing an integrated telehealth HIPPA compliant platform into an established home grown Electronic Medical Record System at a large academic medical center

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I have no financial disclosures



### Background

#### OBJECTIVE

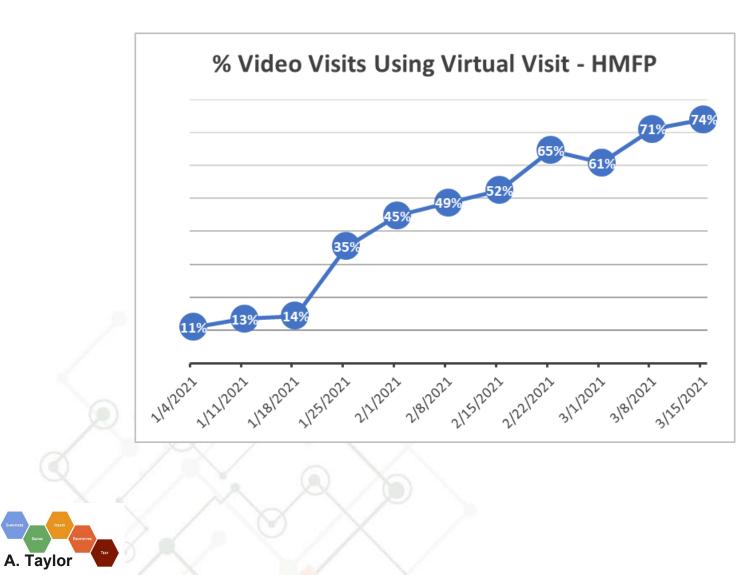
- Since March 2020, the COVID-19 pandemic has catalyzed rapid integration of telemedicine services into clinical practice.
- Initially members of our provider organization (HMFP) used many different platforms to provide telehealth services.
- Our aim was to integrate an easily utilized, HIPPA compliant telehealth platform into an established home grown EMR at BIDMC.
- Our secondary aim was to evaluate the patient and provider experience to ensure that the new platform met needs



#### Background

### METHODS

- June 2020: Our HMFP senior leadership team worked intensely with BIDMC IT to design a telehealth platform to integrate into OMR (EMR for BIDMC).
- We rolled out pilot launch with opportunities for feedback and iterative improvements thru September 2020.
- We utilized several different communication strategies to build the burning platform for change
- We developed several different educational approaches to onboarding new providers to the platform including tutorials, videos and electronic materials



Status of Roll Out	TOTALS
Complete	637
In Progress	453
Deferring for now	110
Total Est. Clinicians to Activate* (estimated)	1,200

### Conclusion

- This project demonstrates that exponential adoption and use of a novel telehealth platform is possible.
- Managing expectations for our initial version and having a commitment to continued improvements in the platform engaged providers to utilize BIDMC virtual visits.
- Additional capabilities for screen sharing, use of translators in the visits, opportunities for including medical students, residents and family members was identified as necessary early in the rollout, but proved challenging.
- Challenges to access and comfort with telehealth services which may disproportionately affect patients who benefit from translator services and patients without access to video capable technology.



## HCI is a Mindset



- How can you get the actual experiences of who will be affected (not just patients)?
- How can I frame problems in new ways?
- What are creative ways to test parts of the solution before going full implementation?

The Mindset Can Be Applied to Almost Any Problem



Throughout Symposium – Keep Coming Back to Mindset