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Preventative Health Care Shortage

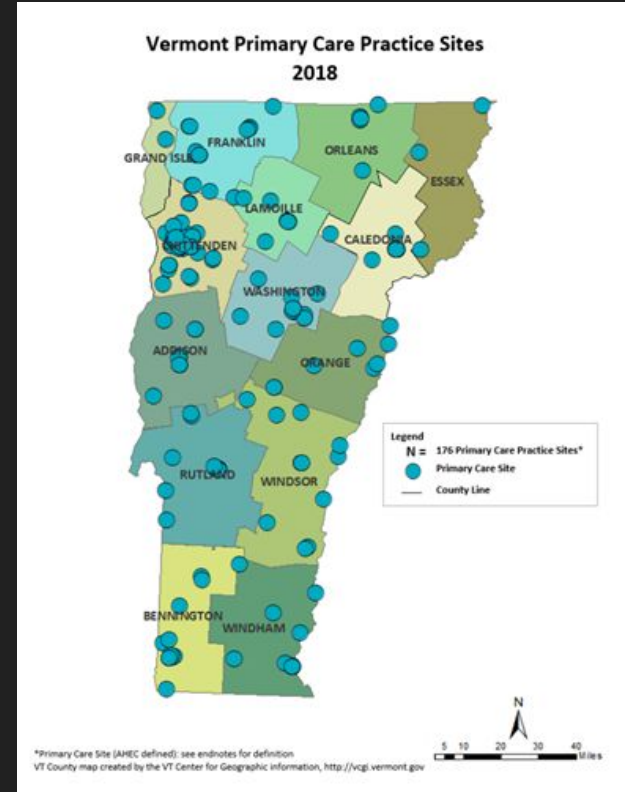
Jenna Elkhoury
Family Medicine Clerkship, November 2021
Colchester Family Practice
Faculty Mentor: Dr. Amalia Kane

Problem Identification

- While the ACA provided more opportunity for widespread preventative care, it opened our eyes to the National primary care physician shortage
- In 2014, The Kaiser Family Foundation estimates that 8073 additional primary care physicians are required to eliminate Primary Care Health Professional Shortage Areas from the United States, and that number continues to grow
- While the number of medical school graduates has increased significantly over the past two decades, Medicare-funded training opportunities for graduates has remained frozen at 1996 levels... leaving over 3,100 applicants without residency match in 2019
- America will face a shortage of up to 124,000 physicians by 2033 (Kaiser Family Foundation)
- AAMC reports projected primary care physician shortage (family medicine, general pediatrics, geriatric medicine) to be between 17,800 and 48,000 by 2034

Public Health Cost

- The steady increase in medical student debt is unsustainable and could cause debt burdens to climb such that by 2030 approximately 50% of physicians' after-tax income could be shunted to loan payments for projected average debt burdens of close to a million dollars (Greyson, 2011)
- Financial models have shown that primary care physicians have expenses more than their income for the first three to five years after residency and other models leave the physicians with only \$200-\$600 per month in flexible income (Marcu, 2017)
- Health care systems with a robust primary care foundation have a higher quality of care, better overall population health, greater equity, and lower health care costs (Kozakowski, 2016)
- 20% of the US population lives in rural areas but only 9% of physicians practice there (Committee, 2005, Rosenblatt 1999)



Community Perspective

“You get to be part of a community, almost like an extension of their family. I don't think other docs really get to see that, they don't get to celebrate the ups and downs of life”

“Flexibility is really nice, if you like geriatrics, or sports, or kids, you can deliver babies if you want, and you can change that as you go. You're not locked in. There's this fun angle of having the adaptability to do what you like and do what the community needs”

Dr Katie Marvin (Stowe Family Practice)

“Family medicine docs get a bad rap. We get paid less, and we can do a lot more for people than more specialized doctors”

“Money is a big part of it. Vasectomies make the most money of any procedures I do, maybe a couple hundred dollars. A cardiologist makes thousands from a left heart cath. We need both.”

Dr Ben Clements (Colchester Family Practice)

The Primary Care shortage in Vermont and Medical Student Interest in Primary Care (Palanza, 2020)

Deterrents identified:

Stigma associated with lower compensation compared to other specialties, lower board scores, and lack of respect from colleagues in other specialties

Difficulties connecting and managing patients with brief 15-minute office visits

Overwhelmed with managing complicated patient on an outpatient basis

Large amount of administrative work (e.g. notes, forms, contacting other providers, etc.)

Desire to do specific procedures

Attractors identified:

Building relationships with patients and the community

Preventative medicine

Counseling patients about lifestyle and health changes and getting to see them get implemented over time

Getting to treat the patient as a whole

Wide variety of patients day-to-day with a large base of practice from pediatrics to adults

Ability to do procedures and minor interventions (e.g. casting, sutures, injections, etc.)

Intervention/Methodology:

With the permission of Kenneth Palanza et al, we adapted and modified a previously generated survey that allowed us to better understand the motivations and barriers of medical students to enter primary care. The survey was dispersed to all medical students at LCOM as well as third and fourth year medical students at Ross University and American University of the Caribbean (AUC). We analyzed preliminary data from 100 respondents.

Survey to Assess Medical Student Interest in Primary Care:

What year are you in medical school?

- a. 1st
- b. 2nd
- c. 3rd
- d. 4th

What Clinical campus are you assigned to?

- a. VT
- b. CT
- c. Other

Please indicate how much you agree with the following statements:

You are interested in primary care

Strongly Disagree, Somewhat Disagree, Neutral, Somewhat Agree, Strongly Agree

If primary care providers were paid the same as other specialists, you would be more interested in primary care
Strongly Disagree, Somewhat Disagree, Neutral, Somewhat Agree, Strongly Agree

If primary care providers were able to spend more time doing office procedures, home visits, preventive health, and managing chronic conditions including mental health, you would be more interested in primary care
Strongly Disagree, Somewhat Disagree, Neutral, Somewhat Agree, Strongly Agree

As a medical student, you believe there is stigma associated with pursuing a career in primary care
Strongly Disagree, Somewhat Disagree, Neutral, Somewhat Agree, Strongly Agree

Your student loan debt and predicted compensation influence your decision to pursue a particular medical specialty
Strongly Disagree, Somewhat Disagree, Neutral, Somewhat Agree, Strongly Agree

In the future, you plan to practice where you attend medical school or where you will attend residency
Strongly Disagree, Somewhat Disagree, Neutral, Somewhat Agree, Strongly Agree

If there were a scholarship available for primary care (e.g. cover the cost of medical school), it would incentivize you to pursue primary care

Strongly Disagree, Somewhat Disagree, Neutral, Somewhat Agree, Strongly Agree

More support or encouragement by your medical school could increase your interest in pursuing a career in primary care

Strongly Disagree, Somewhat Disagree, Neutral, Somewhat Agree, Strongly Agree

Primary care providers have flexibility in choosing how much they work

Strongly Disagree, Somewhat Disagree, Neutral, Somewhat Agree, Strongly Agree

Primary care providers have a variety of types of work they can do (inpatient, outpatient, research, teaching, mentoring, etc.)

Strongly Disagree, Somewhat Disagree, Neutral, Somewhat Agree, Strongly Agree

What aspects of primary care make it appealing as a career? Please rank these options in order of importance to you (1 being the most important and 11 being least).

- Long-term relationship with patients and their families
- Focus on family/community care
- Care continuity
- Complexity of cases
- Wide breadth of required expertise
- Opportunity to do prenatal and/or deliveries
- Opportunity to do both pediatric and adult care
- Opportunity to do procedures and surgeries
- Population health
- Inpatient and outpatient opportunities
- Other - Please explain: _____

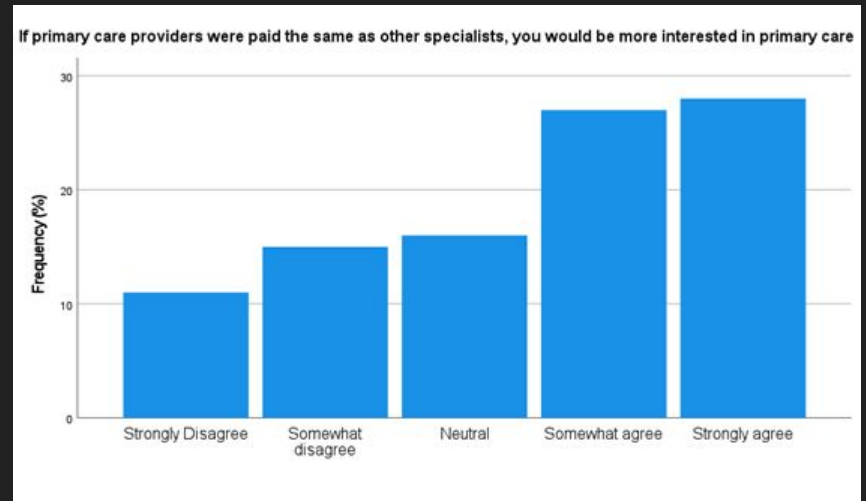
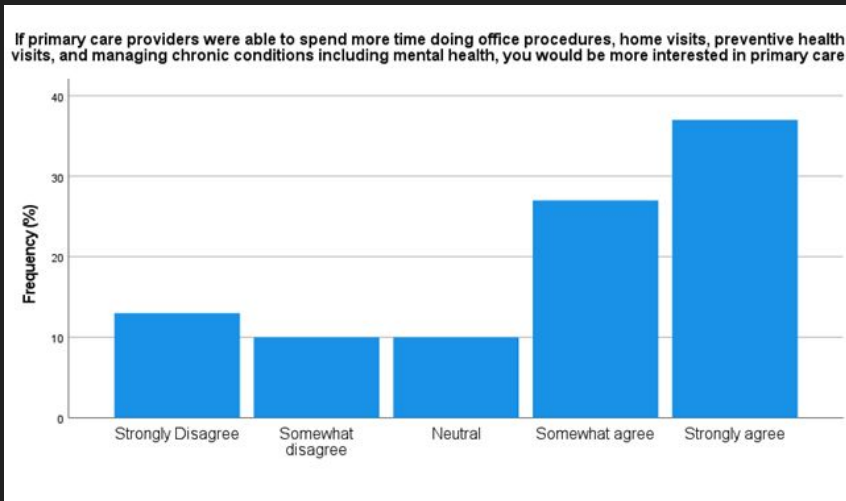
Survey Results/Response Data

- Survey participant demographics:
 - 100 medical students were surveyed
 - Year in medical school - 1st: 11%; 2nd: 26%; 3rd: 44%; 4th: 19%
 - Clinical campus - Vermont: 73%; Connecticut: 25%; Other: 2%

- The most highly ranked aspects of primary care that make it appealing to respondents:
 - Long-term relationships with patients and their families (most often ranked #1)
 - Continuity of care
 - Wide breadth of required expertise
 - Focus on family/community care
 - Opportunity to do procedures/surgeries

Survey Results/Response Data cont.

- 64% of students agreed that they would be more interested in primary care if they had more time for office procedures, home visits, preventative health visits, and managing chronic conditions
- 55% of students would be more interested in primary care if they were paid as much as other specialties
- 51% of students agreed that loan debt and anticipated compensation affect their choice of specialty
- 50% of students agreed that additional scholarships/tuition forgiveness would increase their interest in primary care



“We need to be better advocates for ourselves, each other, and the field”

- Dr Katie Marvin

Evaluation of Effectiveness/Limitations

- **Effectiveness**
 - Reached all students at the medical school level (1st-4th year)
 - Perspectives from students in VT, CT and other schools outside the US
 - Survey results helped identify attractors and deterrents to primary care for students at the medical school level
- **Limitations**
 - Fewer responses from 1st and 2nd year students limits our understanding of upcoming medical students perspectives on primary care
 - Small sample size (N=101) potentially not representative of LCOM
 - Lack of responses from medical students in a DO program limits understanding of differences in education in promoting primary care (DO vs MD)
 - Need to further discuss and analyze results in order to create targeted interventions that respond to specific attractors and deterrents in each state

Recommendations for Future Interventions/Projects

Cost of medical school tuition influences a career in sub-specialties:

- Place a limit on institutional tuition and fees
- Expand state and federal loan forgiveness programs in exchange for public service
- Federally-fund medical education

Stigma associated with a career in Primary Care:

- increase the amount of time spent on primary/preventative care rotations as 3rd year medical students
- Reformat Allopathic education to highlight preventative care similarly to IMG and many DO educations
- Plan to present data to AHEC to share with future students in an effort to alleviate stigma

More time to spend doing office procedures, home visits (etc.):

- Reformat Primary Care physician schedules: half day dedicated to acute care (procedure based) and half day dedicated to preventative care (physicals + wellness exams)
- Limit the need or share the burden of pre-op appointments with the surgeons involved (ex: Cataract surgery)
- De-prioritize Urgent Care and ER visits for acute problems that can be managed by your Primary Care physician (decrease health care cost)

References

Committee on the Future of Rural Health Care, Institute of Medicine. *Quality Through Collaboration: The Future of Rural Health*. Washington, DC: National Academies Press; 2005

Fodeman J, Factor P. Solutions to the primary care physician shortage. *Am J Med*. 2015 Aug;128(8):800-1. doi: 10.1016/j.amjmed.2015.02.023. Epub 2015 Mar 31. PMID: 25840033.

Gemelas JC. Post-ACA Trends in the US Primary Care Physician Shortage with Index of Relative Rurality. *J Rural Health*. 2021 Sep;37(4):700-704. doi: 10.1111/jrh.12506. Epub 2020 Aug 13. PMID: 32790225.

Greysen SR, Chen C, Mullan F. A history of medical student debt: observations and implications for the future of medical education. *Acad Med*. 2011;86(7):840-845. doi:10.1097/ACM.0b013e31821daf03.

Kozakowski SM, Becher K, Hinkle T, et al. Responses to Medical Students' Frequently Asked Questions About Family Medicine. *American Family Physician*. 2016;1(93).

Marcu MI, Kellermann AL, Hunter C, Curtis J, Rice C, Wilensky GR. Borrow or Serve? An Economic Analysis of Options for Financing a Medical School Education. *Acad Med*. 2017;XX(X):1. doi:10.1097/ACM.0000000000001572

Phillips JP, Prunuske J, Fitzpatrick L, Mavis B. The Family Medicine Attitudes Questionnaire: A Valid Instrument to Assess Student Attitudes Toward Family Medicine. *Fam Med*. 2019;51(6):493-501. <https://doi.org/10.22454/FamMed.2019.957692>.

Palanza, Kenneth Michael, "The Primary Care shortage in Vermont and Medical Student Interest in Primary Care" (2020). Family Medicine Clerkship Student Projects. 549. <https://scholarworks.uvm.edu/fmclerk/549>

Rosenblatt RA, Hart LG. Physicians and rural America. In: Ricketts TC III, ed. *Rural Health in the United States*. New York, NY: Oxford University Press; 1999:38-51

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Yes

Name: Katie Marvin, MD (provided verbal consent)

Name: Ben Clements, MD (provided verbal consent)