Designing and Implementing Health Systems Science

Designing, Implementing, and Evaluating Successful HSS Training Programs
November 2nd, 2023

Jed Gonzalo MD MSc
Professor of Medicine and Health Systems and Implementation Science
Senior Associate Dean for Medical Education
Virginia Tech Carilion School of Medicine

Objectives

As a result of this education, participants will be able to:

1. Describe systems-based competencies across health professions' frameworks.
2. Identify the core competency areas of Health Systems Science and the relationship of Health Systems Science in medical education's three-pillar model of learning.
3. Articulate several approaches for integrating Health Systems Science into curricula being used at US medical schools and residency programs.
4. Define and describe the concept of value-added medical education.
5. Articulate several obstacles for Health Systems Science implementation.

Our Professions' Core Competencies

Graduate Medical Education:
1. Patient Care
2. Knowledge for Practice
3. Professionalism
4. Interpersonal Communication Skills
5. Practice-Based Learning/Improvement
6. Systems-Based Practice

Physical Therapy Competencies:
1. Clinical Reasoning
2. Knowledge for Specialty Practice
3. Professionalism
4. Communication
5. Education
6. Systems-Based Practice

Pharmacist Competencies:
1. Direct Patient Care
2. Pharmacotherapy Knowledge
3. Systems-Based Care/Pop. Health
4. Communication
5. Professionalism
6. Professional Development

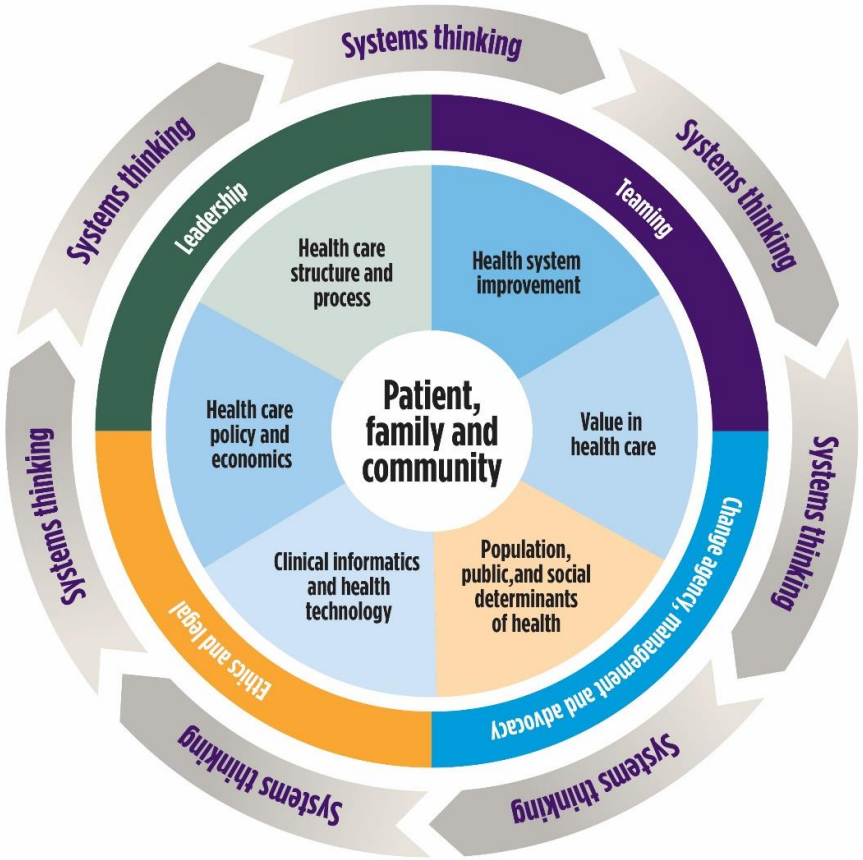
Unifying Competencies:
1. **Systems-Based Practice**
2. Population Health
3. Quality and Safety
4. Informatics and Technology
5. Leadership
6. Professionalism

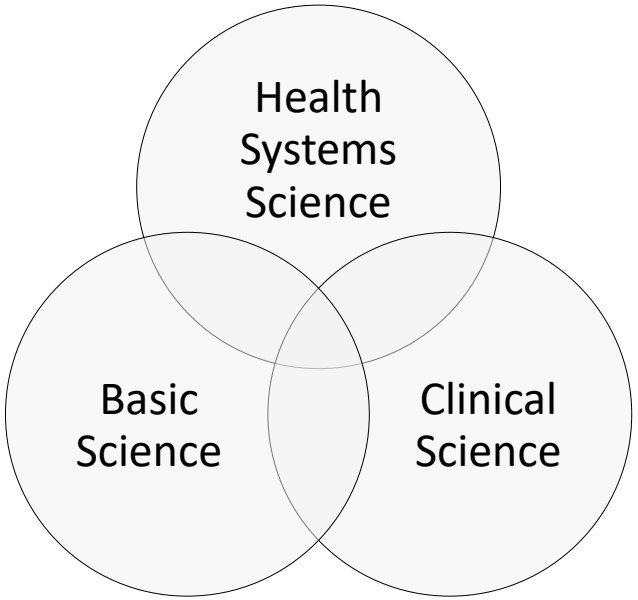
Undergraduate Medical Education:
1. Patient Care
2. Knowledge for Practice
3. Professionalism
4. Interpersonal Communication Skills
5. Practice-Based Learning/Improvement
6. Systems-Based Practice
7. Interprofessional Collaboration
8. Personal/Professional Development

Professional Nursing Education:
1. Knowledge for Nursing Practice
2. Person-Centered Care
3. Population Health
4. Scholarship
5. Quality and Safety
6. Interprofessional Partnerships
7. Systems-Based Practice
8. Informatics/Technologies
9. Professionalism
10. Professional, Leadership

ACGME Core Competencies
Englander et al. Toward a Common Taxonomy of Competency Domains for the Health Professions and Competencies for Physicians. Academic Medicine, 2013.
American Physical Therapy Association. Core Competencies of a Physical Therapist Resident. January 2020.
American College of Clinical Pharmacy Clinical Pharmacist Competencies. 2017.
American Association of Colleges of Nursing. The Essentials: Core Competencies for Professional Nursing Education. 2021.

The HSS Framework (Extending SBP)





Health Systems Science definition:
the principles, methods, and practice of improving quality, outcomes, and costs of healthcare delivery for patients and populations within systems of medical care.

Crosson et al. Gaps in Residency Training Should Be Addressed to Prepare Doctors for 21st-Century Delivery System. Health Affairs 2011
Gonzalo JD et al. Educating for the 21st-Century Healthcare System: Framework of Basic, Clinical and Systems Sciences. Acad Medicine. 2015.
Gonzalo, et al. Identifying and Defining Curricular Content Domains for Health Systems Science. Acad Med 2016
Gonzalo, D Wolpaw, S Skochelak. Chapter 1. Health Systems Science. Elsevier. December 2016
Havyer et al. Science of health care delivery milestones for undergraduate medical education. BMC Medical Education 2017
Gonzalo et al. Aligning Education with Health Care Transformation: Identifying "New" Faculty Competencies. Acad Med 2017

VIRGINIA TECH

How are US medical schools integrating HSS?

Phase	Medical School 1 [Total estimate 112 hours]	Medical School 2 [Total estimate 106 hours]	Medical School 3 [Total estimate 147 hours]	Medical School 4 [Total estimate 60 hours]	Medical School 5 [Total estimate 355 hours]
Pre Clerkship	**Course: Science of Health Systems 1-2 (60h)** All 12 HSS domains Year 2 – PS, QI, EBM, EHR skills	**Course: Patients and Populations: Improving Health/Healthcare (66h)** Legal, historical, financial context, disparities, improvement and systems, PS, epidemiology and biostatistics, interprofessional education	**Course Title: Foundations: 4w (92h)** Health coaching, advocacy, shared decision-making, population health, mistrust, SDH, HVC, policy **Course: HSS in the Preclinical Studies Block (20h)** EBM, shared-decision making HVC, teams	**Course title: Practice of Medicine Course (58h)** Doctoring course, communication, reasoning, notes, oral presentation, cultural competence etc. Population-centric care frame, databases, variations in quality.	**Course: Foundations of Profession (40h)** Healthcare, systems, insurance, SDH, etc. **Course: HSS Continuity Clinic (80h)** Continuity clinic experiences, focused on HSS. **Course: HSS Didactic Learning (30h)** Microsystems, IPE, med safety
Clerkship	Health equity; disparities, SDH IM – HSS reflection FCM – transitions, med rec Various clerkships - HVC	FCM – SDM, community engagement Peds – EBM IM – PS, errors, reporting	Peds – IPASS, HVC Neurology – SDH, transitions Others – HVC	HSS concepts learned through SBP competencies in clinical setting; task force working on HSS integration.	**Course: Clinical Systems of Care (25h)** System processes, explore PS, transitions, HVC, CI/HIT
Post Clerkship	**Course: Translating HSS (44h)** Application of all HSS principles learned in Years 1-3; teams with a QI/systems coach, Yellow Belt Lean/Six Sigma. **Course: Transitions to internship (~8h)** Prep for internship, transitions, HVC **Electives (8)**	**Course: Health, Society, and Profession (40h)** Team-based QI projects, analysis of systems issues. IPE sessions focus on PS, health care law, ethics.	**Course: HSS Course/Block (15h)** QI application, data analytics, analyzing systems errors, diagnostic errors, balancing uncertainty, HVC, IPE sim **Course: Transition to Internship block (20h)** HVC, transitions, discharge planning, coding, advocacy	HSS-related electives and selectives. Example - health policy 'selective' that facilitates learning in policy and population health.	**Required Immersion Weeks (120h)** Communication, Public Health Communication, IPE Policy and Economics **5 Required Courses (60h)** Patient Safety and Event Analysis, QI Principles, IPE

UCSF SOM Clinical Microsystems Clerkship Systems projects, patient care	**Kaiser Permanente** HSS and Quest Program Team-based projects, HSS curriculum	**Carle Illinois College of Medicine** Interprofessional faculty mentors linked with clerkships	**Virginia Tech Carilion School of Medicine** HSSIP "Champions" Faculty linked with each clerkship	**GME Tracks** Penn State, Temple, Jefferson, J. Hopkins Experiential learning of HSS	**NYU IM Residency** Transitions of Care Residency Rotation

Macy Foundation Conference on the Clinical Learning Environment (Gruppen, Irby, Durning, Maggio, van Schaik)
T. Brigham. Knitting the Continuum Together: Seizing the Opportunity to Improve Medical Education. www.acgme.org
Asch et al. Evaluating Obstetrical Residency Programs Using Patient Outcomes. JAMA 2009
Hunderfund, A. et al. Role modeling and regional health care intensity: experiences with cost-conscious care. Acad Med 2016
Kogan, Hauer, Holmboe. The Dissolution of the Step 2 Clinical Skills Examination and the Duty of Medical Educators to Step Up the Effectiveness of Clinical Skills Assessment. Acad Med 2021
Gonzalo et al. A Constructive Reframing of Student Roles Using a "Communities of Practice" Lens. Acad Med 2017
Reference: E. Pierluissi, T. Burgos, L. Mazotti, GL Park, G. Mejicano, S. Parker, N. Karp, B. McGillen, O. Moussa, C. Drake, D. Sartori

VIRGINIA TECH

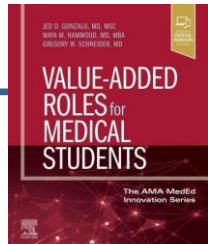
Value-Added Medical Education: Are medical students an asset or "liability"?

"**Value-Added Medical Education:** Experiential roles for students in practice environments that can positively impact patient and population health outcomes, costs of care, or other processes within the health system, while also enhancing student competencies in Clinical or Health Systems Science.

Direct Patient Benefit
Monitoring care plans (e.g. calls, home visits)
Facilitating patient access to resources
Patient education
Assessing patients to identify barriers
Being a patient "coach"
Direct Clinic Benefit
Facilitators of communication and coordination
Improving clinical operations and processes

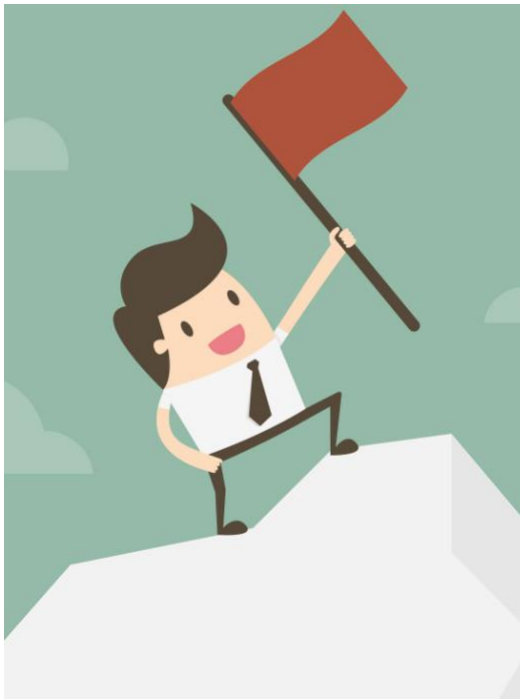
"New Roles"
Patient Navigator
Care Transitions Facilitators
Safety and Patient-Care Analysts
Quality Improvement Team Extenders
Population Health Managers
Patient-Care Technician
Medical Scribes

Shea et al. Compensation to a dept. of medicine for the teaching of medical students. NEJM 96
Jones et al. On the cost of educating a medical student. Acad Med 97
Lin, et al. Value-Added Medical Education: Engaging Future Doctors to Transform HealthCare Today, JGIM 2014
Gonzalo et al. Medical Students as Systems Ethnographers: Exploring Patient Experiences and Systems Vulnerabilities in the ED. AEM 2017
Gonzalo et al. A Constructive Reframing of Student Roles Using a "Communities of Practice" Lens. Acad Med 2017
Gonzalo JD, et al. Adding Value to the Healthcare System: Identifying Systems Roles for Students. Am J. of Med Quality. 2016
Gonzalo JD, et al. How Can Medical Students Add Value? Advancing the Value of UME to the Health System. Acad Medicine 2016.



Not An Easy Climb

- Student perceptions
- Faculty knowledge and skill
- Reliable valid assessments
- Confusion of what it is
- Disagreement about physician's role
- Time to teach and coach
- Clinical learning environments
- Skilled education designers
- Curricular space



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KAISER PERMANENTE
BERNARD J. TYSON
SCHOOL OF MEDICINE

Evaluating Health Systems Science (HSS) Programs and Tracking Program Effectiveness through the lens of Kaiser Permanente Bernard J. Tyson School of Medicine (KPSOM)

Abbas Hyderi, MD, MPH
Senior Associate Dean for Medical Education
Professor of Clinical Science

November 2, 2023

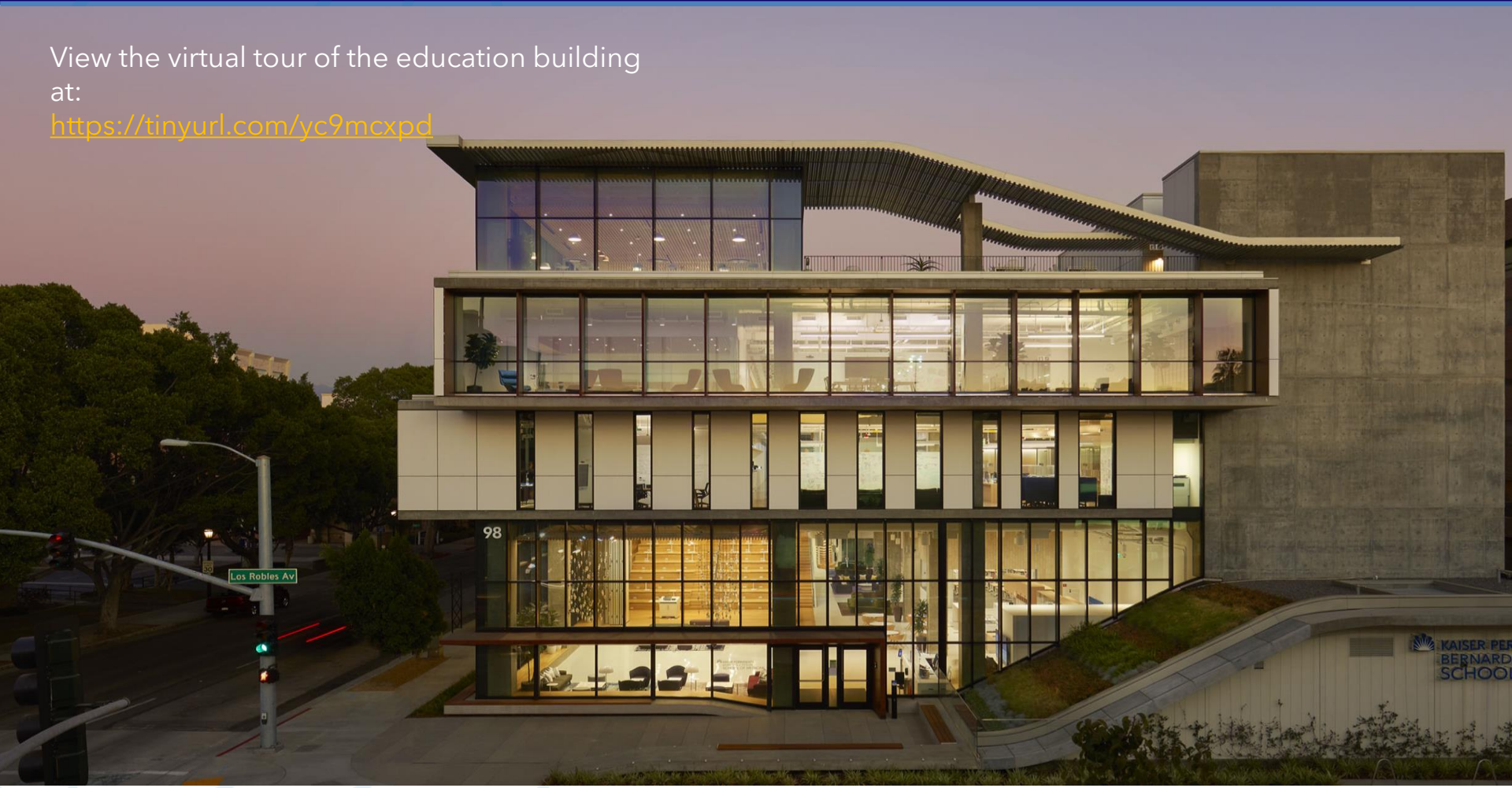
Our Mission

To provide a world-class medical education that ignites a passion for learning, a desire to serve, and an unwavering commitment to improve the health and well-being of patients and communities

School Basics

- Located in Pasadena, CA
- Embedded in KP health care system unaffiliated with parent university
- 50 students in each class
- Students will be supported in exploring any field they would like
- Provisional accreditation from LCME (October 2022) & WSCUC (July 2021)
- Highlights: CBME, HSS as distinct third pillar with 4-year footprint, All LIC model with Phase 1 FM/IM and six specialties in Phase 2, Coaching program, EID emphasis

View the virtual tour of the education building at:
https://tinyurl.com/yc9mcxpd



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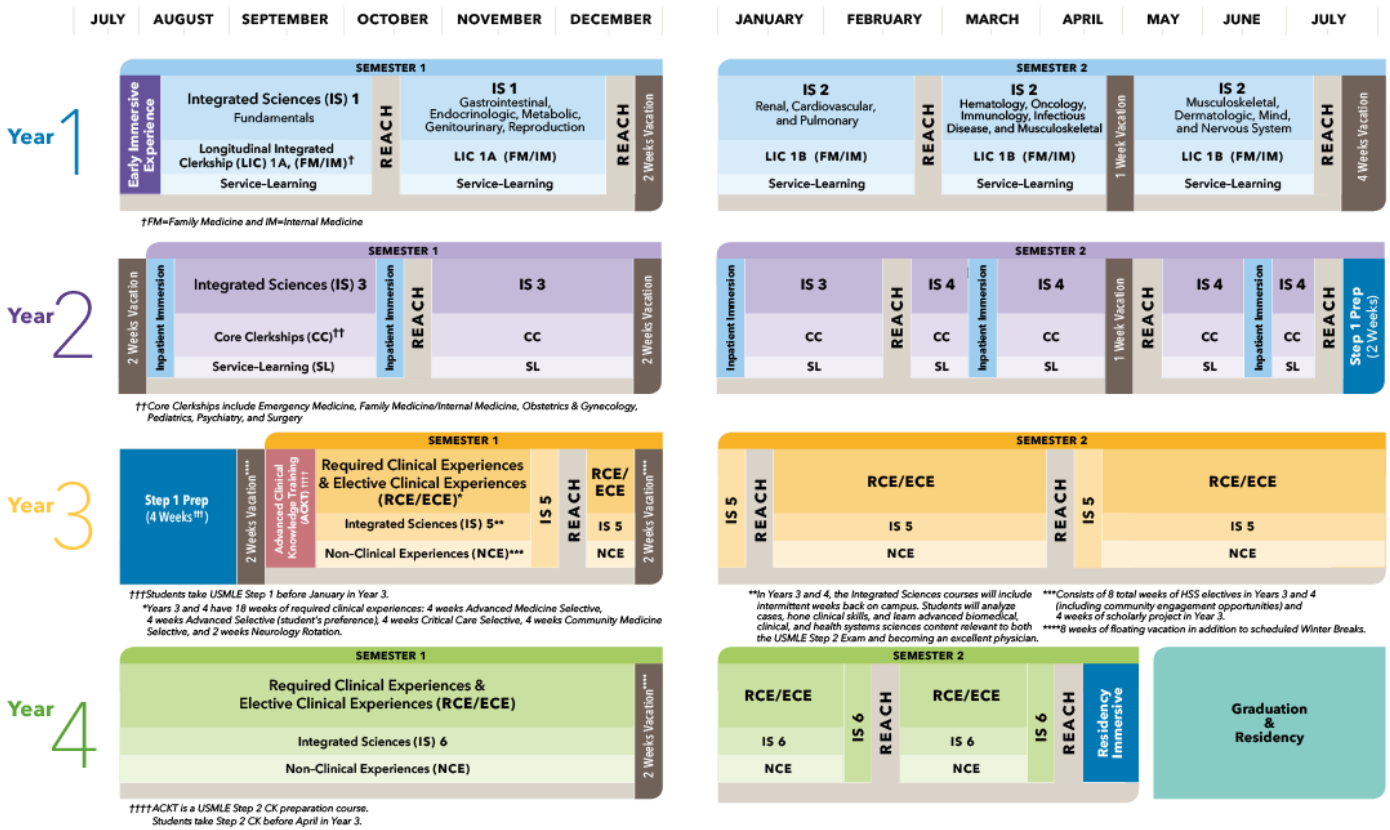
Your four-year journey.

(For the Class of 2027 as of 06/19/23. Please check back periodically for additional updates.)

REQUIRED SCHOLARLY PROJECT
(Conducted anytime during Years 1–3)

THE INTEGRATED SCIENCES COURSES INCLUDE:
- Biomedical Science
- Clinical Science
- Health Systems Science

4-YEAR LONGITUDINAL THREADS:
- Advocacy and Leadership
- Equity, Inclusion, and Diversity
- Health Promotion
- Interprofessional Collaboration



Virginia Tech Carilion School of Medicine

CARILION CLINIC

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HSS Curriculum

- Integrated Sciences Courses' HSS component with 4 domains
- Curricular threads include advocacy and leadership; ethics; equity, inclusion & diversity (EID); health promotion; and interprofessional collaboration
- Experiential, longitudinal curriculum includes: the required, two-year Service-Learning course; LIC SBP assignments across the first two years; the year 2 QUEST quality improvement project applying HSS principles in clinical learning environment
- Phase 3 HSS Selectives, Community Medicine Rotation, and required longitudinal Scholarly Project

HSS Content Domains

Longitudinal Integrated Clerkship

Students complete 6 **Longitudinal Integrated Clerkships (LIC)** at 1 of 6 KP medical centers

- Year 1 – Family/Internal Medicine
- Year 2 – Emergency Medicine, Family/Internal Medicine, OB/GYN, Pediatrics, Psychiatry, Surgery

Students start the LIC in first month

- One preceptor per student per LIC

Downey Medical Center

Los Angeles Medical Center

Panorama City Medical Center

Fontana Medical Center

South Bay Medical Center

West Los Angeles Medical Center

Service-Learning

Key elements of service-learning:

- Required over two years
  - 1/2 day per month in federally qualified health center + 1 hr/month Practicum / reflective work
- HSS faculty lead + Community Clinic Preceptor dyad per site
- Aims:
  - Understand social, economic, and environmental factors that influence health
  - Develop future leaders who will address fundamental challenges to closing health inequities from patients to communities

JWCH Institute Wesley Health Centers, Downey

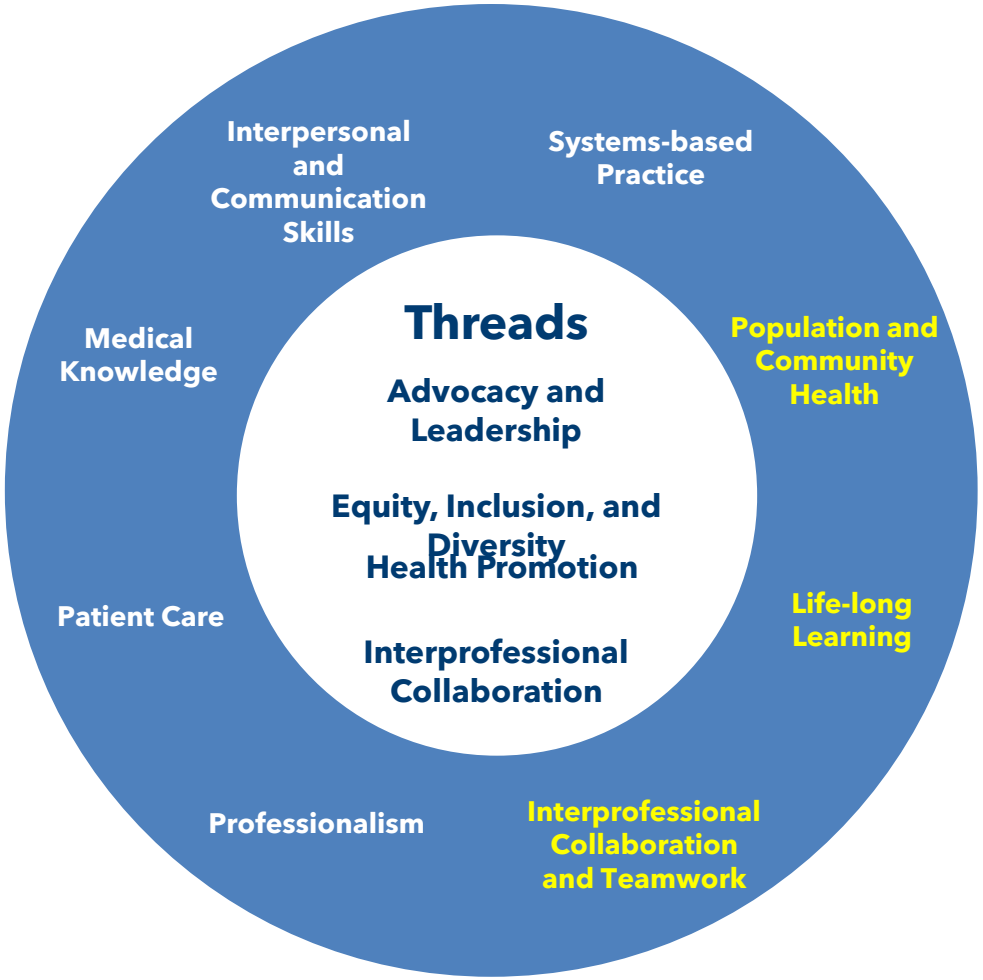
JWCH Institute Wesley Health Centers, Downtown LA

ParkTree Community Health, San Bernadino County

UMMA Community Clinic, South LA

Valley Community Healthcare, Panorama City

Venice Family Clinic, South Bay



Educational Program Outcomes/Competency Domains

- Advancement determined by Competency Committee at 3 points in training
- At each point, review of all performance to date

A Dual Assessment System – Day 1 to Graduation

Course Assessment System:

- ✓ IS NBME CAS
- ✓ OSCEs
- ✓ IS Open Ended Questions
- ✓ IS End-of-Week Quizzes
- ✓ Clerkship Assessments
- ✓ Scholarly Project
- ✓ Service-Learning Practicum
- ✓ All Assignments

Graded Assessment

EPOs & Milestones:
(programmatic)

- ✓ Portfolios
- ✓ Dashboards
- ✓ Milestones
- ✓ Progress OSCEs
- ✓ Narrative Comments
- ✓ Annual Competency Determination

Outcomes

A Dual Assessment System – Day 1 to Graduation

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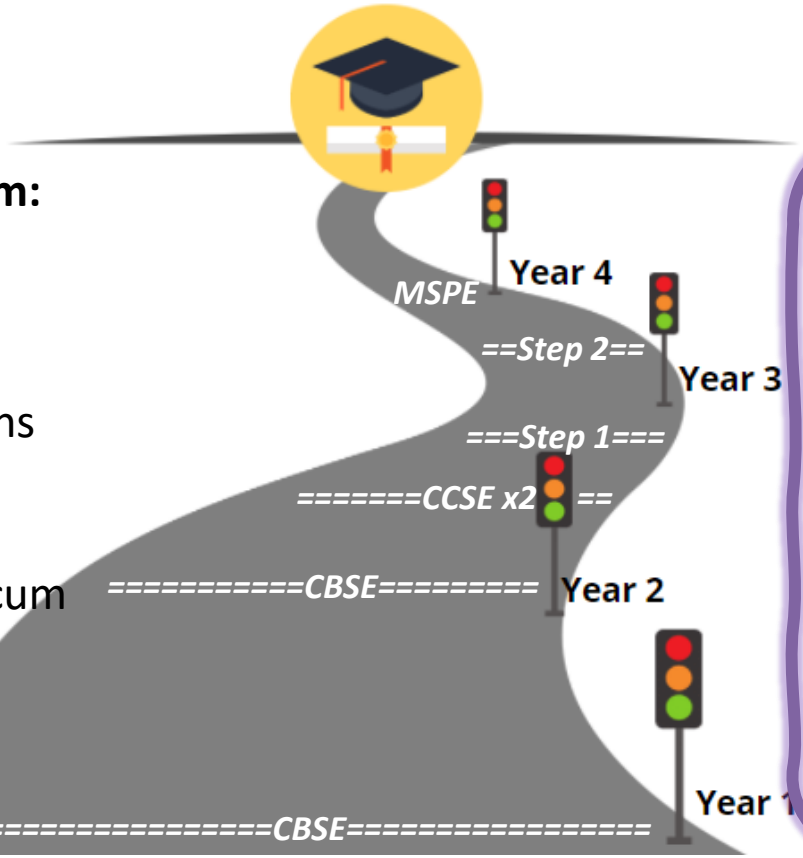


EPOs & Milestones:

- ✓ Portfolios
- ✓ Dashboards
- ✓ Milestones
- ✓ Progress OSCEs
- ✓ Narrative Comments
- ✓ Annual Competency Determination

Graded Assessment

Outcomes

HSS Assessment

- NBME Customized Assessment Services questions for biostatistics and epidemiology
- Open-ended questions (OEQs)/Essays for Integrated Science Course's HSS Domains and Curricular Threads
- OSCE peri-encounter tasks incorporating HSS
- Essays for Service-learning course to assess population and community health & equity, inclusion, and diversity

HSS Assessment - Continued

- LICs:
  - Clinical assessment specialists – physicians with dedicated FTE for clinical observation and feedback
  - QUEST project addressing quality of care gaps informed by HEDIS quality of care measures
  - Patient reported outcomes for care by students
  - SBP exercises: Year 1: Systems level Thinking, Medication Errors, Social Determinants, and Changing Processes/Practices; Year 2: Quality, Safety, Effectiveness, Value, Advocacy, and Ethics
- Service-learning:
  - Practicum project by community-informed rubric
  - Trimester reflection essays
  - 1:1 biannual meetings

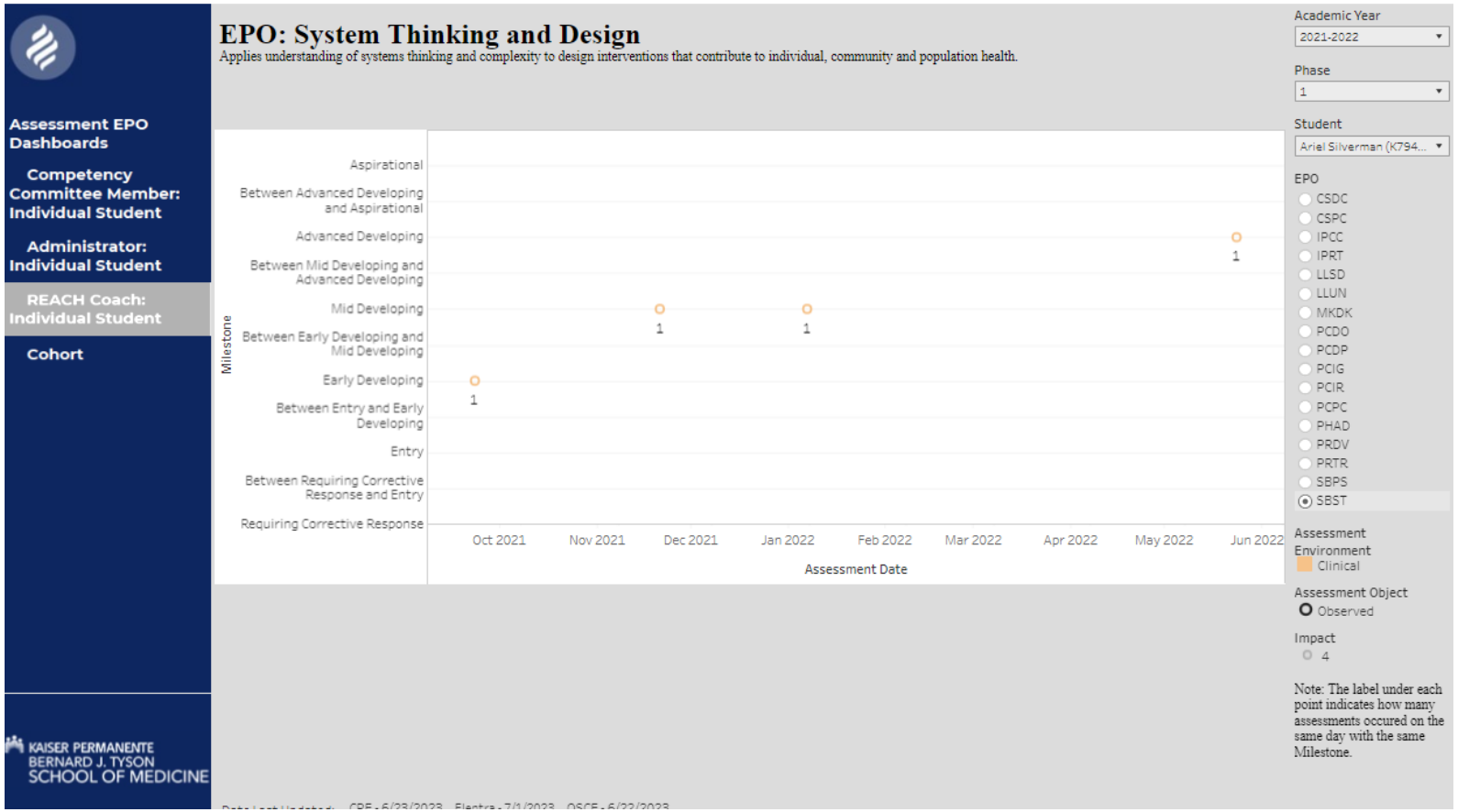
HSS Assessment from Clinical Learning Environment

- Robust suite of assessments from CLE
- Mapped to EPOs and milestones, visualized on dashboards to track achievement include:
  - Brief Clinical Observations of EPAs and Skills
  - Checklists for Communication Skills and Physical Exam
  - Observer, Reporter, Interpreter, Manager, Educator Mtngs
  - End of Trimester and End of Course Preceptor Assessment Form (includes SBP EPOs)
  - LIC assessments from prior slide
- Physician coaches assigned to 6-7 students across 4 years to operationalize CBME

Sample Student's HSS Assessment Portfolio

HSS Component	Project Title	Outcome
Service-Learning Practicum	Prosperando con la Diabetes: A Playbook for Spanish Diabetes Education	Completed and passed all components
Scholarly Project	A Lost Year for Some: the dynamics and distribution of suffering for low-income families with young children during COVID-19	Co-presenter for Pediatric Academic Societies (PAS) meeting in Denver, Colorado 2023
QI Project FM/IM clerkship	Nota de Voz: Improving Colorectal Cancer (CRC) Screening Through Personalized Messaging	On a team of 8 students in the 2nd year, designed an intervention to Improve colorectal cancer screening disparity with Spanish-speaking patients using provider-generated, personalized voice messages. In pilot testing the intervention showed a 20% increase in return rate. In the 3rd year this team of students, led by Emilia, spread the intervention to include all of the Family Medicine physicians at one medical center.
LIC: Systems-Based Practice Assignments	See clerkship narrative.	Completed all assignments.
HSS Selectives (Placement with United Way of Greater Los Angeles: Housing for Health)	Final Project: Documenting the complex health and accessibility needs of people experiencing homelessness	Documentation of common challenges and barriers for people experiencing homelessness; analysis of opportunities for better integration of the healthcare, behavioral health and homeless rehousing systems in L.A. County.

Visualization of HSS CBME on Dashboards



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Program Evaluation

- Learner assessment data
  - Individual student across four years
  - One cohort across four years
  - Compare cohorts
- Curricular evaluation
  - Aggregated learner assessment data
  - Surveys and focus groups of students and faculty (class, clinic, community)
- Longitudinal student tracking
  - AAMC Resident Readiness Survey
  - Five and ten year

Resources

- AMA landing page for teaching HSS
  - https://www.ama-assn.org/education/changemeded-initiative/teaching-health-systems-science
    - Health Systems Science 2nd edition
      - https://shop.elsevier.com/books/health-systems-science/skochelak/978-0-323-69462-9
      - Chapter 16: The Use of Assessment to Support Students' Learning and Improvement in HSS
    - Health Systems Science Education: Development and Implementation
      - https://evolve.elsevier.com/cs/product/9780443111457?role=student
- Interprofessional Education Collaborative (IPEC) competencies
  - https://www.ipecollaborative.org/ipec-core-competencies
- National Collaborative for Improving the Clinical Learning Environment
  - https://ncicle.org/interprofessional-cle

Thank You and Q&A

Mass General Brigham

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Kimberly Erler, OT, PhD
Rachel Pittmann, MS CCC-SLP, MS-HPEd


TEDY'S
TEAM
Center of
Excellence in
Stroke Recovery
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TEDY'S TEAM

Center of Excellence in Stroke Recovery

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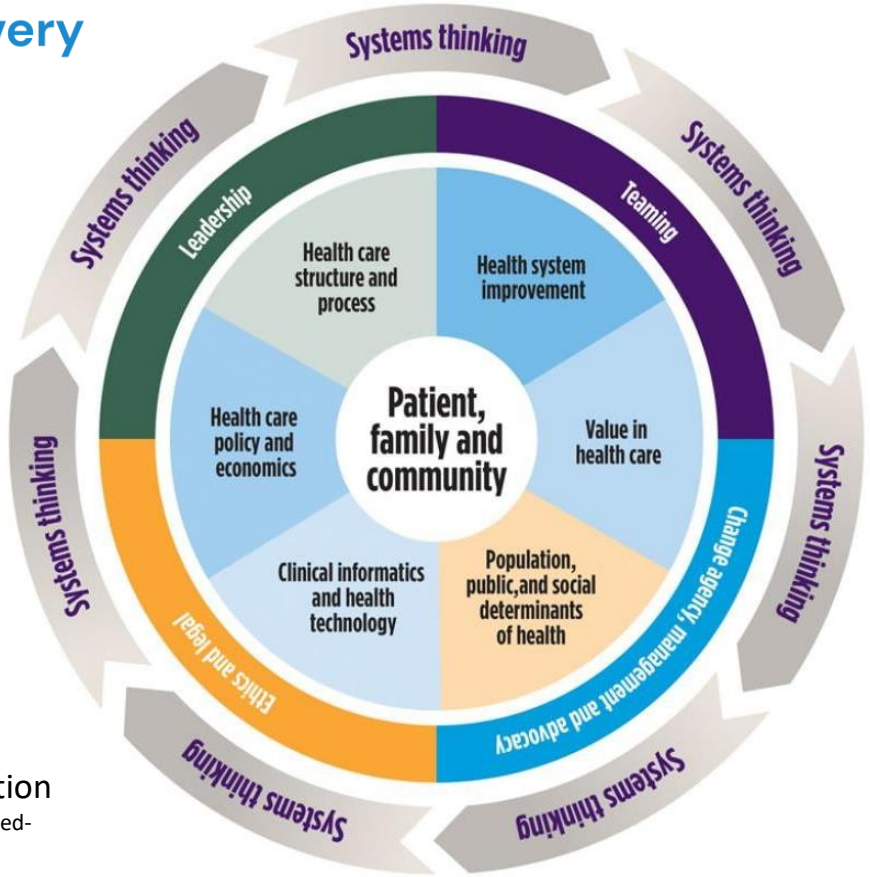

https://www.ama-assn.org/education/changemeded-initiative/teaching-health-systems-science

Developing collaborative interprofessional teams

Investing in student leaders as advocates for change

Harnessing the voice of the patient

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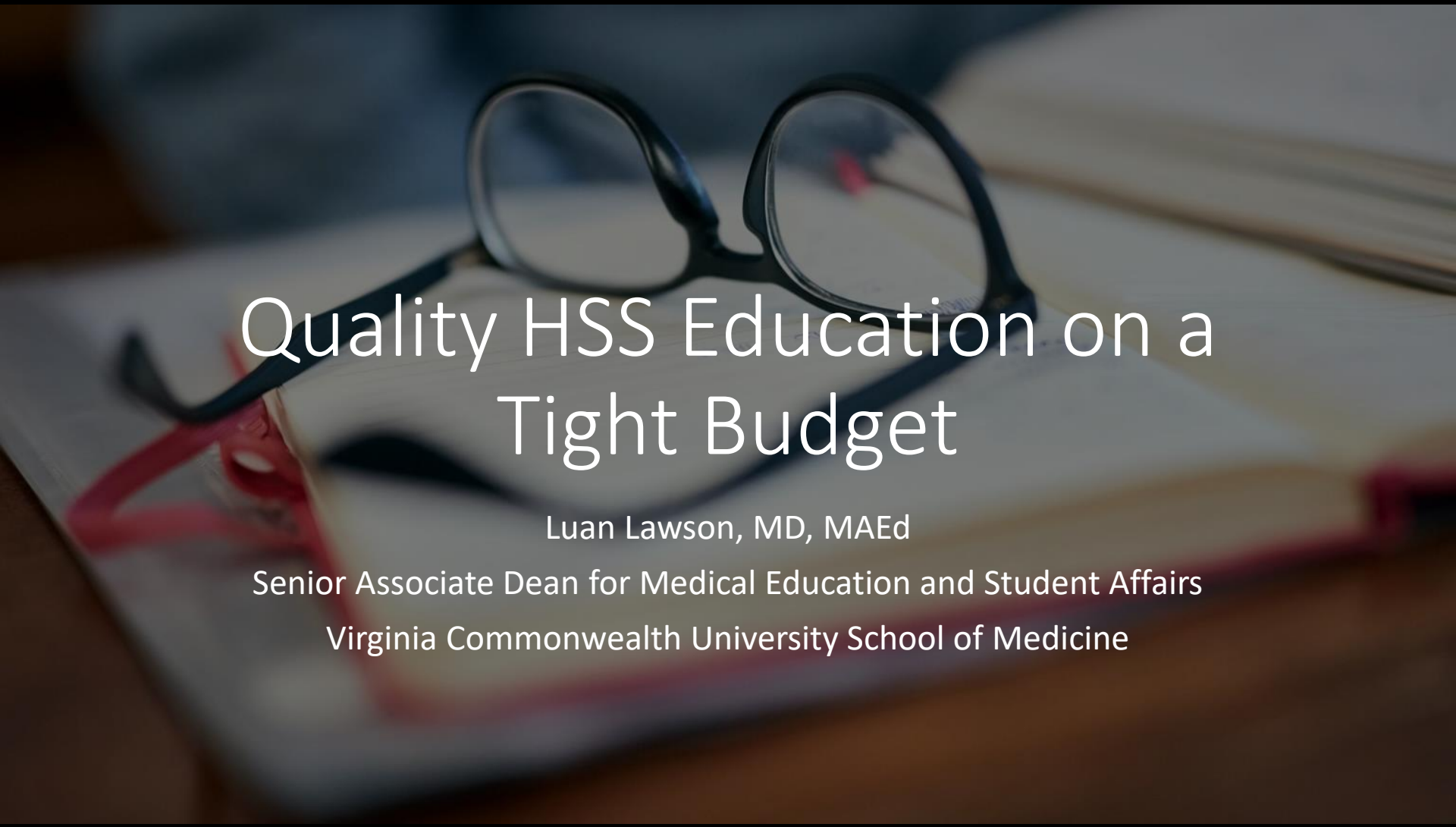


Quality HSS Education on a Tight Budget

Luan Lawson, MD, MAEd

Senior Associate Dean for Medical Education and Student Affairs

Virginia Commonwealth University School of Medicine

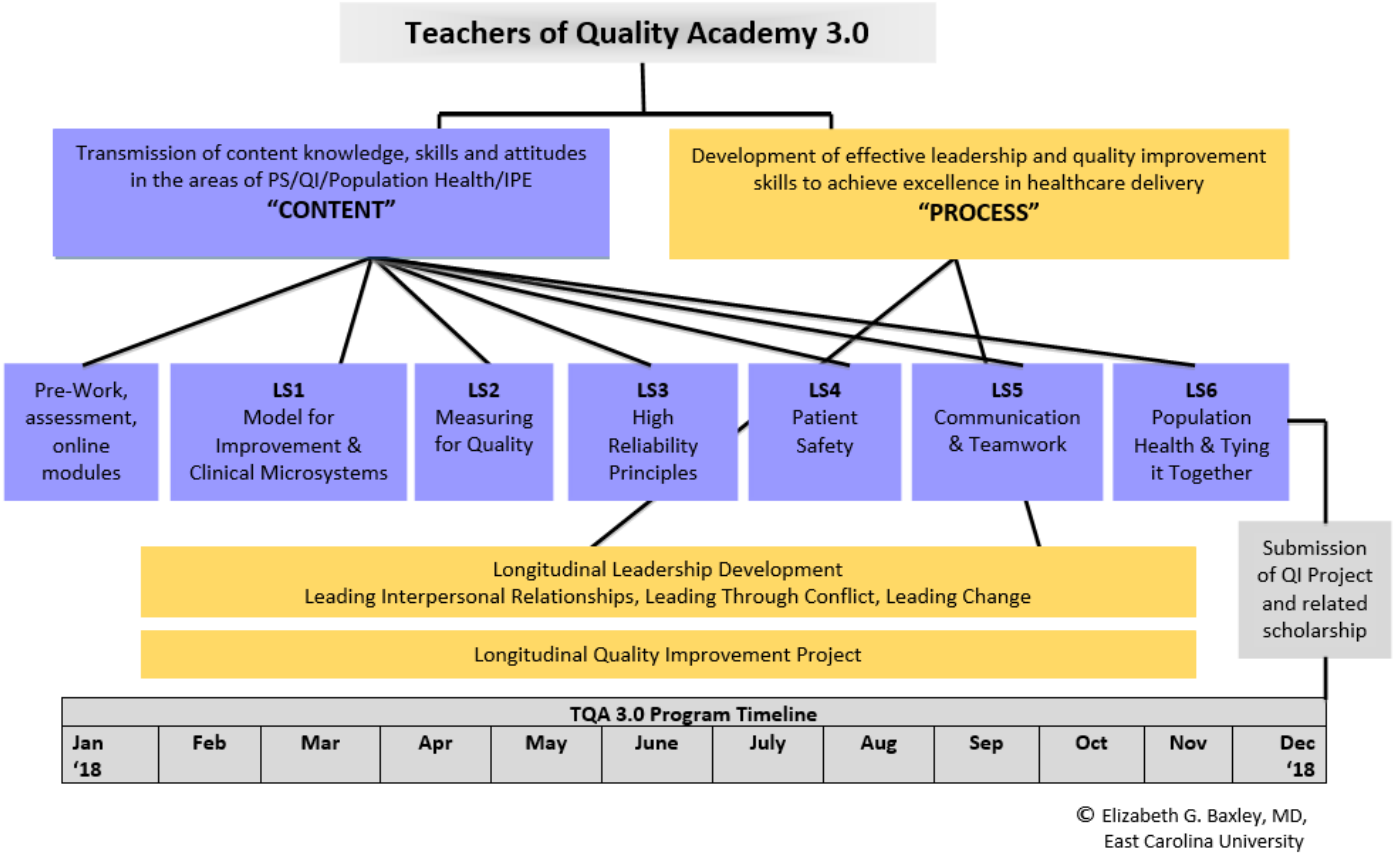
Barriers for Teaching HSS

- Faculty (Lack of) Expertise
- Time
- Financial support/compensation
- Buy-in
- Professional identity
- Institutional culture and infrastructure
- Health system priorities

Desired Program Components

- Strong sponsorship
- Interprofessional
- Honorific
- Problem-centered
- Immediately applicable
- Tangible products as outcomes
- Faculty contribution to curricular design
- Voluntary, but no department left behind
- Protected time

ECU/Brody Teachers of Quality Academy



Leverage Faculty Experience

- Embrace broad faculty expertise
- Utilize lived experiences
- Co-learning
- Institutional resources
- Expand the concept of educator

Provide Meaning for Participants

- Formal incentives
  - Promotion and tenure
  - Support scholarly activity
  - CME/MOC
  - Formal recognition
  - Diverse teaching opportunities
  - Creation of new professional roles
  - Time

Provide Meaning for Participants

- Leverage faculty professional identity
  - Faculty learning communities and interprofessional collaboration
  - New mentoring relationships
  - Personal growth and professional satisfaction
  - Transferrable and broadly applicable skills

Engage the Health System

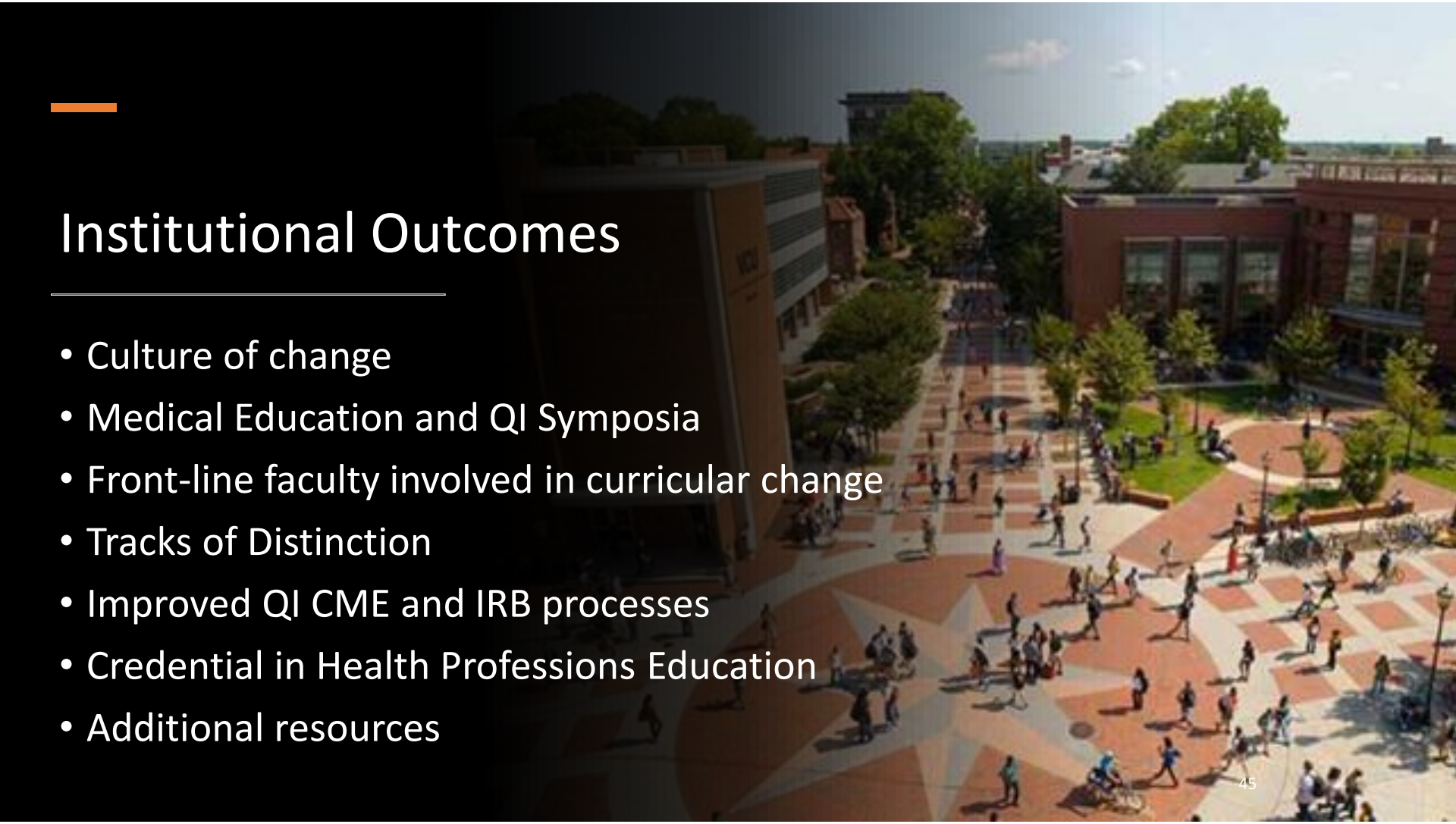
- Formalize partnership between medical school and health system to enhance clinical care AND education
- Leverage the clinical learning environment to focus on all health professions students, residents, and fellows
- Focus on students as future leaders
- Increased cross-campus collaborations and IPE

Impact on Learners

- Faculty who model and teach on the front line
- Diverse and engaged educators
- New educational initiatives
- Innovation
- Involvement in scholarly activity
- Curricular change through a QI lens
- Interprofessional education

Institutional Outcomes

- Culture of change
- Medical Education and QI Symposia
- Front-line faculty involved in curricular change
- Tracks of Distinction
- Improved QI CME and IRB processes
- Credential in Health Professions Education
- Additional resources



Health System Improvements

Inpatient-Focused Improvement Efforts

- Reducing readmissions among geriatric patients in family medicine through improved transitions of care
- Reducing hypoglycemia through increased use of order sets on an IM inpatient service
- Improving transitions of care for patients at risk for suicide in an academic psychiatry practice
- Improving handover procedures from post-anesthesia care unit to Pediatric Intensive Care Unit to reduce delays in medication administration
- Increasing utilization of the safety intelligence reporting system by residents on a pediatric inpatient service
- Improving integration of a clinical ethics in multidisciplinary inpatient rounds

Acute Care-Focused Improvement Efforts

- Improving the radiographic ordering process for acute appendicitis in children under twelve years of age
- Increasing appropriate medication reconciliation among boarding psychiatric patients in a regional hospital emergency department
- Improving surgical history and physical documentation among residents
- Implementing an enhanced recovery after surgery protocol among patients with pancreatic resection
- Enhancing screening for obstructive sleep apnea on an inpatient rehabilitation unit
- Utilizing nursing protocol orders to decrease length of stay in a children's emergency department

Ambulatory Practice-Focused Improvement Efforts

- Reducing no show rates in 3 clinical practice sites (Family Medicine, Endocrinology, Child Psychiatry)
- Standardizing dose objectives for radiotherapy in breast cancer
- Improving time to care for Spanish-speaking patients in the pediatrics outpatient center
- Enhancing home visit referrals for infant and post-partum assessment

Evolving and Improving

- TQA 1.0- Educators to design curriculum
- TQA 2.0- Frontline educators to teach curriculum
- TQA 3.0-Clinical mentors and role models to change culture
- TQA 4.0-7.0 Expanded leadership and team concept

Lessons Learned

- Faculty and learners can learn together
- Expand the definition of faculty
- Support interprofessional and intraprofessional development simultaneously
- Teaching while practicing while learning is hard!
- Mentoring is critical
- Manage change and uncertainty
- Align institutional needs and faculty interests
- Money ≠ protected time

HEALTH SYSTEMS SCIENCE EDUCATION IN ACTION:
SHOW - MEETING AT THE CROSSROADS

November 2, 2023

Teri Kennedy, PhD, MSW, ACSW, FGSA, FNAP

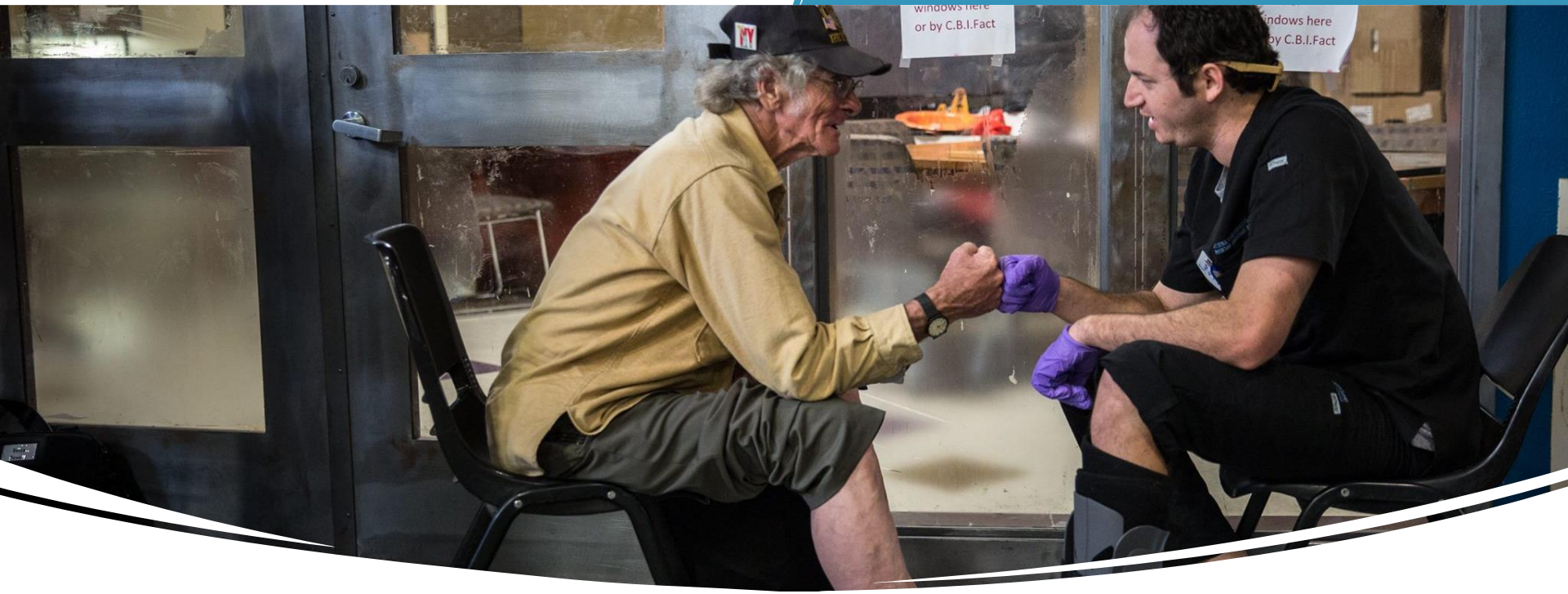
Associate Dean, Interprofessional Practice, Education, Policy & Research (iPEPR) and

Ida Johnson Feaster Professor of Interprofessional Practice & Education, University of Kansas School of Nursing;

Professor, Department of Population Health, University of Kansas School of Medicine;

Professor Affiliate, University of Kansas School of Social Welfare

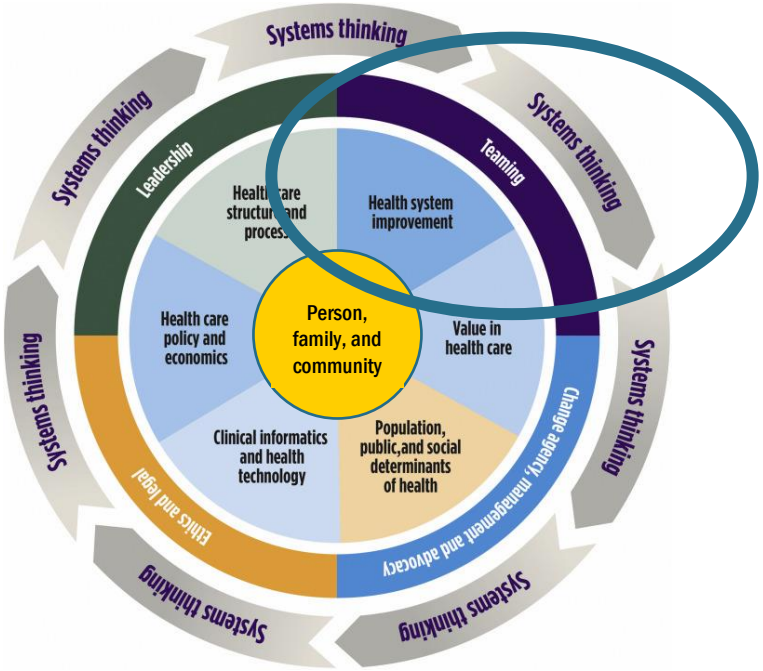
University of Kansas Medical Center., Kansas City, KS



SHOW
Student Health Outreach for Wellness

crossroads
CHANGING LIVES, ONE PERSON AT A TIME.

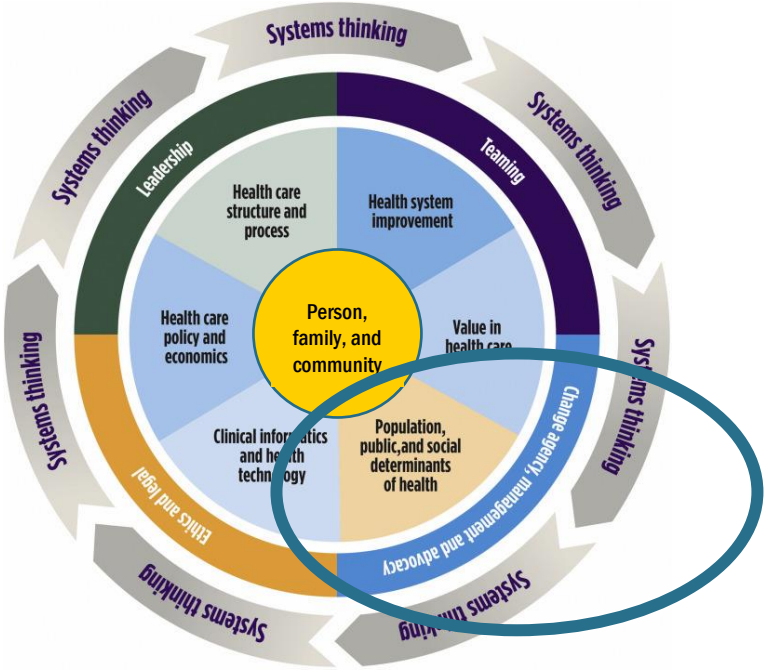
TEAMING



IPEC Competencies

- Values and Ethics (VE)
- Roles and Responsibilities (RR)
- Interprofessional Communication (CC)
- Teams and Teamwork (TT)

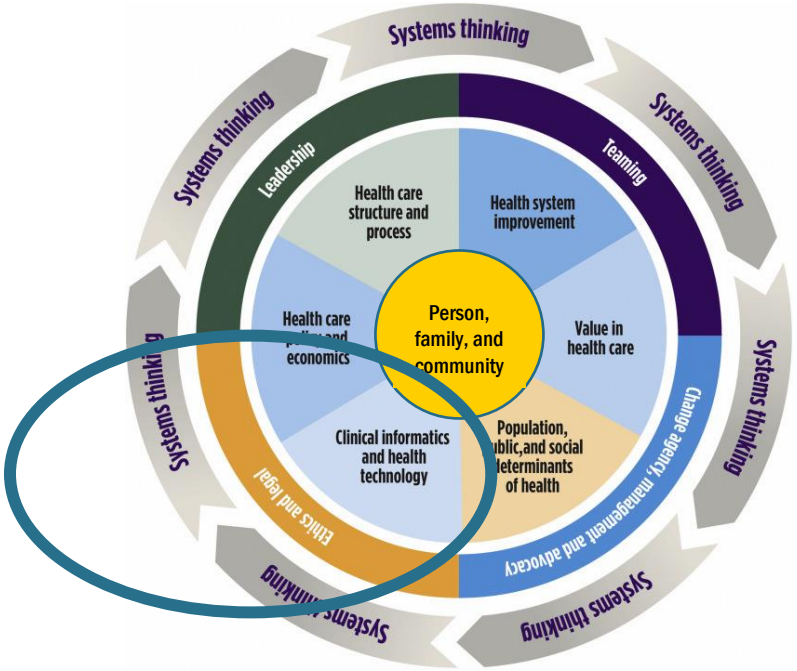
CHANGE AGENCY, MANAGEMENT AND ADVOCACY



Health Equity and Social Justice

- Address Stigma
- Assess individual social determinants of health
- Quality Assurance
- Teams (e.g., Policy)

ETHICS AND LEGAL



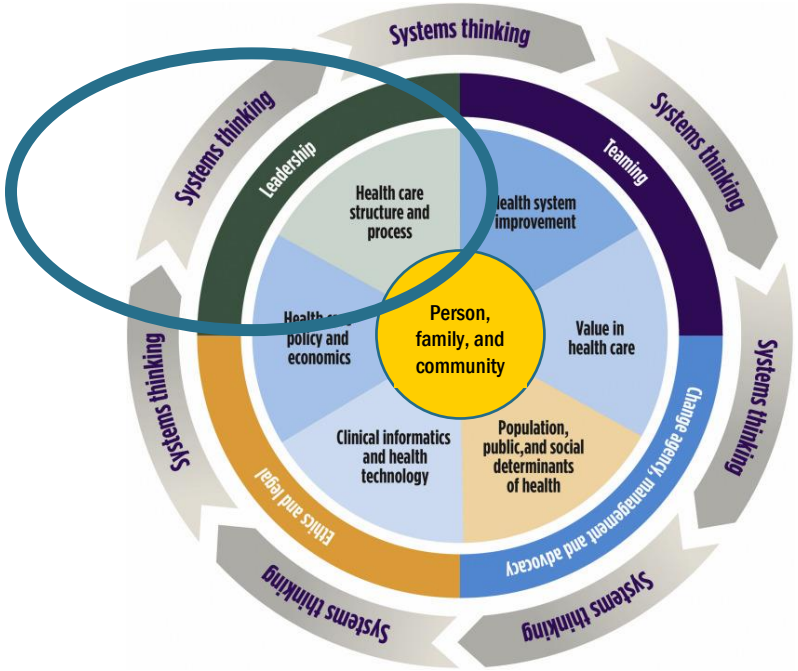
Ethics

- Values and Ethics (VE)

Legal

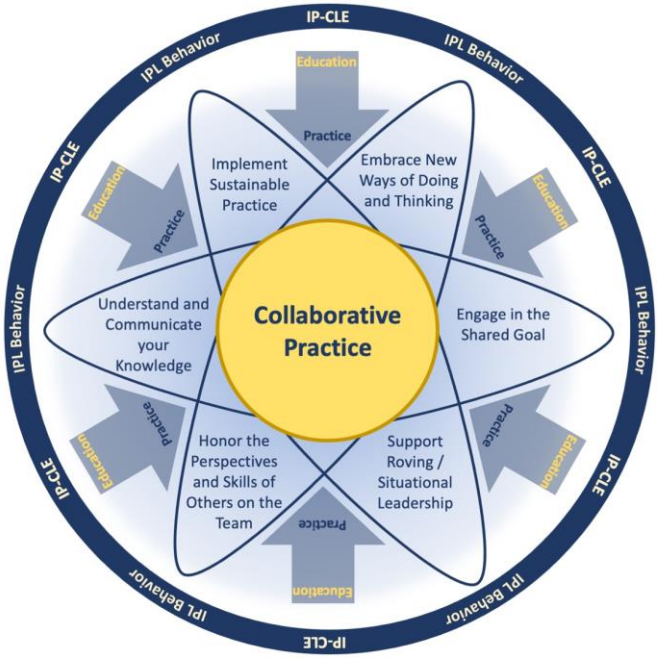
- HIPAA (Health Insurance Portability and Accountability Act)
- Clinic state licensure requirements
- Medicaid (AHCCCS) requirements

LEADERSHIP



TEAMS

- Clinical Practice
- Planning
- Policy
- Scheduling
- Outreach
- Fund-Development



(Sanborn & Kennedy, 2021)

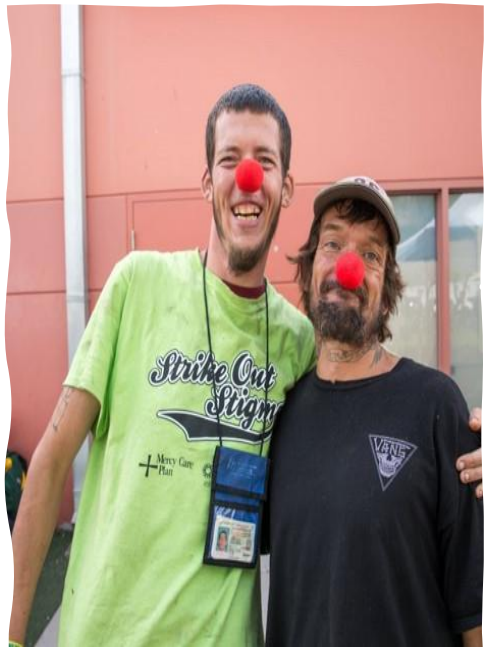
LEARNING IN PRACTICE

SHOW

- Weekend Clinic
- Annual Health Fair
- Street Medicine
- Hotspotting

Meeting at the Crossroads

- Direct patient care - weekly huddles
- Direct patient care - preceptor/student treatment projects
- Health promotion services



SCHOLARSHIP

ASU Research Day

Society for Free Clinics

ASSESSMENT

Students broadened their knowledge related to how physical (including musculoskeletal), behavioral, and social dimensions and social determinants of health contribute to each resident's presenting problems.

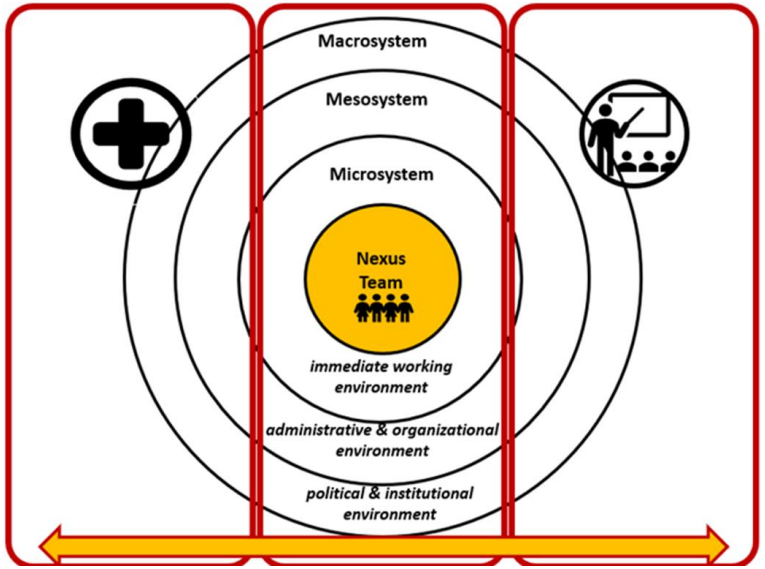
By engaging with the facility staff who worked with residents of Crossroads, students learned how the resident was progressing from week to week over the course of treatment.

Students and faculty preceptors gained an understanding of each discipline's unique and overlapping roles in the treatment of unhoused adults and adults living with SUDs and chronic pain.

Qualitatively, students reported increased confidence in working collaboratively with other members of the interprofessional team, greater understanding of whole-person care, peer-guided care, substance-use treatment systems, and a commitment to serving people living with SUDs (as evidenced by two DNP and three Social Work students accepting positions post-graduation with adults living with SUDs during the pilot.

"ONCE YOU GET IT, IT'S REALLY HARD TO TURN IT OFF."

Katie Quatman-Yates



M³ Systems Level	Sample Questions	Community Partner	Academic Partner	NexusIPE™ Partnership
Micro: *Immediate Working Environment*	*Describe the culture of your immediate working environment.*	(peer-run) Team members work within an environment that value peer-guided care using a 12-Step model. Members of the care team are in recovery from substance use and are not required to have professional education or licensure.	(student run) Team members have experience working with SHOW, a student-led health clinic, where faculty serve as interprofessional mentors and preceptors for undergraduate and graduate students working with vulnerable populations. In this student-led model, everyone's contributions are equally valued.	(flattened hierarchy) The peer-based culture of The Crossroads, Inc. and student-led culture of SHOW supports a Nexus partnership with a flattened hierarchy among members of the Nexus team. The role played by each member is valued and each member is viewed as an equal partner.

(Kennedy, Harrell, Dieter, & Brandt, 2022)

KEY TAKEAWAYS

Start with people, families, and communities

Address critical community needs

Relationships matter, take time, and are well worth the investment

Co-create academic-community partnerships using a systems lens

Establish a partnership pre-nup

"Don't let the curriculum get in the way of student learning"

REFERENCES

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THANK YOU

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