



# Goals

- Discuss HSS structure of a non-clinical department within a school of medicine
  - Departmental mission
  - Education mission
- Describe the connections between HSS and implementation science that can result in a research agenda to benefit healthcare delivery
- Describe lessons learned (to date!)

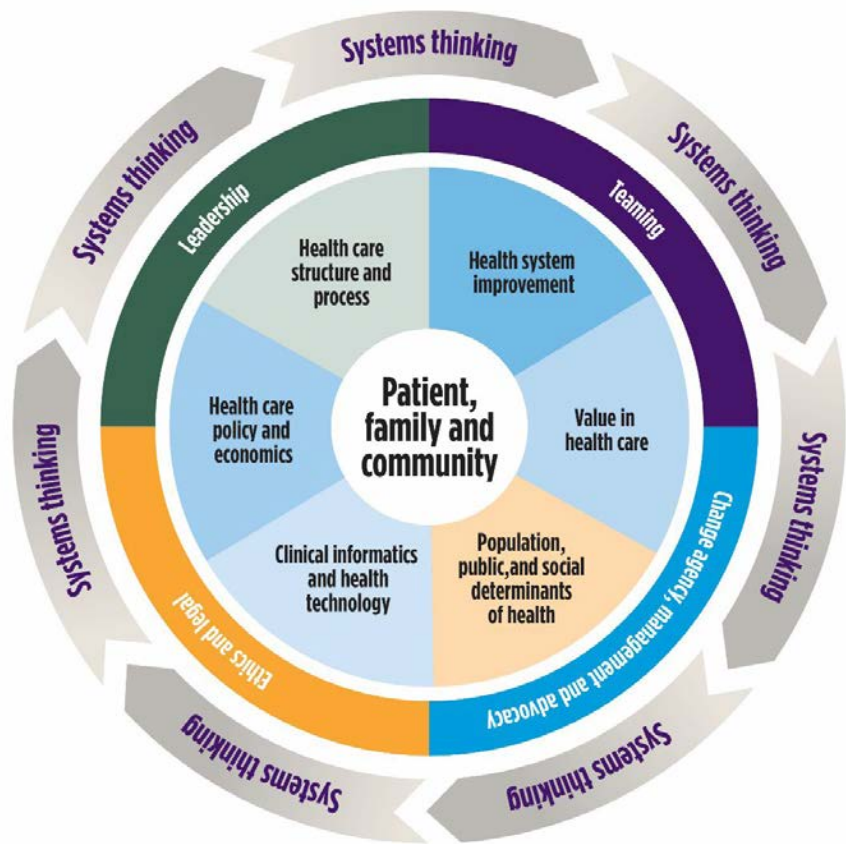
# HSIS Department & HSSIP Domain

## **HSIS department**

- Teaching, Research, Service (or clinical ops)
- Teach in domain
- For primary faculty, research is 50% ish portion of time
- Departmental home for HSS scholarship and educators
- Includes teamwork/interprofessionalism as scholarly domain

## **HSSIP domain**

- 4 year curriculum
- Phase 1, 2, and 3(ish)
- Phase 1- classroom, sim
- Phase 2- sim, clinical
- Topics in HSS wheel + Clinical applications
- Includes interprofessionalism



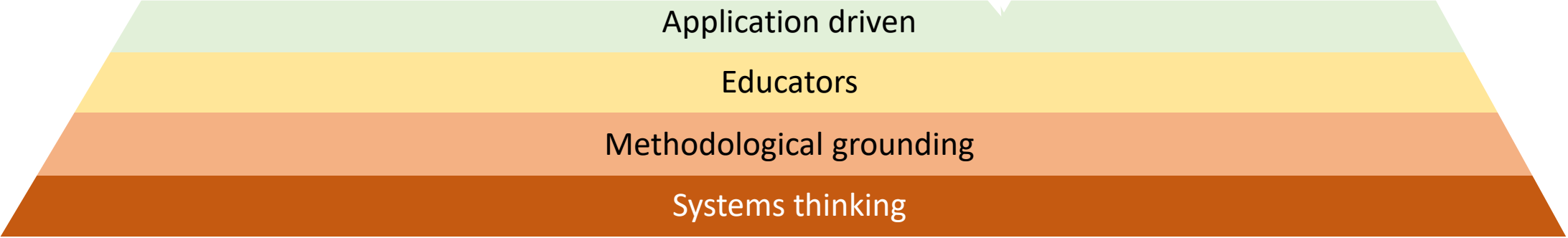
Davis, Gonzalo. How Medical Schools Can Promote Community Collaboration Through HSS Education. *AMA journal of ethics*, 2019

Djulbegovic, Bennett, Guyatt. A unifying framework for improving health care. *Journal of Evaluation in Clinical Practice*. 2018

Gonzalo, et al. The Triple Helix of Clinical, Research, and Education Missions in AHCs. A Qualitative Study. *Learning Health Systems*, 2020.



- Systems thinkers
  - Engineering (ISE)
  - Psychology (context and design)
  - Behavioral Economics (design influence behavior)
  - Human Factors (take what we know about human performance and design the system accordingly)
  - Public Health (how people behave in the real world)
- Applied problems
  - Health- obesity, SUD, etc
  - Operations- access, process optimization
  - Translation, Implementation
  - Healthcare delivery models
- Educators, Methodologists, Deep SME



Application driven

Educators

Methodological grounding

Systems thinking

# Health Systems Science + Implementation Science



# Your commitment opportunity

- Learning through this program
- Engage with teaching mission of the department
  - Opportunities to teach and interact with students
    - Upcoming! April 14 sim day
- Engage with research mission of the department
  - Medical Education Research
  - Health Systems Science, health care delivery, implementation science
- Engage with your own faculty development
  - Journal club with the other Clinical Champions



# Current departmental research and education faculty



Dr. Mary Wesley



Dr. Mengxi Zhang



Dr. Cynthia Morrow



Dr. Natalie Karp

+clinical champs  
Sarah DeWitt  
Joseph Kidd  
A Lucktong  
Andrew Moore  
Jaclyn Nunziato  
Vydia Permashwar  
Lubna Wani  
Justin White

+ multiple adjunct and instructional faculty

# Current state of the department



This is a design moment

Goal: Build transdisciplinary teams to study and address implementation science challenges in health care to:

- Implement system improvements to positively impact health care now
- Extramural grant support to systematically investigate and report innovations in models of care for others to implement

Respect unorthodox backgrounds



# Steps so far

- Department (HSIS) is purpose-built to create a collaborative and multidisciplinary
  - Special breed of faculty and infrastructure must be recruited and retained- diverse perspectives, backgrounds, mission driven, applied
    - Partnership
    - Project management
    - Infrastructure for grants management
  - Core full time HSIS foundation faculty (Tenured, Tenure-Tracked), implementation science, public health, HSS, domain specific
  - Must deliberately include
    - clinicians
    - clinical researchers
    - public health experts
    - experts in quality, safety and simulation;
    - experts in human factors,
    - Systems engineers
    - Designers

Differentiator: Human-Centered Design

# Lessons learned

- Silos
- Funding
- Polylingual yet nuanced
- Diversity of experience
- Marriage of tenure expectations and applied work
- Process and buy-in

# Thank you

[separker@vt.edu](mailto:separker@vt.edu)

*standing on the shoulders of giants*

