

# Health Systems Science at UC Davis: A Case Study

<sup>1</sup>UC Davis School of Medicine, Sacramento, CA, <sup>2</sup>UC Davis Health, Section of Obstetrics and Gynecology, Sacramento, CA

## Introduction

With health policy playing a larger role in the practice of medicine since the passage of the Affordable Care Act<sup>1</sup>, the need for medical students to have a basic understanding of health policy and its many components is urgent. Teaching medical students basic knowledge of health policy will properly prepare them to grow into the future leaders of the healthcare system.

Only 3 initiatives that address Health Systems Sciences (HSS) curricula and provide a case-study of sorts have been documented<sup>3,4,5</sup>. These include Geisel School of Medicine at Dartmouth, University of New Mexico School of Medicine, and Penn State College of Medicine.

## AIM

The purpose of this study is to survey UC Davis medical students' :

- knowledge about and concerning health policy/advocacy basic principles,
- involvement in health policy/advocacy efforts,
- adequacy of their medical school's health policy/advocacy curriculum
- interests in pursuing health policy/advocacy activities in the future and if applicable,

In addition to providing an initial evaluation of the new Area of Scholarly Concentration: Health Policy and Advocacy at UC Davis School of Medicine.

## Method

In 2022, UC Davis created the Health Policy and Advocacy Area of Scholarly Concentration (ASC) as an integrated longitudinal elective that spans the four years of undergraduate medical education and will give students the opportunity to develop further skills in HSS.

The Health Policy and Advocacy ASC is currently underway beginning with the class of 2025. A 17-item questionnaire will be used to evaluate the course and activities.

A literature review using google scholar was conducted to guide the development of the UC Davis HSS curriculum and subsequent evaluation tool.

## Results

Institution	Length of Coursework	Topics
Penn State College of Medicine	4 years *Elective	Healthcare structure, economics, Clinical information and health information technology, social determinants of health and public health, Value-based care, teamwork and leadership, <b>Advocacy</b> , patient safety, health system improvement
Geisel School of Medicine at Dartmouth	4 years * Required 4-week course in fourth year that includes a QI project	Improving health and healthcare, population health, collaboration, teamwork, and leadership, epidemiology and biostatistics, case studies relating to opioid epidemic, obesity, healthcare disparities
University of New Mexico School of Medicine	4 years * Required 4-week course taught within the Family Medicine clerkship that includes a policy brief requirement	Public health principles, social determinants of health, community engagement, community-identified concerns, health insurance, cost, <b>advocacy</b> , quality when caring for patients, international healthcare systems, high value care, leadership, population health.
UC Davis School of Medicine	4 years *Elective	<b>Advocacy</b> , Physician Advocacy 101, How a Bill Becomes a Law, Healthcare around the world, Introducing Health Care Policy & Economics, What to know about Health Care Delivery Systems, Our Healthcare System - California Focus, Physicians as Leaders, Partnering with medical associations (CMA, AMA, ACOG, etc.)

## Health Systems Sciences Curricula

## UC Davis Evaluation Survey

1) Year in Medical School

- MS1
- MS2
- MS3
- MS4

2) What is your age?

- 18-24
- 25-30
- 30 or older

3) Gender

- Male
- Female
- Non-binary
- Other/prefer not to answer

4) Are you Hispanic or Latino?

- Yes
- No

5) Regardless of your answer to the prior question, please indicate how you identify yourself (select one or more)

- American Indian or Alaskan Native
- Asian
- Black or African American
- Native Hawaiian or Other Pacific Islander
- White

6) Your family income growing up would best be described as:

- Low (less than \$40,999)
- Middle (\$50,000-\$99,999)
- High (\$100,00 or more)

7) Anticipated future field:

- Primary care
- General Surgery/ Surgical subspecialty field
- Non-primary care clinical
- Undecided

8) Did you take a public health, health policy, or public policy course before medical school?

- Yes
- No

9) Have you ever been involved in health policy/advocacy/public policy work before medical school (paid or unpaid)?

10) True or False: Medicare is a joint federal and state health insurance program that helps cover medical costs for people with limited income

11) True or False: Medicaid is a federal health insurance program for people 65 or older, and some people under 65 with certain disabilities or conditions.

12) True or False: Government-administered health insurance (e.g., Medicare) requires more money per person for administrative costs than private health insurance.

13) Yes/No: Have you been involved in any health policy/ advocacy efforts since 2020? (e.g., public comments, op-eds, legislative visits, etc.)

14) True or False: Before the Affordable Care Act was signed into law in 2014, people with preexisting conditions could be denied healthcare.

15) Please indicate your level of agreement with the following statements:

- Understanding health policy is important to practicing medicine
- I am satisfied with my required medical school coursework related to health policy, health care delivery, advocacy, and health care reform issues (not including electives or Areas of Scholarly Concentration)

(1) Strongly disagree; (2) Disagree; (3) Neither agree nor disagree; (4) Agree; (5) Strongly agree

16) If part of the Health Policy and Advocacy Area of Scholarly Concentration, please indicate your level of agreement with the following statements:

- As a result of the experiences and discussions provided by the ASC, I have a better understanding of how to be an advocate for health policies that impact my patients and the practice of medicine
- The Health Policy and Advocacy Area of Scholarly Concentration has enhanced my medical school education
- As a result of the experiences and discussions provided by the ASC, I have a better awareness of how community organizations, politicians, and other resources affect the health of my patients

(1) Strongly disagree; (2) Disagree; (3) Neither agree nor disagree; (4) Agree; (5) Strongly agree

17) How can the Health Policy and Advocacy Area of Scholarly Concentration be improved?

- Open ended question

## Conclusion

Although the American Medical Association now considers Health Systems Sciences (HSS) as the third pillar of medical education along with the historic pillars of basic and clinical sciences<sup>2</sup>, best teaching methods or models have not been established.

We've entered a time when the question of whether medicine should be an instrument of social and political change has evolved to: "*how* should medicine should be an instrument of social and political change".

It is our belief that the next generation of physicians are embracing the sociopolitical landscape of medicine and training in health policy and advocacy is necessary. UC Davis' Health Policy and Advocacy Area of Scholarly Concentration (ASC) will prepare students to become physician leaders and its evaluation will be a much-needed addition to the literature.

## References

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## Contact Information

acmart@ucdavis.edu