BRIEF
REPORTS

# Students of Change: Health Policy in Action

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**BACKGROUND AND OBJECTIVES:** Health policy is more impactful for public health than many other strategies as it can improve health outcomes for an entire population. Yet in the "see one, do one, teach one" environment of medical school, most students never get past the "see one" stage in learning about the powerful tools of health policy and advocacy. The University of New Mexico School of Medicine mandates health policy and advocacy education for all medical students during their family medicine clerkship rotation. The aim of this project is to describe a unique health policy and advocacy course within a family medicine clerkship.

**METHODS:** We analyzed policy briefs from 265 third-year medical students from April 2016 through April 2019. Each brief is categorized by the level of change targeted for policy reform: national, state, city, or university/school. Implemented policies are described.

**RESULTS:** Slightly less than one-third of the policies (30%) relate to education, 36% advocate for health system change by addressing cost, access, or quality issues, and 34% focus on public health issues. Fourteen policies have been initiated or successfully enacted.

**CONCLUSIONS:** This curriculum gives each medical student a health policy tool kit with immediate opportunities to test their skills, learn from health policy and advocacy experts, and in some cases, implement health policies while still in medical school. A 1-week family medicine policy course can have impact beyond the classroom even during medical school, and other schools should consider this as a tool to increase the impact of their graduates.

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Physicians are trained to educate and counsel individual patients to make good choices for wellness, but a potentially more significant impact can be made by physicians who advocate and intervene at the policy level. As clinical experts and advocates on the local, state, and national levels, providers can multiply their power to address health inequities substantially. Empowering medical students to serve as advocates can prepare them for key roles in shaping our health care system and opportunities that impact populations. Furthermore, medical students desire training in health policy and advocacy.[1-4]

Community immersion and advocacy is an integral part of the University of New Mexico School of Medicine curriculum. Aspects are taught longitudinally in all 4 years (Table 1). During year 3, an approach to advocacy by using a health policy approach is taught within the family medicine (FM) clerkship because, as the American Academy of Family Physicians notes,

> These specialists, because of their background and interactions with the family, are best qualified to serve as each patient's advocate in all health-related matters…[5]

The clerkship clinical time was condensed into 7 weeks to allow for an eighth week consisting of 40 hours of didactics and skills training with 26.6 of these hours dedicated to health policy and advocacy education.[6] Students learn how to advocate using a written policy brief and then simulating real-world advocacy by presenting their ideas to FM instructors and clerkship cohort peers. We encourage students to actively pursue implementation of their ideas, but due to curriculum time constraints, it is not mandatory.

This paper describes the outcomes of the FM health policy and advocacy clerkship course. We conducted

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**Table 1: Overview of Health Policy and Advocacy Training at the University of New Mexico School of Medicine**

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| **Year 1: Health of New Mexico:** All medical students begin their program with a required two-week course on public health principles with an introduction to the social determinants of health, health equity, and community engagement. This is their first introduction to the roles and responsibilities as students and future physicians in addressing health inequalities among populations at the individual, community, and policy implementation levels.<br><br>**Year 2: Practical Immersion Experience:** Between years 1 and 2 of the curriculum, students undertake a practical immersion experience. They live and work throughout New Mexico in primarily rural, underserved, and Native American communities for 6 weeks. A central component of the experience is learning to listen to community members and work with, rather than on, communities to address a community-identified concern.<br><br>**Year 3: Health policy and health system education:** In year 3, students complete a required 8-week FM clerkship where 26.6 hours are dedicated to health policy, advocacy and health system education. Students learn concepts such as the intricacies of health insurance, cost, and quality considerations when caring for patients, and international health care systems.<br><br>**Year 4: Medicine in New Mexico**: In year 4, all medical students are required to take a 4-week course to prepare them for residency. In addition to 96 clinical hours in their future specialty outside of the University of New Mexico system, students select one of three tracks. Track one focuses on high value care, leadership, time management and business ethics. Track two emphasizes scholarly work. Track three is an exploration of population health concepts. Population health competencies as defined by Duke University are used as essay questions for a critique of a community health issue.[12] |

Kaprielian VS, Silberberg M, McDonald MA, et al. Teaching population health: a competency map approach to education. Acad Med J Assoc Am Med Coll. 2013;88(5):626-637. doi:10.1097/ACM.0b013e31828acf27

**Table 2: FM Clerkship Health Policy and Advocacy Course Design**

| Component | Structure |
|---|---|
| **Didactics:** The course includes didactic lectures taught by existing faculty and local community subject matter experts. For example, New Mexico state senators, city judges, and law enforcement officers speak to our students regularly about how health policy decisions are made and the need for physician involvement in these processes.[13] | **Didactic Topics**<br>Introduction to health policy and policy project overview are taught by one faculty instructor<br><br>Health policy, advocacy and media is taught by a second faculty instructor.<br>Intimate partner violence and health policy is taught by a variety of local community subject matter experts. |
| **Community Site Visit:** During the course, students choose an issue that is of interest to them, of concern to their community, and has public health implications. They identify topics by considering what "keeps them up at night" or is a source of regular frustration in caring for patients. They discuss health policy issues with instructors and local experts, and interview leaders within a community organization that advocates for policy change to learn how policies are created "in the real world." The organization site visit is done alone or in teams of no more than four. Organizations are selected from a pre-approved list created by the lead instructor. Students may opt to write an op-ed piece to a local newspaper on a current issue with policy implications in lieu of visiting an organization. | **Organization Site Visit Interview Questions**<br>1. Who did you meet with?<br>2. Brief description of the organization<br>  a. What do you do and why do you do it?<br>3. Describe a past policy initiative<br>  a. Was it successful? Why? If not, why not?<br>  b. What are some of the "lessons learned" in your trying to set policy?<br>4. Describe a current or future policy initiative<br>  a. What other organizations are you working with to support your policy?<br>  b. Will you use professional lobbyists? Why or why not?<br>  c. Critically analyze one of their policies, in place or proposed, for alignment with the "bones" of good policy:<br>  i. Evidence informed<br>  ii. Legal and Ethical<br>  iii. Monitored for impact<br>5. How can I as a future physician be engaged in this process?<br>6. Other questions asked |

| | |
|---|---|
| **Practical Exercise:** From their chosen issue, students independently write a one-page health policy brief. Instructors emphasize that their approach must be based on evidence, but can be novel or adopted from an existing policy enacted within another state or country. Students can be creative in their idea, but the brief's structure and the order cannot be altered. Students are given written and oral grading rubrics at the beginning of the rotation to understand course requirements. The course director reviews assignments before the due date, which is the last day of the clerkship, and provides feedback allowing students to revise and re-submit for a course grade. Assignments comprise 10% of the overall clerkship grade. | **Health Policy Components and Structure**<br>*Purpose statement:* What specifically do you want done, how should it be done, and why do you want it done?<br><br>*Decision-maker:* Who is the ONE decision-maker (so they don't simply state "NM legislature"—they must find a champion). Provide name, title, and the reason they are the appropriate person (they have sponsored similar initiatives, they are the student's representative, etc. )<br><br>*Policy issue:* Students provide evidence and statistics to make their case. They are asked to describe the issue being addressed by health policy. What is the problem? Who does it affect? Why is it a problem? (Why should the decision-maker care?)<br>*Policy history:* Students research and present a history of policies and laws tried elsewhere and whether a similar policy has failed or was implemented.<br><br>*Policy options:* Students present two policy solutions to the problem (since most decision-makers want to know what an alternative might be). Under each option, students include the pros, cons, and barriers to implementation.<br><br>*Preferred policy and justification:* Students select one option as the preferred option.<br>*Stakeholders:* Students research and report on who might be for or against the preferred policy, and why.<br><br>*Summary:* Students summarize their proposal in three key points<br><br>*Final memorable statement.* Students craft a "slogan," defined as a catchy phrase that will make their policy brief stand out. |
| Final presentation | At the end of the clerkship, students prepare an 8-minute oral presentation for the class as if they were presenting their policy proposal to decision-makers to learn how to effectively and succinctly advocate for their idea. |

a qualitative review of medical student policy briefs submitted as part of the FM clerkship requirements to categorize what type of policies students identify for change, at what level change needs to occur, and the extent to which students framed policy interventions to address population health outcomes.

## Methods

Table 2 details the Health Policy and Advocacy Course design. We coded 293 deidentified student policy briefs submitted between April 2016 and April 2019. Authors N.A. and C.B. inductively coded themes from the topic and subtopic of each policy brief. Authors A.C.E. and D.A. categorized and condensed themes into categories. Where discrepancies occurred, A.C.E. reviewed the full briefs to verify codes. A.C.E. and D.A. then used a consensus process to determine where the brief belonged. Frequencies are reported to give context to the findings. We used an Excel spreadsheet to manage data. Variables of interest are defined below.

*Level of Policy Intervention*

We categorized responses by the level of policy intervention. Levels were state, university, national, city, or tribal government.

*Decision Makers*

We identified decision-makers as formal law-making bodies or organizations. A comparison between the level of intervention and type of decision-maker was made to verify appropriateness for policy intervention's corresponding level.

*Age of Target Population*

We categorized each brief into age groups for the target population of the policy intervention: pediatric (ages 9 years and under), adolescent (ages 10-17), pediatric and adolescent (target policy proposal that included both age groups), adults (ages 18-64), elderly (ages 65+), or total population.

*Topics*

We first categorized topics using the National Academy of Medicine triple aim of cost, access, and quality, and inductively identified topics for the health or system problem(s) and proposed solutions(s).[7] Student topics were then organized into eight categories (in order of frequency from highest to lowest): education, access, injury prevention, quality, nutrition, health care cost, and substance abuse. Finally, we condensed these into three groups for results reporting:

**Table 3: Policy Brief Characteristics (N=265)**

| | N | % | Description of Policy Brief Focus |
|---|---|---|---|
| **Level of Policy Intervention** | | | |
| State | 112 | 42 | Students focused the majority of their proposals at the state government or university. These are the two levels of policy intervention for which we provide direct instruction. |
| University | 83 | 31 | |
| National | 36 | 14 | |
| City | 32 | 12 | |
| Tribal government | 2 | 0.7 | |
| | | | |
| **Age Group of Target Population** | | | |
| Adults | 130 | 49 | Most briefs were aimed at policies targeting adults or the general population more broadly. |
| Entire population | 63 | 24 | |
| Adolescents | 35 | 13 | |
| Pediatric and adolescents | 26 | 10 | |
| Pediatric | 8 | 0.3 | |
| Elderly | 3 | 0.1 | |
| | | | |
| **Decision-Maker Type** | | | |
| Lawmakers | 155 | 58 | Student policy proposals targeted lawmakers at the city, state, and national levels for leading or executing the recommended policy change effort. |
| Organization leadership | 110 | 42 | |
| | | | |
| **Policy Topics** | | | |
| Education | 80 | 30 | Students put forward policy interventions to address their own health needs during medical school (56%) slightly more often than education for non-medical providers. Topics targeted for medical student education included cultural competency, nutrition, and testing accommodations for medical students during high stake exams. Education within the community focused primarily on evidence-based sex education for youth. |
| Health care system change | 95 | 36 | *Health care cost:* cost of prescription drugs, and out-of-pocket health insurance costs to consumers.<br>*Health care quality:* universal medical records to share patient information across systems, improving vaccination rates through education, improving health literacy interventions, and universal screening of patients for homelessness, poverty, and diagnosis such as post-partum depression.<br>*Health care access:* expansion of insurance coverage for persons with low-socioeconomic status, contraception access, expanded services for persons experiencing homelessness, and assistance for incarcerated patients. |
| Public health | 90 | 34 | Ensuring nutrition via healthy eating by increasing the amount of farm-to-table offerings within public schools and taxing sugar-sweetened beverages and increasing media advertising of fresh fruits and vegetables. Harm reduction strategies for substance abuse policies via implementation of community injection sites and increasing locations of needle exchange programs. Wellness policies were the only category where the focus was exclusively on the mental or physical well-being of physicians in training and not for the benefit, although tangentially it is, of their patients or community. |

1. Education proposals related to medical education specifically and public education more broadly;
2. Topics from briefs proposing changes for the health care system: health care cost, quality, and access; and
3. Public health intervention-focused and includes injury prevention, substance use, and wellness.

*Outcomes*

We describe results on two outcome measures: attempted and successful implementation of student policy briefs and FM clerkship student evaluation results.

The University of New Mexico Human Research and Review Committee exempted this study (HRRC 19-229).

## Results

Of the 293 briefs, 28 were duplicate entries or missing a significant amount of information. We report results based on the 265 briefs.

*Policy Characteristics*

Table 3 summarizes the level of policy intervention, age group affected by the policy intervention, the type of decision-maker, and student topics.

*Outcomes*

Although not required, 14 students attempted to implement their policy proposals. Six proposals were implemented.

Overall, students report positive learning experiences from the policy education in their evaluations, but average a neutral score on the policy brief assignment (Tables 4 and 5).

## Discussion

Final course evaluations suggest not all students fully embrace the policy brief assignment, but they report the experience positively influences their overall understanding and appreciation for the impact of health policy and advocacy. The neutral findings were reflective of some not caring about the assignment and some embracing it as another tool for advocacy. A few students attempted to implement their ideas, with some notable successes._This finding from our student evaluation confirms studies that found that physicians deemed community participation and advocacy important within their careers.[11,12]

Health policy training has a positive impact on medical students because it helps shape professional roles by assisting students in identifying their role as an advocate.[8-10] Interactions outside the classroom

**Table 4: Medical Student Policy Briefs Enacted or Attempted Enactment 2016-2019**

| Outcome | Level of Change | Topic |
|---|---|---|
| Implemented | State | A call to action to change New Mexico Medical Board application language to foster greater physician health[16] |
| | City | Life skills as credit towards high school graduation for Albuquerque's homeless youth |
| | University | Allowing students to verify blood products prior to transfusion |
| | University | Voluntary self-disclosure of sexual and gender minority status on UNM Medical School applications |
| | University | Proper documentation of blood product refusal |
| | University | Reversal of the requirement for requiring low-income patients to pay 50% up front before scheduling elective surgery |
| | University | Digital anonymous mental health help for medical students |
| Potential enactment (In progress as of July 1, 2020) | State | Adverse childhood experiences in New Mexican children: statewide identification, prevention, and intervention programs |
| | State | Decreasing skin cancer risk for students in New Mexico public schools |
| | State | Professional licensure regardless of immigration status |
| Attempted | State | Rewording the requirements for preparticipation physical evaluations for student athletes |
| | State | Life skills training for public high school students in New Mexico to improve graduation rates |
| | City | Harm reduction in community health care through needle exchanges |
| | University | Increasing patient meal access in the University of New Mexico Hospital main emergency department |

Combined mean scores for a 5-point Likert agreement scale, where 1 is strongly disagree and 5 is strongly agree.

Fletcher I, Castle M, Scarpa A, et al. An exploration of medical student attitudes towards disclosure of mental illness. Med Educ Online. 2020; 25: 1727713.

**Table 5: Mean Student Evaluation Scores of the UNM Health Policy and Advocacy Training (N=279)**

| Evaluation Items | Academic Year | | |
|---|---|---|---|
| | 2016-2017 | 2017-2018 | 2018-2019 |
| | Mean | Mean | Mean |
| As a result of the experiences during this block, I have a better understanding of how to be an advocate for health policies that impacts my patients and the practice of medicine. | 4.1 | 4 | 3.9 |
| The policy brief was a useful learning tool. | 3.7 | 3.6 | 3.5 |
| I have a better awareness of community organizations and resources that improve the health of my patients/community after the organization site visit. | 4 | 4 | 4.1 |

Combined mean scores for a 5-point Likert agreement scale, where 1 is strongly disagree and 5 is strongly agree.

Table adapted from data provided by the UNM SOM Office of Program Evaluation, Education and Research: https://hsc.unm.edu/school-of-medicine/education/md/ume/pear.html

with community advocacy groups permitted our students to learn how to engage in advocacy for real-world issues that affect their patients and community.

This study was a retrospective collection of policy briefs, which limited the data to the completed assignment and does not allow for direct analysis of the student's choices. Further, we are unable to address the outcomes of proposals that were implemented, nor can we explain why others were not implemented.

## Conclusion

The American Medical Association holds that physicians must:

> advocate for social, economic, educational, and political changes that ameliorate suffering and contribute to human well-being.[13]

There is a role for health policy training for medical students.[14,15] This curriculum gives each student a health policy toolkit with immediate opportunities to test their skills, learn from health policy and advocacy experts, and implement health policies while still in medical school. Research is needed on whether these experiences increase actual participation in health policy and advocacy in future clinical practice. Nonetheless, it is essential that medical students are trained in health policy as a form of advocacy as future stewards of individual and community health.

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