Physician Advocacy: Influencing our Future

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Disclosures: This is acknowledge that Elizabeth Blair Solow, MD has disclosed that she does not have any financial interests or other relationships with commercial concerns related directly or indirectly to this presentation. Dr. Solow will not be discussing off-label uses in her presentation.

Purpose:

Provide a framework of understanding on the importance of physician advocacy in defining our future.

Overview:

Physician advocacy is crucial for the advancement of health care in this country. The purpose of this talk will provide a framework by which physicians may work within to advocate for better care for their patients and resources for the profession. Professional organizations call on physicians to participate in active discourse related to our area of expertise, healthcare. The talk will review current trends in teaching health policy in the United States and opportunities for physicians to engage in learning about health policy and how to advocate.

Objectives:

- 1. Describe advocacy definitions pertaining to physicians
- 2. Describe the role Professional Organizations play in Physician Advocacy
- 3. Describe Health Policy issues faced by physicians today
- 4. Describe current trends in teaching health policy to medical students and residents
- 5. Describe leadership opportunities for physicians to become involved in advocacy

Biosketch:

Blair Solow grew up in Senatobia, Mississippi, completed her BA in Biology at the University of Kansas, and her medical degree at UT Houston Health Science Center. Internal Medicine residency and Rheumatology fellowship followed at the UT Southwestern Medical Center. She joined the UT Southwestern faculty in 2011. In addition to managing her patients at the West Campus Building, she precepts at Parkland Rheumatology clinic and inpatient consults. Clinical research activities include site-PI for a PCORI funded trial on GIST brain training and patient understanding of complex prescription information as well as the NIH funded StopRA trial, to prevent rheumatoid arthritis. Blair has been a member of the American College of Rheumatology Government Affairs Committee and now volunteers for the ACR Committee on Rheumatologic Care.

Definitions of Advocacy

What does advocacy mean? The earliest known definitions of advocacy come from around 1300. Etymology Online and Merriam-Webster show *advocate* can be used as a noun or a verb[1, 2].

Advocate (noun):

mid-14c., "one whose profession is to plead cases in a court of justice," a technical term from Roman law, from Old French avocat "barrister, advocate, spokesman," from Latin advocatus "one called to aid (another); a pleader (on one's behalf), advocate," noun use of past participle of advocare "to call (as witness or adviser), summon, invite; call to aid; invoke. Middle English as "one who intercedes for another," and "protector, champion, patron." Feminine forms advocatess, advocatrice were in use in 15c.

Advocate (verb):

"plead in favor of,"; "to act as advocate for someone or something".

A suggested operational definition of advocacy for physicians:

"action by a physician to promote those social, economic, educational, and political changes that ameliorate the suffering and threats to human health and well-being that he/she identifies though his/her professional work and expertise." [3]

Activist (noun): person who uses or supports strong actions (such as public protests) in support of or opposition to one side of a controversial issue; to bring about political or social change.

Civics and Definitions

THREE BRANCHES OF THE US GOVERNMENT

Executive

Legislative

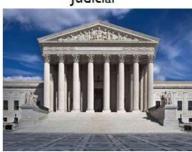


U.S. Senate House of Representatives (Collectively: Congress)



Office of the President Federal Agencies (includes HHS/CMS)

Judicial



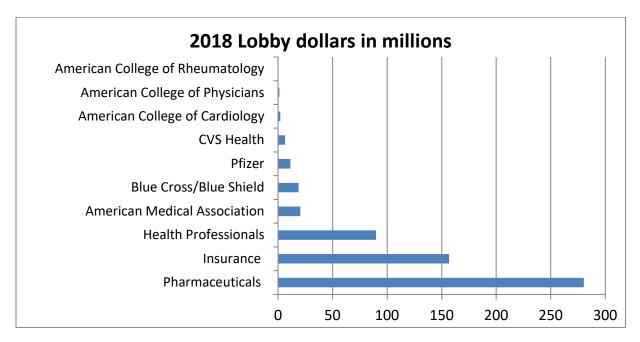
U.S. Supreme Court Appellate Courts District Courts

Congress: "legislative"; writes and passes laws. Includes the Senate and House of Representatives. Both bodies must pass the exact same legislation (somehow!) before it becomes a law.

CMS: Centers for Medicare and Medicaid Services. "Regulatory" body that interprets the law and writes regulations with annual updates called the "Final Rule". Proposed rules will have a comment period. In Regulatory Advocacy, advocates work with agency officials or government board members whose agency issues healthcare related regulations in order to seek a new regulation, or prevent/modify a regulation from being passed.

HHS: Department of Health and Human Services

Lobbyist: An activist who seeks to persuade members of the government to enact legislation that would benefit their group. The lobbying profession is legitimate and integral part of our democratic political process. Figure below[4].



The Health Care Lobby is a multi-million dollar entity. Using the Center for Responsive Politics, authors from MetroHealth Medical Center in Cleveland reviewed lobbying activities from 1997-2000[5]. They studied five major domains: pharmaceutical and health product companies, physicians and other health professionals, hospitals and nursing homes, health insurance and managed care companies, and disease advocacy and public health organizations. Expenditures totaled \$237 million in 2000, which is approximately 15% of *all* federal lobbying and greater than agriculture, defense, finance, and transportation. Expenditures were led by pharmaceutical companies followed by physicians and health professionals, mostly via associations.

PAC: Political Action Committee. A political committee organized for the purpose of raising and spending money to elect candidates or gain access. PACs originated in 1944.

Bill: "S." denotes a bill going through the Senate (example S.2012); "H.R." denotes a bill going through the House of Representative (ex H.R. 1600).

CBO: Congressional Budget Office. Federal nonpartisan office in legislative branch that provides economic and budget information to Congress.

How does a bill move through Congress?

A bill is first introduced by a Sponsor and Co-Sponsor (ideally of different parties), and then may be referred (by the Speaker of the House and the Majority Leader in the Senate) to a committee. The committee Chair then refers it to the appropriate subcommittee. If the bill passes subcommittee with or without amendments, then it is sent back to the full committee. The committee may amend the bill, and then will send the bill to the full House or Senate to vote. Bills need to be approved by both the House and the Senate, and similar bills may go through at the same time. The different versions must be resolved by a committee, which will send an identical bill to go back through both houses. Once both houses vote "yes" the bill can be sent to the President[6]. Bills are often submitted in several Congresses and the more co-sponsors a bill has the better the chances. Often, regulatory agencies like CMS or CBO will provide details to the impacts of certain legislation, should it pass, which may influence votes[7]. In the 115th Congress (2017-2019) 13,556 bills were introduced, 6% (867) received a vote in one house, and 3% (443) became law[8].

Health Policy Issues faced by Providers

Health policy refers to "decisions, plans, and actions that are undertaken to achieve specific health care goals within a society" per the World Health Organization (WHO)[9].

Health Policy: Health Insurance Coverage

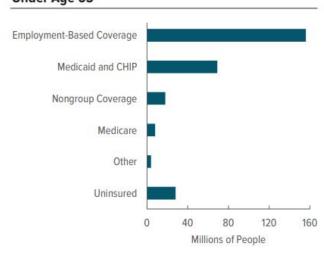
According to the Congressional Budget Office or CBO, health insurance will be enjoyed by 244 million people under the age of 65, mostly through employer or Medicaid/CHIP[10]. On average, approximately 28 million will be uninsured (11% of the population). Both figures are expected to rise from 2018-2027 to 247 million insured and 31 million uninsured.

Health Policy: NIH Funding

NIH funding is an important avenue for research. As of June 2018, NIH shows Fiscal Year 2018 for UT Southwestern Medical center to have received 435 awards, totaling \$181,358,562[11]. Sequestration of the NIH budget occurred in 2013, leading to a fall in

Figure 1.

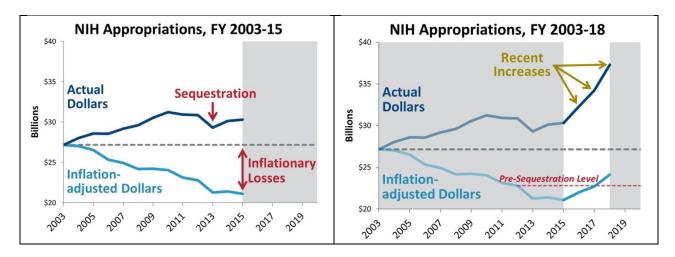
Health Insurance Coverage in 2017 for People
Under Age 65



Sources: Congressional Budget Office; staff of the Joint Committee on Taxation.

CHIP = Children's Health Insurance Program.

NIH appropriated dollars and the budget was flat until 2016[12]. The 21st Century Cures Act, signed in December 2016, provided a funding boost for scientific research[13-15]. Currently, NIH invests \$39.2 billion annually[16]. Figure below[17].



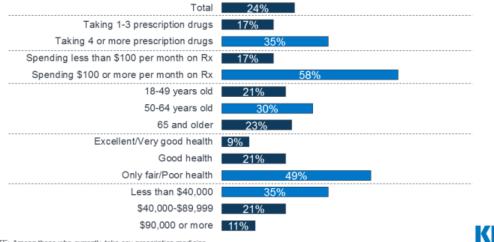
Health Policy: Access to Medicine

Over 59% of Americans use prescription drugs and this number is rising. Women tend to take more medications than men, and as age raises so does the percent of the population taking medications. In a key group that cannot access Medicare, age 40-64 years, 65% take prescription medications[18].

Kaiser Family Foundation (KFF) reported on survey data in March 2019 on patients attaining prescription medication. KFF surveyed by random digit dialing in the US of 1,440 persons >=18 with a contact rate of 20.1% (290/1440). Of those taking prescription drugs approximately 1 out of 4 adults (24%) (and 23% of seniors) report difficulty affording the medications. Groups that are more likely to experience difficulty are 1) those who need to spend \$100 or more per month on medications, 2) incomes <\$40,000 annually; 3) taking >=4 medicines. The group surveyed felt pharmaceutical companies are a major factor in the price of prescription drugs as well as pharmacy benefit managers and do not trust that they will price medications fairly[19].

Who Has Difficulty Affording Their Prescription Drugs?

Percent who say it is difficult to afford the cost of their prescription medicine:



NOTE: Among those who currently take any prescription medicine.

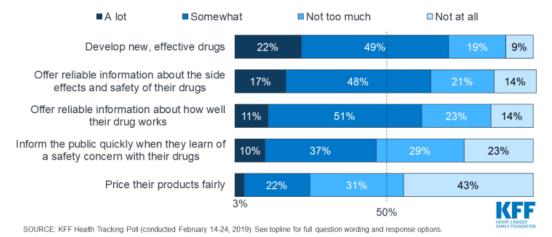
SOURCE: KFF Health Tracking Poll (conducted February 14-24, 2019). See topline for full question wording and response options.

HENRY J KAISER FAMILY FOUNDATION

Figure 3

Most Trust Drug Companies On Variety Of Issues, But Few Trust Drug Companies To Price Their Products Fairly

How much do you trust pharmaceutical companies to do each of the following?



In a recent Senate Finance Committee testimony in February 2019, pharmaceutical executives admit that high drug prices affect the poor the hardest, despite the drug companies' ability to control pricing. Drug companies suggested that drug pricing is most affected by pharmacy benefit managers[20].

The Senate Finance Committee has also invited pharmacy benefit managers three times to testify in April 2019 on the rising costs of prescription medications[21].

In 2018 President Trump announced a prescription drug plan called "American Patients First". This was further outlined in his 2019 Budget. The President asked for Medicaid demonstration projects to test drug coverage reform at the State level, reduce Medicare costs for Part D, including negotiation power, FDA to bring generics to market more quickly, and organize a study comparing drug prices in America versus other countries[22].

The Players in Drug Pricing and their Fortune 500 ranking and revenues[23-25]:

Pharmaceutical companies ("Manufacturers"). Pharmaceutical companies create (or acquire) and sell drugs. *Revenues reported after discounts and rebates are removed. Revenues may not show the full profitability of the manufacturers, however. If one uses *Return on Assets* then drug companies and PBMs look more comparable[26].

Johnson/Johnson	Rank 37	Revenues 76 billion
Pfizer	Rank 57	Revenues 52 billion
Merck	Rank 78	Revenues 40 billion

Distributors. Intermediary role in supply chain between retailers and manufacturers. Only 3 companies make up 85% of the marked: AmerisourceBergen, Cardinal Health, McKesson.

McKesson	Rank 6	Revenues 199 billion
AmerisourceBergen	Rank 12	Revenues 153 billion
Cardinal Health	Rank 14	Revenues 130 billion

Pharmacy benefit managers (PBMs). Working on behalf of health insurance companies or employers, PBMs act as middlemen and negotiate upfront discounts on the prices of prescription drugs with pharmaceutical companies, as well as rebates, which reward favorable coverage of a particular drug (and the resulting increase in utilization by a health plan's patients). PBMs set formularies. These prescription drug agreements are proprietary. Top 3 PBMs controlling 73% of market share are CVS Health (retail + PBM; previously CVS Caremark), Express Scripts (subsidiary of Cigna), and OptumRx (OptumRx is part of UnitedHealth Group).

CVS Health	Rank 7	Revenues 184 billion
Express Scripts	Rank 25	Revenues 100 billion

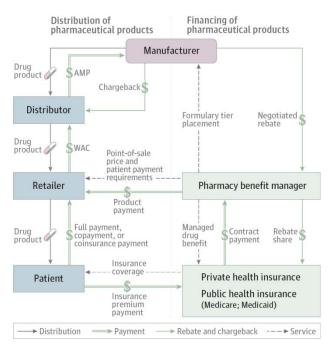
Health insurance companies ("Payers"). Health insurance companies approve treatments, set co-pays, and price out with PBMs how much patients pay for drugs. Includes Medicare and Medicaid.

UnitedHealth Group	Rank 5	Revenues 200 billion
Anthem (BCBS)	Rank 29	Revenues 90 billion
Aetna	Rank 49	Revenues 60 billion

For context, Fortune 500 Rankings for other industries are below.

Rank 1	Revenues 500 billion
Rank 4	Revenues 229 billion
Rank 18	Revenues 122 billion
Rank 30	Revenues 90 billion
Rank 55	Revenues 55 billion
	Rank 4 Rank 18 Rank 30

The figure below from JAMA illustrates the movement of a particular medication and money[24]:



Health Policy: Access to Care (Workforce Shortages)

As the population ages and health care services are going to be needed in greater supply the Bureau of Labor Statistics (under the US Department of Labor) reports that employment over 2016-2026 for the health care segment to be fastest growing occupational group and be responsible for approximately one-fifth of all new jobs by 2026[27].

Graduate Medical education (GME) slots are paid for predominately by Medicare, followed by a percentage from Medicaid, (US Department of Health and Human Services) HHS, Veterans Administration and private insurers, individual hospitals, private funders (for example the Rheumatology Research Foundation may provide funding for a rheumatology fellowship position), or state funds[28-31]. The Balanced Budget Act of 1997 placed a cap on Medicare GME funding which has affected the availability of residency slots (despite the rise in medical school enrolment)[32]. Until new legislation is passed, residency slots will not increase.

AAMC published a report in 2018 to address physician supply and demand mismatch, and the projections for 2016 to 2030 estimate a shortage of between 42,600 to 121,300 physicians by 2030, representing the 25th to 75th percentiles (Figure below)[33]. Estimated physician supply could increase from 791,400 to 846,600 by 2030, which is a 7% increase, however the US population is expected to grow by 11% which will lead to a decline in physician-to-population ratio.

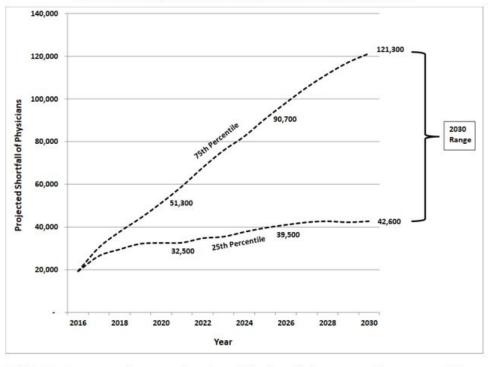
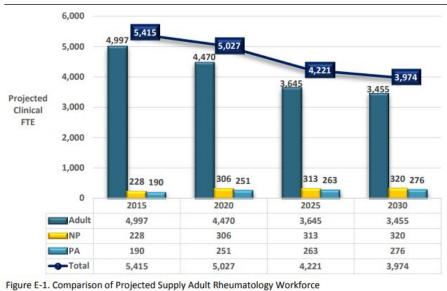


Exhibit ES-1: Total Projected Physician Shortfall Range, 2016-2030

Exhibit ES-1: Because complex systems have internal checks and balances, to avoid extremes we believe that the 25th to 75th percentile of the shortage projections continues to reflect a likely range for the projected adequacy of physician supply. The projected shortfall of total physicians in 2030 is between 42,600 and 121,300, with the range widening over time to reflect growing uncertainty about key supply and demand trends.

In 2015, the American College of Rheumatology developed the Workforce Study to better understand the need for future rheumatologists. The findings were concerning with a marked decline in providers and an expected rise in the need for specialists in rheumatic disease and arthritis[34].



National Legislation in the 116th Congress to address workforce shortages include the following[35]:

- 1. S.348 Resident Physician Shortage Reduction Act of 2019
- 2. S.304 Training the Next Generation of Primary Care Doctors Act of 2019
- 3. S.289 Rural Physician Workforce Production Act of 2019
- 4. H.R.5942 Health Equity and Accountability Act of 2018 (not yet reintroduced in 2019)

State Legislation in the 86th Texas Legislature to address workforce shortages include the following[36]:

1. SB 1378 Relating to meeting the GME needs of medical degree programs



Advocacy Wins [37, 38]

- 1. Federal legislation signed into law as well as state bills providing gag clauses which will now allow pharmacist to share lower-cost medication options to patients
- 2. Deferred action on E/M coding collapse until 2021
- 3. Physical Therapy caps removed
- 4. Pharmacy Benefit Managers legislation reform passed in 18 states
- 5. Step therapy and Prior authorization legislation reform

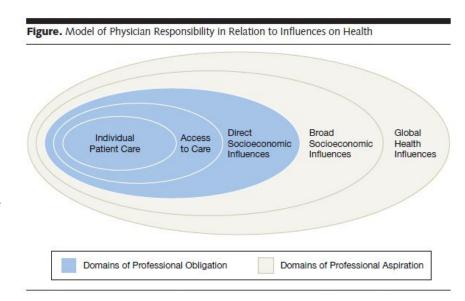
Medical Professionalism and Advocacy

In 2002 a Physician Charter was created by the American Board of Internal Medicine Foundation, American College of Physicians Foundation, and the European Federation of Internal Medicine, published in the Lancet and Annals of Internal Medicine, to describe medical professionalism in the new millennium[39]. The document contains three core principles and ten commitments. The Fundamental Principles include: 1) Principle of primacy of patient welfare; 2) Principle of patient autonomy; 3) Principle of social justice. The ten commitments include: 1) Commitment to professional competence; 2) Commitment to honesty with patients; 3) Commitment to patient confidentiality; 4) Commitment to maintaining appropriate relations with patients; 5) Commitment to improving quality of care; 6) Commitment to improving access to care; 7) Commitment to a just distribution of finite resources; 8) Commitment to scientific knowledge; 9) Commitment to maintaining trust by managing conflicts of interest; 10) Commitment to professional responsibilities. Numbers 5, 6 and 7 are commitments to improve things within our practice, but also the practice of medicine in the country where we practice. Number 6 calls physicians to promote public health, support preventative medicine and be involved in public advocacy. Following the Annals and Lancet publications, the Charter was published in multiple other journals in the US and Internationally endorsed by over ninety professional associations, colleges and societies[40].

In 2004 authors in JAMA argued that the medical profession needs be more engaged in the public arena for three reasons[41]. First, the issues in the community and socioeconomic status have impacts on health problems and access to care. Second, major issues in public health, access to care and quality of care are in the direct purview of the physician. And finally, public trust in physicians

and the medical profession may be revived by leadership in improving the health of the people. The authors define physician public roles "as advocacy for and participation in improving the aspects of communities that affect the health of the individuals".

The authors proposed a model of physician responsibility to help provide context for where a physician may exert great influence (see Figure)[41].



American Medical Association (AMA) in the Declaration of Professional Responsibility H140.900 charges physicians to "Advocate for social, economic, educational, and political changes that ameliorate suffering and contribute to human well-being" and "Educate the public and polity about present and future threats to the health of humanity" [42]. The AMA has also published a "Code of Medical Ethics"

in 2016 which states "A physician shall recognize a responsibility to participate in activities contributing to the improvement of the community and the betterment of public health" and "A physician shall support access to medical care for all people" [43].

Can we look to the Hippocratic Oath to determine what our roles may be in addressing political issues with patients? Physicians are charged with working to prevent disease, to remember that illness affects a patients well-being, family, and economics, and that we are to remain a member of society with special obligations to our patients[44].

Hippocratic Oath[45]:

Hippocratic Oath (Modern Version)

Written in 1964 by Louis Lasagna, Academic Dean of the School of Medicine at Tufts University

I swear to fulfill, to the best of my ability and judgment, this covenant:

I will respect the hard-won scientific gains of those physicians in whose steps I walk, and gladly share such knowledge as is mine with those who are to follow.

I will apply, for the benefit of the sick, all measures [that] are required, avoiding those twin traps of overtreatment and therapeutic nihilism.

I will remember that there is art to medicine as well as science, and that warmth, sympathy, and understanding may outweigh the surgeon's knife or the chemist's drug.

I will not be ashamed to say "I know not," nor will I fail to call in my colleagues when the skills of another are needed for a patient's recovery.

I will respect the privacy of my patients, for their problems are not disclosed to me that the world may know. Most especially must I tread with care in matters of life and death. If it is given me to save a life, all thanks. But it may also be within my power to take a life; this awesome responsibility must be faced with great humbleness and awareness of my own frailty. Above all, I must not play at God.

I will remember that I do not treat a fever chart, a cancerous growth, but a sick human being, whose illness may affect the person's family and economic stability. My responsibility includes these related problems, if I am to care adequately for the sick.

I will prevent disease whenever I can, for prevention is preferable to cure.

I will remember that I remain a member of society, with special obligations to all my fellow human beings, those of sound of mind and body as well as the infirm.

If I do not violate this oath, may I enjoy life and art, respected while I live and remembered with affection thereafter. May I always act so as to preserve the finest traditions of my calling and may I long experience the joy of healing those who seek my help.

The Commission on Education of Health Professionals for the 21st Century was launched in 2010, led by national and international individuals, to develop a vision with practical recommendations of actions to transform health professional education across the globe[46]. Proposed reforms included competency-based curricula to respond to management and policies of complex health systems.

Per the request of the National Institutes of Health and The Robert Wood Johnson Foundation, the Institute of Medicine (IOM) published a review in 2004 for improving medical education as it relates to teaching curriculum on behavioral and social factors of health and disease[47]. The IOM, now the National Academy of Medicine, which falls under the National Academies of Science, Engineering, and Medicine, is an American nonprofit, non-governmental organization. It found that behavior and social science curriculum was lacking and made several recommendations. The authors identified six core behavior and social science domains: mind-body interactions in health and disease, patient behavior, physician role and behavior, physician-patient interactions, social and culture issues in health care, and health policy and economics. In the latter domain, the recommendations to include in the medical school curricula included overview of US health care system, for example how the US healthcare system is tied to economy given the health care industry is intertwined with the public sector. Further themes included uninsured populations and managed care. The authors added that additional material should also be presented in the residency years.

Recognizing the need for change, the NIH awarded grants (K07) to 9 medical schools to pilot curricula targeted to the six domains. Later expanding to include 16 schools including Baylor College of Medicine, Texas A&M Health Science Center, and the University of Texas Health Sciences Center at San Antonio. In the NIH K07 Program Executive Summary, Oregon Health and Science University, University of California, San Francisco, and University of North Carolina specifically mentioned curriculum on advocacy and health policy[48].

Doctors and Voting

There are over 1,000,000 physicians practicing in the United States who handle nearly 900 million patient encounters a year [49, 50].

In 2007 a group of researchers out of Hopkins looked to see how well physicians turned out to vote[51]. They assessed nationally representative survey data from 1996, 2000, and 2004 from the Current Population Survey, which his administered by the Unites States (US) Census Bureau and US Bureau of Labor Statistics. They compared doctors to lawyers, nurses, engineers, farmers, teachers, secretaries, waiters, drivers or laborers. The highest voter turnout was by *lawyers* (85%, 95% CI 82.5-87.5%), the lowest were laborers (35%, 95% CI 29.5-40.3%). One in 4 physicians did not vote in the recent past presidential elections (76%, 95% CI 72.1-79.9%). After controlling for socioeconomic differences, physicians were 2-fold less likely to vote compared to lawyers, teachers, and farmers.

Grande and colleagues looked at physician voter turnout from 1996-2002 and compared it with data from 1976-1982[52] for US physicians, lawyers and the general population. Data was pulled from the US bureau of Census Current Population Survey (CPS) November Voter Supplement (survey). They assessed approximately 85,000 general population citizens, 1,274 physicians and 1,886 lawyers over this time period. Survey response was approximately 85%. Physicians were slightly older than lawyers and younger than general population (45y vs 44.1y vs 46.2y, respectively, p=0.01), a quarter female (26.3% vs 31% vs 53.1%, respectively, p<0.001), predominately Caucasian followed by Asian-American. Doctors were less likely to vote than the general population most years (OR 0.62, 95% CI

0.48-0.80), and lawyers outvoted the general population and doctors. No differences in physician voting compared to 1976-1982.

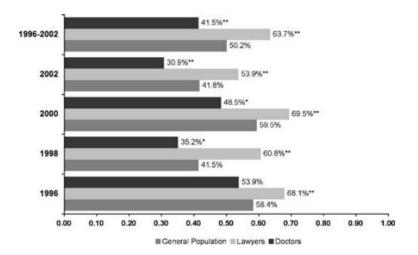


Figure 2. Adjusted probability of voting of physicians compared to lawyers and the general population from 1996 to 2002. P values are calculated for physicians and lawyers compared to the general population. Statistical significance is denoted with an asterisk for P<.05 and double asterisks for P<.01.

Despite our less than ideal voting turnouts, physicians do worry about the future of medicine. In a 2013 survey of US Physicians (429/20,472 responded, 2.1%) by Deloitte Center for Health Solutions, almost 7/10 physicians were satisfied with practicing medicine, however 6/10 said the practice of medicine is in jeopardy[53]. The Deloitte 2016[54] and 2018[55] surveys addressed health information technology plus MACRA legislation and virtual care, respectively. The 2018 Survey of US Physicians (8,774/~700,000, 1.3%) by Merritt Hawkins for The Physicians Foundation, found 44.7% of physicians were somewhat or very positive about the medical profession and 38.4% were somewhat or very optimistic about the future of the medical profession[56]. When asked if physicians have the ability to influence the healthcare system, 62.5% felt little or very little influence, up slightly from 2016 at 59.2%.

Strategies to promote increased voting turnout include early release at medical schools. Boston's Beth Israel Deaconess Medical Center and Harvard Medical School released medical students early for 2018 elections. Several schools (including UT Southwestern) have added voter registration booths at either orientation or key election times. Other ideas include giving more information about online voting and use of absentee ballots for students and physicians, where applicable[57].

Doctors in Washington, DC

In 1776, when the Declaration of Independence was drafted, physicians comprised 11% (5/56) of the signatures [58]. With the assembly of the 1^{st} Continental Congress (1774-1788), 8.5% (31/363) were physicians. Five percent (2/39) of those who drafted the US Constitution were physicians [59]. Dr.

Benjamin Rush, signer of the Declaration of Independence, would tell his [medical] students to have "a regard to all the interests of your country, informing the nation about the useful arts and seizing opportunities to diffuse useful knowledge and sound opinion of every kind. Doctors no less than others should speak out on public questions."[58]

We are presently in the 116th Congress (2019-2021). There are currently 16 physicians. Tom Price was the 17th physician, however he became Secretary of Health and Human Services under the Trump administration. Several of these physicians have been in the House or Senate for nearly 10 years (Table below). The numbers in congress have been low over the past several decades, however in the 116th Congress physicians show an increase in percentage compared to previous years. Physicians in congress tend to be Republican, male, and practice in specialty fields[60, 61].

Doctors have often joined in the political fray when large pieces of healthcare legislation that affect the practice of medicine are put forward[62]. When Medicare was introduced in 1966 physicians and the American Medical Association were against the program. With the Affordable Care Act, doctors have had mixed feelings that tended to go along party lines[63].

Only one president (William Henry Harrison 1881-1881) went to medical school, however he did not graduate. In the Supreme Court, one physician (out of 114 justices) (Samuel Freeman Miller 1862-1890) has presided[59, 64].

A Caucus is a group of Congress members that meet to pursue legislative objectives important to that group. There are about 300 groups, and the GOP Doctors Caucus, founded in 2009, is made of Congress men and women who are physicians and nurses. In the 116th Congress there are 16 medical providers lead by Dr. Phil Roe[65].

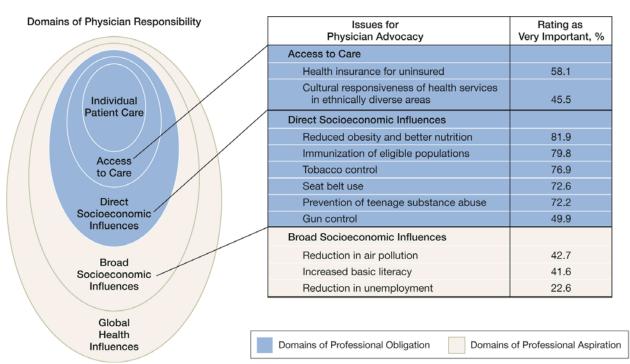
Table. Physician Participation in Congress						
US Congress	1-50 th	51-97 th	86-108th	109-114 th	98-115 th	116 th
Years	1789-1889	1889-1982	1960-2004	2005-2015	1982-2018	2019-2021
Non-MD	5405	5397	2196	867	-	532
Physician	252	60	25	27	31	16
%	4.7%	1.1%	1.1%	3%	-	3%
Excerpted from several sources [61, 66-69].						

Physician Views on Advocacy

Campbell and colleagues surveyed 1662 practicing physicians (internal medicine, family practice, pediatrics, surgery, anesthesiology, and cardiology) in the US on attitudes on professionalism using the ABIM's Charter of Professionalism[70]. The sample was pulled from the AMA Masterfile 2003, and was sent to 3504 physicians, of which 1662 completed the survey (response rate 52%). Physicians were 73% male, 72% Caucasian, 15% Asian. The majority of physicians agreed with the statement "Physicians should advocate for legislation to assure that all people in the US have health care insurance coverage" (86% 95%Ci 80.1-91.9).

A small study out of the University of Pennsylvania surveyed primary care physicians about their attitudes and willingness to address political issues with clinic patients[71]. Ninety-seven percent (36 physicians) participated in the survey. Physicians had been practicing for nine years on average and 53% were male. All were registered to vote and 94% of physicians discussed voting or a politically oriented health care issue with patients while 56% initiated these discussions. 63% were willing to offer voter registration in the clinic. Male primary care physicians were more likely to initiate discussions with patients about health political health care issues and contribute money to political campaigns.

Data from the Institute on Medicine as a Profession's (IMAP) survey on Medical Professionalism from 2003 was assessed using Gruen and colleagues framework for physician advocacy[41, 72]. Of the 271,148 US physician survey data available, 3504 were randomly selected and grouped by specialty, which included primary care, subspecialty, and surgery. Of those 3504 surveyed 1662 responded (57.8%). Political involvement was defined as "How important is in for physicians to be politically involved (other than voting) in health-related matters at the local, state or national level?" and "In the past 3 years have you been politically active (other than voting) on a local health care issue?" These physicians were 80% male, 74% Caucasian, and 50% in practice for greater than 20 years. 92% rated political involvement important and 26% participated in political activities in the past 3 years. Interestingly, if the physician was African-American or other underrepresented minority the political activity involvement was greater, up to 56%. Hours in clinical care per week nor location of the practice made a difference in participation rates. Physicians rated several domains as very important for physician advocacy (see Figure below).



Researchers from UCSF sent a survey to the Department of Internal Medicine faculty to assess key areas of advocacy including, 1) policy research, 2) expert advice to government officials, and 3)

public policy advocacy in collaboration with organizations outside the government[73]. Of the 553 who received the survey, 223 (40%) responded. Fifty percent were male, 57% Caucasian, 36% Professor rank, 21% Associate Professor, 66% either Clinical Investigator or Clinical Educator. Over half of the respondents participated in at least one of the policy related activities and 23% participated in all three. Faculty Rank, but not gender or race determined involvement in policy activities.

There is limited evidence that physicians may have variation in practice patterns based on their political leanings when it relates to a politicized health issue, such as marijuana, abortion, and firearms[74].

Landers and Sehgal report on a survey of Senate and House legislative assistants working on health care legislation to ask 1) frequency of meetings with physicians, 2) issues, and 3) effectiveness of physicians as lobbyists[75]. Of the 191 legislative assistants approached, 84 (70%) completed the interview. Legislative assistants reported on average 10 meetings per month with physicians in the senate and 4 meetings per month in the House. The authors estimate approximately 29,000 meetings per year may have occurred. The top 3 issues most often discussed were 1) Medicare reimbursement (81%), 2) managed care reform (75%), 3) funding for medical education (25%), 4) funding for medical research (8%), and 5) access to health insurance (5%). Legislative assistants felt 44% of physicians were "effective" and 46% "somewhat effective" at messaging. Hence, we have some room to grow as physician advocates.

Teaching Opportunities on Advocacy

Accreditation Council for Graduate Medical Education (ACGME) requires residents and fellows to obtain competency in six areas. In the 6th competency Systems-Based Practice (SBP) advises residents to be aware and responsible to the larger context of the health care system, which includes an expectation to advocate for quality patient care and optimal patient systems[76].

The path to teaching advocacy to medical students, residents, and practicing physicians is not yet defined. Earnest and colleagues attempt to describe what *Training Physician Advocates* could look like[3]. (Figure below).



A systematic review evaluating literature from 1983 to 2013 attempted to determine the published literature on health policy training in health care, including public health, nursing, medicine, and sociology[77]. Thirty three articles from 5124 were reviewed. Four themes emerged including: 1) description of proposed health policy curriculum; 2) pilot of a health policy program; 3) support for increased health policy training; and 4) survey of health policy training within a professional curriculum. The authors concluded that despite increase rhetoric to advance health policy training in health care education, limited literature is available to describe curriculum and evaluations of these training programs. The table below summarizes the literature review I have completed to understand opportunities across the United States in teaching health policy and advocacy.

Location	Year	Trainees	Content	Outcomes
Connecticut Veterans Affairs[78]	2011- 2013	16 (residents, NP, CPR)	Health Policy and Advocacy training	Improved learning of health policy, Increased comfort with policy topics, increased confidence navigating healthcare systems, increased knowledge
University Hospital of Albert Einstein College of Medicine, NY[79]	2002- 2005	47 MS (nationwide)	Health Policy, Research Methods for project, Advocacy skills, physician activists as role models	Able to generate a research question and advocacy plan. Considered careers that involved advocacy
Albert Einstein College of Medicine, Bronx, NY[80]	2010- 2013	48 MS	3 month elective. Awareness health disparities, social determinants of health, implicit bias, advocacy skills	Increased knowledge and confidence, improved attitudes on physician bias and community engagement
University of Illinois at Chicago College of Medicine[81]	2016	10 Pediatric residents, MS, public health	2 week course: LEAD course: Define policy issues, communication strategies, formulate policy recommendations and policy briefs	Increased knowledge, more likely to be engaged in health policy, more likely to educated a colleague
Weill Medical College of Cornell University[82]	1996- 2004	12-19 MS	Mandatory 2 week clerkship: Quality of care, Managed Care, Prescription drug cost management, Health for uninsured	Increased knowledge of healthcare systems and policy; 1-3% of class completes an MPH
AMSA Advocacy Day in Washington DC[83]	2012	50 pre-med and MS	National Advocacy Day in DC (1 day event)	Increased knowledge on heath policy issues, increased comfort and intent to engage with advocating for health and communicating with legislators.
Stanford University School of Medicine[84]	2009- 2010	Pediatricians	2 minute review per weekly Grand Rounds. Child Health legislation, National Health reform proposals related to children, California budget	More likely to have written/signed a letter to Congress, increased knowledge regarding health care finance, positive attitudes toward participating in advocacy
George Washington University[85]	2007- 2009	137 residents	Elective. Health Care System Structure and Policy, MD role in health policy, Global Heath	Increased knowledge, increased likelihood of teaching concepts to peers, higher likelihood of pursing health policy training
University of Miami Miller School of Medicine[86]	2007- 2011	98 MS	2 year course. Review of CBOs, physician advocacy, health advocacy project dev	Increased knowledge of community health needs, CBOs, skills related to advocacy
University of Colorado Denver School of Medicine[87]	2005- 2010	62 MS 4 year	Elective tract. Social determinants of health, health care system, health policy and advocacy, and generate policy solutions	Improved leadership skills and leading a group, increased rate of completed projects
University of Chicago Pritzker School of	2013	88 MS	10 weeks mandatory. Explore understanding advocacy,	Increased identification as an advocate. Volunteerism was high and remained so after course completion. Increased

Medicine[88]			commitments, and identification as	knowledge of advocacy
			an advocate (added to a Health Care	
			Disparities Course)	
UCSF, Berkeley,	2015	12 family	Influence of social structures on	Qualitative themes of new vocabulary to describe problems,
CA[89]		medicine	health, practice of medicine,	influence of practice, shifting blame, burnout, need for
		residents	Advocacy, policy solutions	earlier training
Emory University[90]	2017	39 IM	4-week module. Social determinants	Increased engagement in advocacy
		residents	of health, social disparities impact,	
			innovate new improvements	
Northwestern	2019	MS	Mandatory curriculum. Business of	No outcomes published yet
Feinberg School of			Medicine, Health Equity and	
Medicine[91, 92]			Advocacy, Healthcare quality	
NP: nurse practitioner	fellow: N	1S: medical stu	dent: CPR: clinical pharmacy resident: AM	1SA: American Medical Student Association

AAMC submits a yearly survey to all graduating medical students and several questions address public health and advocacy[93]. In 2018, 93.6% of students felt they "agreed" or "strongly agreed" with the statement I have a fundamental understanding of the issues in social sciences of medicine (e.g., ethics, humanism, professionalism, organization and structure of the health care system). Medical school faculty were perceived by 77.4% of the students to advocate on behalf of their patients. Surveys in years past broke down the social science question into individual parts allowing researchers to differentiate humanism and ethics from items like medical economics, health care systems, and managed care[94, 95]. In one such study, researchers found in 2009 less than half of students were prepared for health policy related areas, and those students from institutions with a "higher-intensity" curriculum were four times more likely to perceive their training as appropriate[94, 95].

Not everyone agrees that teaching health policy and advocacy is critical to medical professionalism and medical education[96]. Dr. Thomas Huddle, an internist from Birmingham Alabama wrote an opinion piece where he gave two main reasons as to why advocacy could be detrimental to the practice of medicine. He writes that *mandatory* advocacy by physicians should be not permitted and that partisan politics will cloud judgement. This was followed by 9 published Letters to the Editor by pediatricians, ER physicians, internists, and medical students who disagreed with his sentiments[97].

in 1998 the Association of American Medical Colleges (AAMC) issued the first Medical School Objectives Project (MSOP) to guide medical schools in preparation for training physicians[98]. In addition to a physician being knowledgeable, altruistic, skillful and dutiful, the report advises physicians to advocate for improving access to care for everyone, especially underserved populations. In Report II, under *Role of Manager*, in order to work effectively with groups and a complex health care system, students must demonstrate "knowledge of online resources for legislation, political advocacy, and local health care policy setting." [99].

In 2011 researchers from Harvard Medical School, with funding from the Commonwealth Foundation, surveyed Deans of 160 allopathic and osteopathic medical schools, with 93 Deans responding (58% response rate). Some form of policy education was present (94%) in schools, however the amount and structure of the coursework varied. Average instruction was 14 hours (SD 12 hours) over four years. Nearly 60% of the Deans felt the school had "too little" health policy education and felt "curricular flexibility" and "faculty interest" were barriers to advancing programming[100].

In 2011, in the NEJM physicians from University of Pennsylvania suggested that medical schools adopt a common curriculum for teaching health policy (see Figure)[94]. The components of the four major domains could guide medical schools in their curriculum development, ideally over four years. The authors recommended a team interdisciplinary approach to include health economists, medical sociologists, and health policy analysts.

Figure: Proposed Components of a Medical School Curriculum in Health Policy		
Domains	Components	
Systems and Principles	US Health care system financing	
	Health insurance and Health care safety net	
	Models of Care management	
	Health Information technology	
	Physician Workforce	
Quality and Safety	Quality indicators, measures, and outcomes	
	Patient safety	
Value and Equity	Medical economics	
	Medical decision making	
	Comparative effectiveness	
	Health disparities	
Politics and Law	Health care legislation	
	Medical errors, malpractice	
Adapted from [94]		

It is not entirely known why physicians may (or may not) support the idea of civic engagement and advocacy, however hypotheses for why the action may be limited include[3, 77, 101-104]

- Long, isolating medical training removes trainees from their community
- Contrast between control in clinical setting and uncertain/ambiguous health policy
- Busy, time-challenged work and lives
- Training to keep personal opinion and preferences outside of the clinical visit
- Conflicting priorities within the institution where working
- Political fallout
- Erosion of idealism through training
- Stories and relationships more important than data [to politicians]

Thoughtful residents and medical students have written recently that organizing for advocacy for the patients could be an antidote to alleviate burnout[105-107]. Burnout, being described as not being due to the electronic health records, forms for insurance, or bureaucratic tasks, rather the efforts to help treat patients who have social issues beyond what medicine can heal. Instead of believing an individual is powerful (the singular hero in a white coat) rather coalescing together around an issue and organize to affect change. These residents and students are hopeful for incorporating advocacy training into their residency and student curriculum.

In 2015, while on the American College of Rheumatology Government Affairs Committee, my colleague, Sarah Doaty and I sent a survey to rheumatology fellows in training (FIT) across the US to ask about their knowledge and views on advocacy[103]. We received 95 out of 500 responses (19%). The top reason (64%) for not becoming involved in advocacy was "lack of knowledge on how to get involved". This was followed by "lack of time" and "familiarity with the issues". Based on this data, we devised a program for FIT and program directors called *Advocacy 101* to be given at the same time as Advocates for Arthritis, a yearly conference in Washington DC. The top three policy issues most important to fellows were Access to Medications, Access to Insurance, and Physician Payment.

The table below outlines the curriculum we developed for this program. Advocacy 101 is in its 5th year.

Table 1. Advocacy 101 Curriculum		
Topic	Explanation and Examples	
Introduction to Advocacy	Role of advocacy, structure of federal and state government, ACR advocacy	
	efforts, ACR Key Contacts Program	
Regulatory Advocacy	CMS structure and funding	
Insurance Advocacy	ACR advocacy efforts in mandatory switching of biologics, ultrasound diagnostic	
	imaging certification, infusion site of service	
Physician Payment	Current policy issues: MACRA, Medicare Part B Demonstration, CPT codes, and	
Advocacy	Relative Value Scale Update Committee	
From Washington, DC	How to build relationships in Congress	
Lobbying Congress	Tips from an ACR lobbyist and a former legislative assistant	
Advocacy in Action	SimpleTasks campaign, Advocacy Tools: using social media, VoterVoice application	
ACR Leadership	Importance of advocacy for our specialty and our patients	
State Advocacy	Advocacy efforts on substitution of interchangeable biologics, prior authorization	
	reform, step therapy, and specialty tiers	
RheumPAC	ACR's non-partisan political action committee (PAC) that works on behalf of	
	rheumatologists and patients	
ACR: American College of I	Rheumatology; CMS: Centers for Medicare & Medicaid Services; MACRA: Medicare	
Access and Children's Health Insurance Program Reauthorization Act; CPT: Current Procedural Terminology		

Where is Health Policy found at UT Southwestern?

Several medical student professional and Special Interest Organizations that tackle health policy issues and teach about advocacy [108, 109]: American Medical Student Association, Preventative Medicine Interest Group, Science Policy, Education and Communication Club, Texas Medical Association/American Medical Association, Global Health Interest Group, Student Patient Advocates for the Rights of our Communities.

Dr. Shawna Nesbitt in 2016 developed an elective for 1st and 2nd year medical students called Healthcare in Underserved Communities which works to improve healthcare for communities at risk including uninsured, homeless, WIC, LGBTQ, HIV, food-insecure, correctional facilities[110].

In the internal medicine residency program Drs. Camli Al Sadek and Kai Deshpande are working on projects tackling food insecurity in Dallas county and creating a community garden for Parkland with Dr. Betancourt of PCIM. They hope to create an advocacy program for internal medicine residents. Dr. Hussain Lalani writes often for the Dallas Morning News and KevinMD about his experiences in practicing in an underserved population[111].

Nationally, in fellowship and beyond, subspecialties like Cardiology[112], Rheumatology[103], Hepatology[6], Gastroenterology[113], Oncology[114] are advocating for health policy training and advocacy involvement.

Advocating while employed at UT Southwestern

UT Southwestern has a website dedicated to Government Affairs and Policy, as does the University of Texas System, which establishes policies for employees to follow:

https://www.utsouthwestern.net/intranet/administration/government-affairs/

https://www.utsystem.edu/offices/federal-relations/policy-contacting-federal-officials

A few key requirements to remember:

- 1. If you engage in lobbying on the federal level, you are doing so as a private citizen
- 2. If you lobby at the federal level you cannot use UT Southwestern resources (this includes letterhead, email, work computer, money)
- 3. If there is an issue raised on the UTSW campus by a faculty member (acting as a faculty member), this needs to be routed through Government Affairs to discuss next steps
- 4. State law prohibits state employees from taking a position for or against state legislation or from lobbying activities (acting as a state employee not private individual)
- 5. All contact with legislative officials as a UT Southwestern employee must be approved by the President beforehand to ensure that the purpose for the contact is aligned with UT Southwestern's priorities and outreach plans, and this Office facilitates that approval.
- 6. Federal lobbying laws passed recently have strict reporting requirements and criminal penalties, such that any "contact" with federal officials as defined by the laws must be reported. Importantly, this law applies to contacts made even on behalf of an advocacy association.



Resources

Nerlinger and colleagues propose to build an Advocacy Portfolio (AP) similar to how Education Portfolios are created in academic medicine[115]. This will allow professionals in academic institutions to show effort in these endeavors. The AP should have a basis of quantity (countable factors), quality (effectiveness of advocacy), and a scholarly approach. Components would include:

- Personal Statement with advocacy philosophy, career goals
- Domains of advocacy
 - Advocacy engagement
 - o Knowledge dissemination
 - o Community outreach
 - o Teaching and mentoring
 - o Leadership and administration
- Scholarship

- 1. *Merriam-Webster dictionary definition of Advocate*. 1]. Available from: https://www.merriam-webster.com/dictionary/advocate.
- 2. *Online Etymology Dictionary definition of Advocate*. Available from: https://www.etymonline.com/word/advocate.
- 3. Earnest, M.A., S.L. Wong, and S.G. Federico, *Perspective: Physician advocacy: what is it and how do we do it?* Acad Med, 2010. **85**(1): p. 63-7.
- 4. Influence and Lobbying / Lobbying / Industry: PHarmaceuticals/Health Products; Insurance; Health Professionals 2018 [cited 2019; Available from: https://www.opensecrets.org/lobby/indusclient.php?id=H04
- 5. Landers, S.H. and A.R. Sehgal, *Health care lobbying in the United States*. Am J Med, 2004. **116**(7): p. 474-7.
- 6. Grace, N.D. and L.B. Dennis, *Advocacy: what is a nice scientist like you doing in Washington, DC?* Hepatology, 2007. **45**(6): p. 1337-9.
- 7. Brady, K., Whether a bill becomes a law. Chest, 2014. **145**(2): p. 206-208.
- 8. Statistics and Historical Comparison of Bills in Congress. 2019; Available from: https://www.govtrack.us/congress/bills/statistics.
- 9. *Health Policy*. 2019; Available from: https://www.who.int/topics/health-policy/en/.
- 10. Federal Subsidies for Health Insurance Coverage for People Under Age 65: 2017 to 2027. 2017; Available from: https://www.cbo.gov/system/files?file=115th-congress-2017-2018/reports/53091-fshic.pdf.
- 11. NIH Awards by Location & Organization: UT Southwestern Medical Center. 2018 [cited 2019; Available from:

 https://report.nih.gov/award/index.cfm?ot=&fy=2018&state=TX&ic=&fm=&orgid=578404&distr=TX30&rfa=&om=n&pid=#tab2.
- 12. Fact sheet: Impact of Sequestration on the NIH. 2013; Available from:
 https://www.nih.gov/news-events/news-releases/fact-sheet-impact-sequestration-national-institutes-health.
- 13. Avorn, J. and A.S. Kesselheim, *The 21st Century Cures Act--Will It Take Us Back in Time?* N Engl J Med, 2015. **372**(26): p. 2473-5.
- 14. Gabay, M., *21st Century Cures Act.* Hosp Pharm, 2017. **52**(4): p. 264-265.
- 15. Congress, U.S.t. *21st Century Cures Act*. 2016; Available from: https://www.congress.gov/114/bills/hr34/BILLS-114hr34enr.pdf.
- 16. NIH Budget. 2019; Available from: https://www.nih.gov/about-nih/what-we-do/budget.
- 17. *NIH Research Funding Trends* 2018; Available from: http://www.faseb.org/Science-Policy-Advocacy-and-Communications/Federal-Funding-Data/NIH-Research-Funding-Trends.aspx.
- 18. Kantor, E.D., et al., *Trends in Prescription Drug Use Among Adults in the United States From* 1999-2012. JAMA, 2015. **314**(17): p. 1818-31.
- 19. Kirzinger, A., et al. KFF Health Tracking Poll February 2019: Prescription Drugs. 2019; Available from: <a href="https://www.kff.org/health-reform/poll-finding/kff-health-tracking-poll-february-2019-prescription-drugs/?utm_campaign=KFF-2019-February-Poll-High-Prescription-Drug-Prices&utm_source=hs_email&utm_medium=email&utm_content=2&_hsenc=p2ANqtz-8LzrhASGyJ3Vy-Nx24NHe8KZQ0ZHCfPfHaWaMtAHyNgIPHeTx0pD0pmtki-0Zs865Ek8xC5sRJYdwI4WdUe00240oLUA& hsmi=2.
- 20. Caldwell, L.A. *CONGRESS: In Senate testimony, pharma executive admits drug prices hit poor the hardest*. 2019; Available from: https://www.nbcnews.com/politics/congress/senate-testimony-pharma-executive-admits-drug-prices-hit-poor-hardest-n976346.
- 21. Singh, S. and Y. Abutaleb. *U.S. Congress invites pharmacy benefit managers to third drug pricing hearing*. March 12, 2019; Available from: https://www.reuters.com/article/us-usa-healthcare-

- <u>drugpricing/u-s-congress-invites-pharmacy-benefit-managers-to-third-drug-pricing-hearing-idUSKBN1QU04O.</u>
- 22. Budget, O.o.M.a. *Efficient, Effective, and Accountable: An American Budget* 2019; Available from: https://www.whitehouse.gov/wp-content/uploads/2018/02/budget-fy2019.pdf.
- 23. *Fortune 500*. 2018; Available from: http://fortune.com/fortune500/list/filtered?searchByName=johnson.
- 24. Dabora, M.C., N. Turaga, and K.A. Schulman, *Financing and Distribution of Pharmaceuticals in the United States.* JAMA, 2017. **318**(1): p. 21-22.
- 25. Gonzalez, J., et al., *Comparison of Postdoctoral Pharmacy Training Programs: Drug Information Residencies and Medical Information Fellowships.* Ther Innov Regul Sci, 2018: p. 2168479018793375.
- 26. Fein, A.J. *Profits in the 2018 Fortune 500: Manufacturers vs. Wholesalers, PBMs, and Pharmacies.* June 12, 2018; Available from: https://www.drugchannels.net/2018/06/profits-in-2018-fortune-500.html.
- 27. Statistics, U.S.B.o.L. *Employment Projections: 2016-26 Summary*. 2017; Available from: https://www.bls.gov/news.release/ecopro.nr0.htm.
- 28. Steinwald, B., et al. *Medicare Graduate Medical Education Funding is Not Addressing the Primary Care Shortage*. 2018; Available from: https://www.brookings.edu/wp-content/uploads/2018/12/Steinwald Ginsburg Brandt Lee Patel GME-Funding 12.3.181.pdf.
- 29. *Graduate Medical Education Expansion Programs*. 2019; Available from: http://www.thecb.state.tx.us/index.cfm?objectid=988DB3C0-1E3A-11E8-BC500050560100A9.
- 30. Iglehart, J.K., *Health reform, primary care, and graduate medical education.* N Engl J Med, 2010. **363**(6): p. 584-90.
- 31. *Graduate Medical Education That Meets the Nation's Health Needs*, ed. J. Eden, D. Berwick, and G. Wilensky. 2014: National Academies Press (US).
- 32. Congress, U.S. *H.R.2015 Balanced Budget Act of 1997*. 1997; Available from: https://www.congress.gov/bill/105th-congress/house-bill/2015.
- 33. Dall, T., et al. *The Complexities of Physician Supply and Demand: Projections from 2016 to 2030*. 2018; Available from: https://aamc-black.global.ssl.fastly.net/production/media/filer_public/85/d7/85d7b689-f417-4ef0-97fb-ecc129836829/aamc_2018_workforce_projections_update_april_11_2018.pdf.
- 34. *2015 Workforce Study of Rheumatology Specialists in the United States*. 2015 [cited 2019; Available from: https://www.rheumatology.org/portals/0/files/ACR-Workforce-Study-2015.pdf.
- 35. Current Legislative Activities. 2019; Available from: https://www.congress.gov/.
- 36. Legislature, T. Relating to meeting the graduate medical education needs of medical degree programs offered or proposed by public institutions of higher education. 2019; Available from: https://capitol.texas.gov/BillLookup/Captions.aspx?LegSess=86R&Bill=SB1378.
- 37. O'Reilly, K.B. *8 physician advocacy wins that set the stage for 2019*. January, 11 2019; Available from: https://www.ama-assn.org/advocacy/physician-advocacy/8-physician-advocacy-wins-set-stage-2019.
- 38. *Advocacy News: 2018 Advocacy Efforts* 2019 [cited 2019; Available from: https://www.rheumatology.org/Advocacy/Advocacy-News.
- 39. Medicine, A.F.A.B.o.I., A.-A.F.A.C.o.P.-A.S.o.I. Medicine, and M. European Federation of Internal, *Medical professionalism in the new millennium: a physician charter.* Ann Intern Med, 2002. **136**(3): p. 243-6.
- 40. Blank, L., et al., *Medical professionalism in the new millennium: a physician charter 15 months later.* Ann Intern Med, 2003. **138**(10): p. 839-41.

- 41. Gruen, R.L., S.D. Pearson, and T.A. Brennan, *Physician-citizens--public roles and professional obligations*. JAMA, 2004. **291**(1): p. 94-8.
- 42. *A Declaration of Professional Responsibility*. 2017; Available from: https://policysearch.ama-assn.org/policyfinder.
- 43. *AMA Code Of Medical Ethics*. 2016 [cited 2019; Available from: https://www.ama-assn.org/sites/ama-assn.org/files/corp/media-browser/principles-of-medical-ethics.pdf.
- 44. Beck, A.F., *Revisiting Our Professional Oath Amid Shifts in the American Political Landscape.* Pediatrics, 2017. **140**(6).
- 45. Hajar, R., The Physician's Oath: Historical Perspectives. Heart Views, 2017. **18**(4): p. 154-159.
- 46. Frenk, J., et al., *Health professionals for a new century: transforming education to strengthen health systems in an interdependent world.* Lancet, 2010. **376**(9756): p. 1923-58.
- 47. in *Improving Medical Education: Enhancing the Behavioral and Social Science Content of Medical School Curricula*, P.A. Cuff and N.A. Vanselow, Editors. 2004: Washington (DC).
- 48. NIH. Final K07 Program Executive Summary: Behavioral and Social Science Consortium for Medical Education. Overview of a United Effort: 2005-2011. Available from: https://obssr.od.nih.gov/wp-content/uploads/2017/03/Medsch_Progress_Report2011.pdf.
- 49. Jill J. Ashman, P.D., M.P.H. Pinyao Rui, and T. Okeyode. *Characteristics of Office-based Physician Visits, 2016*. 2016; Available from: https://www.cdc.gov/nchs/data/databriefs/db331-h.pdf
- 50. Foundation, H.J.K.F. *Professionally Active Physicians*. October 2018; Available from: https://www.kff.org/other/state-indicator/total-active-physicians/?currentTimeframe=0&sortModel=%7B%22colld%22:%22Location%22,%22sort%22:%22asc%22%7D.
- 51. Lee, J., et al., *Are Physicians Good at Turning Out to Vote?* Academic Emergency Medicine 2007: p. S208.
- 52. Grande, D., D.A. Asch, and K. Armstrong, *Do doctors vote?* J Gen Intern Med, 2007. **22**(5): p. 585-9.
- 53. Keckley, P.H., S. Coughlin, and E.L. Stanley. *Deloitte 2013 Survey of U.S. Physicians: Physician perspectives about health care reform and the future of the medical profession*. 2013 [cited 2019; Available from: https://www2.deloitte.com/content/dam/Deloitte/us/Documents/life-sciences-health-care/us-lshc-deloitte-2013-physician-survey-10012014.pdf.
- 54. Clinical Disease Activity Index CDAI. p. 1.
- 55. Abrams, K., S. Burrill, and N. Elsner. *Deloitte 2018 Survey of US Physicians*. 2018 [cited 2019; Available from: https://www2.deloitte.com/content/dam/insights/us/articles/4407_Virtual-care-survey.pdf.
- 56. Foundation, T.P. 2018 Survey of America's Physicians: Practice Patterns & Perspectives. 2018 September 2018; Available from: https://physiciansfoundation.org/wp-content/uploads/2018/09/physicians-survey-results-final-2018.pdf.
- 57. Gondi, S., J. Kusner, and Y. Berlyand. *Hey, doctors: Don't be no-shows (again) on Election Day.* 2019; Available from: https://www.statnews.com/2018/10/08/doctors-voting-no-shows-election-day/.
- 58. Gifford, G.E., *Physician signers of the Declaration of Independence*. 1976, New York: New York: Science History Publications, 1976.
- 59. Jameson, M.G., Physicians and American political leadership. JAMA, 1983. **249**(7): p. 929-30.
- 60. Peters, J.W., *Is There a Doctor in the House? Yes, 17. And 3 in the Senate.*, in *The New York Times*. 2014, The New York Times.
- 61. Kraus, C.K. and T.A. Suarez, *Is there a doctor in the house?... Or the Senate? Physicians in US Congress, 1960-2004.* JAMA, 2004. **292**(17): p. 2125-9.

- 62. Yong, E., Congress, the Doctors Will See You Now: Incensed by attempts to repeal the Affordable Care Act, several Democratic physicians are planning to run for office., in The Atlantic 2017, The Atlantic
- 63. LaMotte, S., What doctors think about the Affordable Care Act, in CNN. 2017, CNN.
- 64. Tobey, J.A., *Physician who served on the U. S. Supreme Court.* J Am Med Assoc, 1959. **170**(1): p. 109.
- 65. GOP Doctors Caucus. 2019; Available from: https://roe.house.gov/roedoctorscaucus/.
- 66. *Physicians in the Senate*. Available from: https://www.senate.gov/artandhistory/history/common/generic/Physicians_in_Senate.htm
- https://history.house.gov/People/Search?Term=physician&SearchIn=Biography&ShowNonMember=true&ShowNonMember=false&Office=Representative&Leadership=&State=&Party=&ContinentalCongress=false&BlackAmericansInCongress=false&WomenInCongress=false&HispanicAmericansInCongress=false&AsianPacificAmericansInCongress=false&Dates=1950-1999&Dates=2000-present&CongressNumberList=&PreviousSearch=physician%2cBiography%2cRepresentative%2c%2c%2c%2cFalse%2cFalse%2c1950-1999%2c2000
 - present%2c%2cLastName&CurrentPage=3&SortOrder=LastName&ResultType=List&Command=4.
- 68. Goldenberg, M.N., *House Calls: Physicians in the US Congress, 2005-2015.* South Med J, 2015. **108**(11): p. 657-61.
- 69. *Physicians of the 116th Congress*. 2019 [cited 2019; Available from: http://www.patientsactionnetwork.com/physicians-116th-congress.

Physicians in the House of Representatives Available from:

67.

- 70. Campbell, E.G., et al., *Professionalism in medicine: results of a national survey of physicians.* Ann Intern Med, 2007. **147**(11): p. 795-802.
- 71. Umscheid, C.A., et al., Research letter: Do physicians discuss political issues with their patients? J Gen Intern Med, 2006. **21**(4): p. 400-1.
- 72. Gruen, R.L., E.G. Campbell, and D. Blumenthal, *Public roles of US physicians: community participation, political involvement, and collective advocacy.* JAMA, 2006. **296**(20): p. 2467-75.
- 73. Jacobs, D.B., M. Greene, and A.B. Bindman, *It's academic: public policy activities among faculty members in a department of medicine.* Acad Med, 2013. **88**(10): p. 1460-3.
- 74. Hersh, E.D. and M.N. Goldenberg, *Democratic and Republican physicians provide different care on politicized health issues.* Proc Natl Acad Sci U S A, 2016. **113**(42): p. 11811-11816.
- 75. Landers, S.H. and A.R. Sehgal, *How do physicians lobby their members of Congress?* Arch Intern Med, 2000. **160**(21): p. 3248-51.
- 76. ACGME Common Program Requirements. [cited 2019; Available from: https://www.acgme.org/What-We-Do/Accreditation/Common-Program-Requirements.
- 77. Heiman, H.J., et al., *Health Policy Training: A Review of the Literature.* Int J Environ Res Public Health, 2015. **13**(1): p. ijerph13010020.
- 78. Long, T., et al., *Expanding Health Policy and Advocacy Education for Graduate Trainees.* J Grad Med Educ, 2014. **6**(3): p. 547-50.
- 79. Cha, S.S., et al., *Description of a research-based health activism curriculum for medical students.*J Gen Intern Med, 2006. **21**(12): p. 1325-8.
- 80. Gonzalez, C.M., A.D. Fox, and P.R. Marantz, *The Evolution of an Elective in Health Disparities and Advocacy: Description of Instructional Strategies and Program Evaluation.* Acad Med, 2015. **90**(12): p. 1636-40.
- 81. Shah, S.H., et al., Systems-Based Training in Graduate Medical Education for Service Learning in the State Legislature in the United States: Pilot Study. JMIR Med Educ, 2017. **3**(2): p. e18.

- 82. Finkel, M.L. and O. Fein, *Teaching about the changing U.S. health care system: an innovative clerkship.* Acad Med, 2004. **79**(2): p. 179-82.
- 83. Huntoon, K.M., et al., Self-reported evaluation of competencies and attitudes by physicians-in-training before and after a single day legislative advocacy experience. BMC Med Educ, 2012. **12**: p. 47.
- 84. Bensen, R., et al., *Legislative advocacy: evaluation of a grand rounds intervention for pediatricians.* Acad Pediatr, 2014. **14**(2): p. 181-5.
- 85. Greysen, S.R., et al., *Teaching health policy to residents--three-year experience with a multi-specialty curriculum.* J Gen Intern Med, 2009. **24**(12): p. 1322-6.
- 86. Belkowitz, J., et al., *Teaching health advocacy to medical students: a comparison study.* J Public Health Manag Pract, 2014. **20**(6): p. E10-9.
- 87. Long, J.A., et al., *Developing leadership and advocacy skills in medical students through service learning.* J Public Health Manag Pract, 2011. **17**(4): p. 369-72.
- 88. Press, V.G., C.D. Fritz, and M.B. Vela, *First year medical student attitudes about advocacy in medicine across multiple fields of discipline: analysis of reflective essays.* J Racial Ethn Health Disparities, 2015. **2**(4): p. 556-64.
- 89. Neff, J., et al., *Teaching Structure: A Qualitative Evaluation of a Structural Competency Training for Resident Physicians.* J Gen Intern Med, 2017. **32**(4): p. 430-433.
- 90. Schmidt, S., et al., *An Experiential Resident Module for Understanding Social Determinants of Health at an Academic Safety-Net Hospital*. MedEdPORTAL, 2017. **13**: p. 10647.
- 91. *Curricular Threads*. 2019; Available from: https://www.feinberg.northwestern.edu/md-education/curriculum/components/threads/index.html.
- 92. Heiman, H.L., et al., *Description and Early Outcomes of a Comprehensive Curriculum Redesign at the Northwestern University Feinberg School of Medicine*. Acad Med, 2018. **93**(4): p. 593-599.
- 93. Medical School Graduation Questionnaire: 2018 All Schools Summary Report 2018; Available from: https://www.aamc.org/download/490454/data/2018gqallschoolssummaryreport.pdf.
- 94. Patel, M.S., M.M. Davis, and M.L. Lypson, *Advancing medical education by teaching health policy.* N Engl J Med, 2011. **364**(8): p. 695-7.
- 95. Patel, M.S., M.L. Lypson, and M.M. Davis, *Medical student perceptions of education in health care systems*. Acad Med, 2009. **84**(9): p. 1301-6.
- 96. Huddle, T.S., *Perspective: Medical professionalism and medical education should not involve commitments to political advocacy.* Acad Med, 2011. **86**(3): p. 378-83.
- 97. Palfrey, J.S. and L.J. Chamberlain, *Do medical professionalism and medical education involve commitments to political advocacy?* Acad Med, 2011. **86**(9): p. 1062-3; author reply 1065.
- 98. Report I: Learning Objectives for Medical Student Education. Guidelines for Medical Schools.

 1998; Available from:

 https://www.aamc.org/download/492708/data/learningobjectivesformedicalstudenteducation.
 pdf.
- 99. Report II: Contemporary Issues in Medicine: Medical Informatics and Population Health. 1998;
 Available from:
 https://members.aamc.org/eweb/upload/Contemporary%20Issues%20in%20Med%20Medical%20Informatics%20ReportII.pdf.
- 100. Mou, D., et al., *The state of health policy education in U.S. medical schools.* N Engl J Med, 2011. **364**(10): p. e19.
- 101. Grande, D. and K. Armstrong, Will Physicians Vote? Ann Intern Med, 2016. 165(11): p. 814-815.
- 102. Geiger, H.J., *The Political Future of Social Medicine: Reflections on Physicians as Activists.* Acad Med, 2017. **92**(3): p. 282-284.

- 103. Doaty, S., et al., *Advocacy 101: Engaging Rheumatology Fellows in Health Policy and Advocacy.* Arthritis Care Res (Hoboken), 2018.
- 104. Frayha, N. *Why do so few doctors vote?* 2016; Available from: https://whyy.org/segments/why-do-so-few-doctors-vote/.
- 105. Eisenstein, L., *To Fight Burnout, Organize*. N Engl J Med, 2018. **379**(6): p. 509-511.
- 106. Pannu, A. *Combating Burnout Through Advocacy: A Resident's ACGME Journey*. 2018 [cited 2019; Available from: http://in-housestaff.org/combating-burnout-advocacy-residents-acgme-journey-1056.
- 107. Coutinho, A.J. and K.E. Dakis, *Incorporating Advocacy Training to Decrease Burnout*. Acad Med, 2017. **92**(7): p. 905.
- 108. Medical Student Special Interest Organizations. 2019, UT Southwestern Medical Center.
- 109. *Medical Student Educational / Professional Organizations*. 2019; Available from: https://www.utsouthwestern.edu/education/students/student-orgs/educational-professional-organization.html.
- 110. Haff, S. You Can't Care for Someone You Don't Understand. 2019 [cited 2019; Available from: https://www.qgdigitalpublishing.com/publication/?m=55178&l=1#{%22issue_id%22:%2255946-1%22,%22page%22:42}.
- 111. Lalani, H. *Taking away a patient's access to health care is morally flawed*. 2019 [cited 2019; Available from: https://www.dallasnews.com/opinion/commentary/2019/01/11/healthcare.
- 112. Wadhera, R.K., *Cardiovascular Medicine Amid Evolving Health Policy: Time to Train a Generation of Policy Leaders.* J Am Coll Cardiol, 2017. **70**(17): p. 2201-2204.
- Burke, C.A., 2017 ACG Presidential Address: Challenges in the Practice of Gastroenterology: Engaging with ACG for Positive Impact. Am J Gastroenterol, 2018. **113**(2): p. 157-160.
- 114. *ADVOCACY 101: Preparing ASCO Advocates for Legislative Success*. 2019 [cited 2019; Available from: https://www.asco.org/sites/new-www.asco.org/files/content-files/advocacy-and-policy/documents/2018-Advocacy-101-Guide-web-FINAL.pdf.
- 115. Nerlinger, A.L., et al., *The Advocacy Portfolio: A Standardized Tool for Documenting Physician Advocacy.* Acad Med, 2018. **93**(6): p. 860-868.