Health Policy Advocacy Law and Medicine Committee
Executive Summary

Purpose:
To train a diverse workforce of systems thinkers who will provide whole-person, patient-centered care and advocate on behalf of patients and their communities to achieve health equity/equality

Literature/Best Practices Review:
Given the broad scope of our committee’s work, we created working groups to perform a literature review in conjunction with key informant interviews, recognizing that much of the work in this domain is on-going and may not be published yet.

Aspects of current curriculum to keep:
Building on the work of the Health Disparities task force, we continue to recommend:
- All small group facilitators in which the content is related to health disparities and health equity receive training around unconscious bias, sensitivity in discussing disparities, and specific facilitation skills to foster conversations around bias/disparities.
  - To that end, we recommend compensation for a core group of faculty who commit to teach in these small group settings
- Use of a logging system for students to identify exposure to “vulnerable patients” and “determinants of health” and developing a process to track student site placements
- Build on the Foundations of Doctoring communications curriculum with standardized patients to address issues that students may face when interviewing disadvantaged populations.
- Continue Windshield survey and Photo-Essay activity currently housed in First Course
- Continued integration of health systems science content into existing structures such as PBL, IPED, hidden curriculum, and the communications curriculum

Recommendations:
- Add Health Systems Science (HSS) as the 3rd pillar to Foundational and Clinical Sciences
- Develop a 4-6 week “Foundations of health systems science” at the beginning of training followed by longitudinal clinical experiences (e.g. weekly) that extend throughout the pre-clinical years
- As part of the longitudinal clinical experiences, create required experiential roles/activities for medical students such as medical scribe, Quality Improvement project, service-learning project, patient-navigator/advocate, interprofessional home visits, and medical-legal partnership team member.
- In addition to HSS content, the curriculum should develop core skills of structural competency, critical thinking, self-reflection, continuous learning, comfort with ambiguity and uncertainty, community engagement from an asset perspective
- Leadership and Advocacy skills (in addition to content proposed by the Leadership Sub-Committee) should include: Conflict management, Interprofessional Communication (code switching), Teaming, Vision/Purpose/Intentional Living, Advocacy at different levels (individual, community, structural) and using different methods, Systems Thinking
- Faculty Development is critical for the success of curriculum reform—we recommend a core group of paid faculty that is skilled in small group facilitation, coaching, and core HSS content areas
Program Evaluation:
- Should include both Qualitative and Quantitative outcomes
- Reflective Writing
- Narrative/Story telling
- Train facilitators to provide effective narrative feedback/coaching with appropriate follow up to assess growth
- QI deliverable (description and outcome)
- Service-learning project deliverable (description and outcome)
- Peer feedback and evaluation
- ?Secret patient shoppers to evaluate clinical efficacy
- Concept maps can be evaluated for both knowledge and structural content

Next Steps:
While small components of our recommendations such as a Service-Learning or Quality Improvement project could be incorporated into the current curriculum as pilot projects, the key recommendations of our curriculum committee are not amenable to pilot and would require restructuring of the curriculum for success.
Committee Members:
Tillman Farley, Co-Chair, Rita Lee, Co-Chair, Jennifer Adams, Regina Richards, Nita Mosby Tyler, Frank DeGruy, Daniel Goldberg, Lorez Meinhold, Janet Meredith, Douglas Bach, Tamaan Osbourne-Roberts, Ashley Vavra, Adam Panzer, Meryl Colton, Mackenzie Garcia, Maximillian Cabrera, Sara Graves, Justin Holmes, Michael Dittmar, Tyler Anstett

Our Vision:
To train a diverse workforce of systems thinkers who will provide whole-person, patient-centered care and advocate on behalf of patients and their communities to achieve health equity/equality

Our Approach:

![Diagram](image)

**Figure 1** Core, cross-cutting, and linking domains for a health systems science (HSS) curricular framework. Core curricular domains are content areas that align directly with HSS. The cross-cutting domains are content areas that traditionally may have been included in undergraduate medical education curricula, but have a new context in the HSS. The one linking domain, systems thinking, unifies or links the core curricular or cross-cutting domains to other core curricular or cross-cutting domains (internal linking, depicted in this figure) and to other areas of the curriculum, such as the basic and clinical sciences (external linking, not depicted in this figure).

We based our committee’s work on the Health Systems Science (HSS) curricular framework as published by Jed Gonzalo, et al.¹ (Figure 1).
We focused on the core domains, highlighting key sub-categories and sub-topics that should be covered under these core areas. Given the broad scope of our committee’s work, we created working groups to perform a literature review in conjunction with key informant interviews, recognizing that much of the work in this domain is on-going and may not be published yet. Recognizing that the cross-cutting domains of Teamwork and Interprofessional Education, Evidence-based medicine and Practice, Professionalism and Ethics, and Scholarship were covered by other curriculum sub-committees, our committee did not focus on these areas. However, we wish to highlight the critical importance of integrating these concepts into health systems science and across the educational continuum.

Please see the attached Excel spreadsheet (Appendix A) and document (Appendix B) for a summary of our findings. Several schools have been at the forefront of curriculum change integrating health systems science into the curriculum—primarily Penn State, UCSF, and Dell Medical School.

Aspects of CUSOM curriculum that currently addresses purpose and should be maintained

1. **Foundations of Doctoring Communications Course**: This course indirectly addresses topics such as health literacy, health disparities, and culturally effective communication by utilizing standardized patient cases that expose students to various beliefs, SES, and patient circumstances.
   --We recommend continuing the current communications course and bolstering the connections made between the HSS Core domain content. This includes integrating core lectures on HSS content with the communications curriculum to allow students to practice skills around these content areas (e.g. pair content on health literacy followed by communications sessions where students practice assessing health literacy and adapting counseling/communication based on that assessment).

2. **Small Group Discussions**: Whether housed in PBL, IPED, hidden curriculum, ethics, communications, or a different format, small group discussions are helpful to address and debrief highly sensitive topics when facilitators are properly trained and effective at managing group dynamics.
   --Currently PBL houses much of the small group discussion on determinants of health, underserved populations, cost of healthcare, healthcare value, and cultural factors impacting health. This content should be expanded in a deliberate manner to engage students in this content area as well as the cross-cutting foci of Teamwork and Interprofessional Education, Evidence-based medicine and Practice, Professionalism and Ethics.
   --Currently IPED houses much of the small group work around Quality, Safety, and Health Systems Improvement. Additional cases and/or projects could be developed to deliberately engage interprofessional learners in health systems improvement activities that also incorporate cost and value.

We also feel the following currently taught topics should be maintained, though the curricular location and instructional methodology should be adapted to the new curricular design:

1. **First course**:
   - Discussion of “what is health” and how this might differ between individuals
   - Global Health perspectives—included some content on the determinants of health as they may present in international environments
   - Health Disparities—overview of health disparities and why they might exist
   - Culturally Effective Medicine—methods to address health disparities
   - Defining Diversity—importance of diversity in medicine
Connecting with community organizations in Aurora
Windshield survey and Photo-Essay exploring the communities surrounding AMC
2. Tobacco Control (CVPR) — lecture about disparities in tobacco related health outcomes
3. Access and Justice (HEP/IPED2) — small groups about social determinants and barriers to access
4. Lifecycle violence, Child abuse (LC) — 2 lectures about interpersonal violence, sexual assault, child abuse, family violence.
5. Ethics in Women’s Care (HEP/WC) — disparities in unintended pregnancy
6. Social determinants of health (ICC 7002/ M&S) — Tillman Farley: Disadvantaged/vulnerable populations
7. Child abuse or Elder Abuse (ICC 8005) – SES disparities and skewed expectations/bias
8. CEM reflective writing small groups – understanding bias (ICC 8005/CEM)
9. ACA (ICC 7003) - didactic providing an overview of the current healthcare system
10. High Value Care (HAC and DHLIC) – discussions on how to improve outcomes, minimize harms, and reduce healthcare waste
11. Health Care Economics (FOD) – how payment models influence health care, disparities, cost, and quality
12. Alcoholics Anonymous (HEP/NS) – reflection about attending AA meeting, barriers to talking to patients about SUDS
13. Sickle Cell Patient Lecture – family discusses barriers to access from rural CO, racial disparities
14. PTSD (NS) – disparities for veterans
15. Using an Interpreter and Civil Rights (ICC 7002/CEM) – lecture
16. Sexual History Taking (LC) — session includes health disparities faced by the LGBT population
17. Service-Learning Project (RRC) — a small service learning project is required by all students as part of the RRC.
18. Quality Improvement Projects (Sub-I’s)—these have traditionally been a requirement for the sub-internship rotations. However, these have been quite variable as to their actual completion, scope, and process.

Recommendations for New Material:
1. Add Health Systems Science (HSS) as the 3rd pillar to Foundational and Clinical Sciences
2. Guiding Principles:
   a. We need a core of highly-trained facilitators to be able to deliver this content effectively
   b. Learning should be experiential
   c. Students should be exposed to diverse populations, clinical settings, and specialties
   d. Longitudinal and iterative
   e. We should focus on the teaching of the how and why of health systems science and not just the what, focusing on a growth mindset
   f. We should be explicit in our conversations around issues such as racism, cultural humility, social justice, and health equity
3. Core Values and Concepts:
   In addition to the school’s core values of Leadership, Commitment, and Curiosity, we highlighted the following additional values and concepts as critical to instill in our learners:
   a. Patient-Centered—our work is ultimately devoted to the service of the patients. Whether this presents in the form of the science of discovery, translational research, population health, clinical care, systems improvement, or advocacy, our ultimate responsibility is to the patient and
society. Patient-centered also refers to understanding the patient’s context including individual beliefs and preferences, family, and community.

b. Structural Competency—students must recognize the structures that shape clinical interactions, re-articulate “cultural” formulations in structural terms, develop structural interventions, and develop structural humility.²

c. Systems Thinking—healthcare systems and the factors that impact health are becoming increasingly complex. Our learners will need the knowledge and skills to describe, appraise, and navigate the complex interactions of social structures, healthcare structures, policy, finance and individual factors that impact health.

d. Agility—the social and healthcare environments are changing rapidly. Students will need to be flexible, agile, and adaptable in the context of these changing forces. This includes skills of becoming comfortable with uncertainty, life-long learning to stay abreast of new information, and code-switching (e.g. ability to adapt language and terminology to the audience you are trying to reach).

4. Structural Recommendations:

a. There should be a 4-6 week “Foundations of health systems science” at the beginning of training followed by longitudinal clinical experiences (e.g. weekly) that extend throughout the pre-clinical years (see “c” below)

b. In the “Foundations of Health Systems Science,” include:
   • Structural framework (e.g. socioecological model, structural change model, etc.)
   • Nuts and bolts of health policy—how does it get made, why is it important, how do you understand the impact at the clinical level
   • Advocacy skills at multiple levels (based on structural framework)
   • How to maneuver within the community and healthcare systems
   • QI methodology with explicit links to value in healthcare and the Quadruple Aim
   • Business of Medicine—including but not limited to billing/coding, the impact of insurance status on cost, quality, and outcomes, and the impact of payment models on patients and the practice of medicine
   • Determinants of Health—including racism, health literacy, education, SES, etc.
   • Electronic Health Records—including importance of documentation/data, how to write a note, effective communication in the presence of an EHR

c. Experiential Roles for medical students—integrated into the longitudinal clinical experiences, each role is required for a certain # of weeks (or until competency is demonstrated) followed by the ability to select a specific role to pursue more in depth during the clinical years; ideally done in cohorts (or at least debriefed in cohorts). For each of these roles, students would need faculty coaching and mentorship to learn and improve their skills in each role AND reflective activity with debriefing to surface the learning and skills developed.

<table>
<thead>
<tr>
<th>Role</th>
<th>Brief Description</th>
<th>HSS Content covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scribe</td>
<td>Work as a medical scribe</td>
<td>Navigation in the electronic medical record, Medical documentation and its impact on liability, coding, and billing/reimbursement, How to write a note, Importance of clinical data, data governance, Observe patient-provider interactions, Interprofessional, Team-based care</td>
</tr>
<tr>
<td>QI Project</td>
<td>In small groups, students work on a quality improvement project (could be clinical and/or personal wellness project)</td>
<td>Apply quality improvement methodology (Health Systems Improvement) Value in Health Care</td>
</tr>
<tr>
<td>-----------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Patient navigator/advocate</td>
<td>Students act as patient navigators and advocates within the healthcare system—assist with moving through the system between care teams, referrals, understand billing issues</td>
<td>Healthcare structures and processes Impact of healthcare policy and finance on patients and patient care Cost of healthcare Value-based care Determinants of Health</td>
</tr>
<tr>
<td>Home Visits, esp. after hospital discharge</td>
<td>In interprofessional groups of 2-3, perform home visits after discharge from the hospital to assist with medication reconciliation, evaluation of home safety (with PT/OT), etc.</td>
<td>Transitions of Care Determinants of health Healthcare structures and processes Interprofessional, Team-based care</td>
</tr>
<tr>
<td>Service-Learning project</td>
<td>Each student must do a service-learning project (either as individual or with small group) in collaboration with a community group or advocacy organization.</td>
<td>Advocacy Community-Engagement Determinants of Health Population and Public Health</td>
</tr>
<tr>
<td>Medical-Legal Partnership (MLP) team</td>
<td>There is currently an MLP at Salud Clinic. Several programs (e.g. Denver Health, Children's Hospital of Colorado) are either building or resurrecting an MLP. Students could participate in these programs in collaboration with lawyers/law students to identify and address the determinants of health.</td>
<td>Determinants of Health Advocacy Policy Population and Public Health</td>
</tr>
</tbody>
</table>

d. Create a JD-MD program—many other programs currently offer a combined JD-MD program to allow students to explore the linkages between medicine and law in-depth. Participants in combined JD-MD programs could practice at the intersection of medicine, public policy, ethics, and the determinants of health. Creation of a JD-MD program would allow students to individualize their training and foster additional interprofessional connections.

4. Content Recommendations:
   a. Focus on Structural competency, consider using Structural Violence as a model
   b. Core skills of critical thinking, self-reflection, continuous learning, comfort with ambiguity and uncertainty, community engagement from an asset perspective
c. Discuss racism and its impact on health

d. Discuss the “isms” (e.g. discrimination based on factors such as race, gender, gender identity, sexual orientation, cognitive or physical ability, etc.), their impact on health, and actions to mitigate “isms” in general (humility, curiosity, inclusive language, culturally responsive, etc.)

e. Include specific content on unique populations where there are specific clinical care differences (e.g. Disabilities; LGB patients; Transgender patients)

f. Leadership/Advocacy skills should include:
   - Conflict management
   - Interprofessional Communication (code switching)
   - Teaming
   - Vision/Purpose/Intentional Living
   - Advocacy at different levels (individual, community, structural) and using different methods
   - Systems Thinking

g. Faculty Development and Engagement—successful delivery of this curriculum relies on highly trained core faculty. As such, we recommend the following:
   - Paid cohort of core faculty
   - Required faculty development to include both facilitation skills training, coaching skills training, and core content areas
   - Required demonstration of faculty competence before interacting with students (e.g. development of objective structure teaching exams)
   - Feedback loop for continuous quality improvement and quality assurance

Suggested Outcome measures/ Evaluation of program
   - Should include both Qualitative and Quantitative outcomes
   - Reflective Writing
   - Narrative/Story telling
   - Train facilitators to provide effective narrative feedback/coaching with appropriate follow up to assess growth
   - QI deliverable (description and outcome)
   - Service-learning project deliverable (description and outcome)
   - Peer feedback and evaluation
   - Secret patient shoppers to evaluate clinical efficacy
   - Concept maps

Pilot ideas and next steps

While small components of our recommendations such as a Service-Learning or Quality Improvement project could be incorporated into the current curriculum as pilot projects, the key recommendations of our curriculum committee are not amenable to pilot and would require restructuring of the curriculum for success.

References: