7.3 Fieldwork for Healthcare - Guidance
Ch 6, "Impact of Fieldwork in Healthcare: Understanding Impact on Researchers, Research, Practice, and Beyond"

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Impact of Research
What is Impact?

- motivation for research
- benefit
  - “improve people’s lives, society, or the economy within the health domain”

Note: impact should be considered at the beginning of a research project
Types of Impact

1) researchers and practitioners
2) scientific knowledge
3) technology design
4) practice
5) society
6) economy
Impact on Researcher and Practitioners

what?

- impact on education and training
  - workshops and courses

example

- Healthcare Human Factors’ courses on the impact of human factors on patient care
- conferences
  - Conference on Human Factors in Computing Systems (CHI)
  - American Medical Informatics Association (AMIA)
Impact on Scientific Knowledge

what?

- confirmation of what is already known
- application of knowledge from another context
- expansion of a current concept*

example

- definition of handover
  - original - a single moment when there is full transfer of responsibility
  - post-study - “a process, consisting of three components—transfer of responsibility, acceptance of responsibility, and the sharing of information about patients and tasks—and these components can occur in a variety of orders”
Impact on Technology Design

**what?**
- technology designed to address the problem(s) observed during fieldwork

**example**
- Fall Prevention Tool Kit (FPTK) - software that assesses a patient’s risk of falling and provides steps on how to lower the risk
  - created following a study focused on identifying issues regarding fall risk communications and interventions
Impact on Practice

what? (types of study)

● device assessment*
● workplace assessment*
● quality improvement initiatives
● incident investigations

example

● University Health Network’s research before procurement of IV infusion pumps
  ○ → did not switch to a different IV pump
  ○ → began designing with a manufacturer
● research on ED physician interruptions
  ○ → how to avoid areas where interruptions frequently occur
Impact on Society

what?

- public engagement
  - raise awareness
  - educate the public
- participation in policy, government and hospital committees

example

- members of Healthcare Human Factors team are part of hospital patient safety committees, Association for the Advancement of Medical Instrumentations, etc.
  - → impact on hospital practices
  - → impact on medical technology development and testing
Impact on Economy

**what?**
- development of marketable devices
- reduction of hospital bed stays*
- reduction of need for inpatient care and clinical visits*

**example**
- laparoscopic surgery, or minimally invasive surgery
  - decreases recovery time
- home-based monitoring technology
Translational Gap
What is the Translational Gap?

- gap between research and applications of research
- transfer of knowledge from research to health care system
  - → improve health system quality and safety
How to Bridge the Translational Gap

● appeal to different audiences
  ○ consider where to publish
    ■ academic, professional, medical, etc. journal
  ○ consider co-authoring with a medical professional
  ○ consider the goals and motivations or other professions
    ■ ex. healthcare administrators - generally concerned with cost of care and efficiencies of delivering care
Summary

- Consider the impact you would like your research to have
- Bridge the translational gap and make your impact a reality through sharing of your findings and explaining their applications
Questions?