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# THE PRIMARY CARE SHORTAGE IN VERMONT AND MEDICAL STUDENT INTEREST IN PRIMARY CARE

KENNETH PALANZA

FAMILY MEDICINE CLERKSHIP – JANUARY 2020

STOWE FAMILY PRACTICE

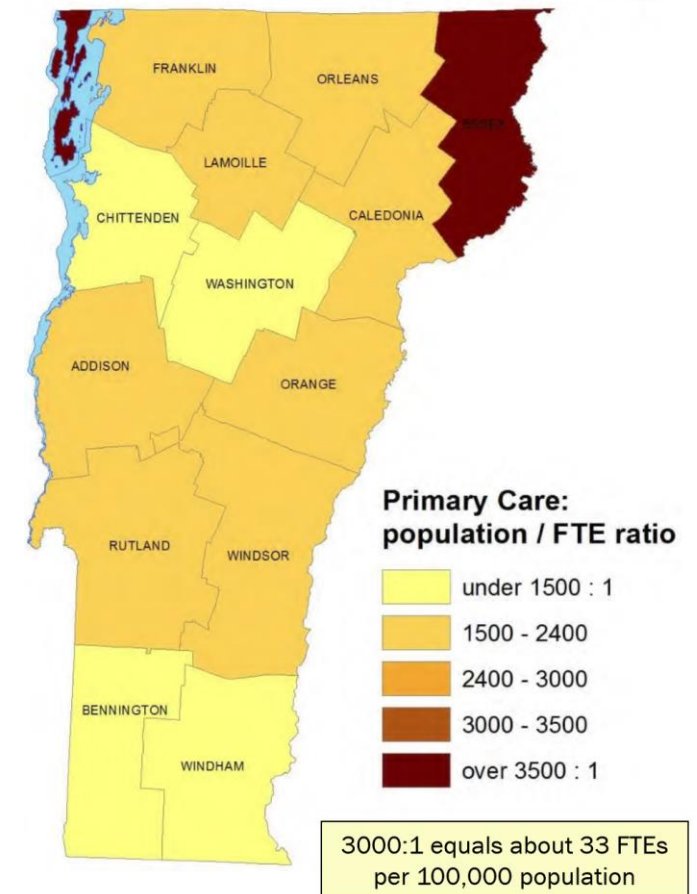
FACULTY MENTOR: KATHERINE MARVIN, MD



# PROBLEM IDENTIFICATION

- The state of Vermont is currently faced with a primary care workforce crisis <sup>1</sup>
- The aging population is increasing the demand for medical services and providers <sup>2</sup>
- In 2018 there was a shortage of 70.5 full-time equivalent primary care physicians in the state of Vermont <sup>1</sup>
  - Physician specialties included family medicine, internal medicine, obstetrics, and pediatrics
- In Vermont, 25% of physicians work primarily in primary care while 75% work in specialty care <sup>2</sup>
- Primary care physician numbers are shrinking
  - 15% of primary care physicians plan to retire or reduce hours in the next 12 months <sup>2</sup>
  - 36% of the primary care physicians were over age 60 <sup>1</sup>
  - Since 2010 there has been a decrease of 9.1% in primary care physicians <sup>1</sup>
  - From 2008 to 2018 there were 19 fewer practicing primary care physicians while during the same time practicing specialty physicians increased by 659 <sup>2</sup>

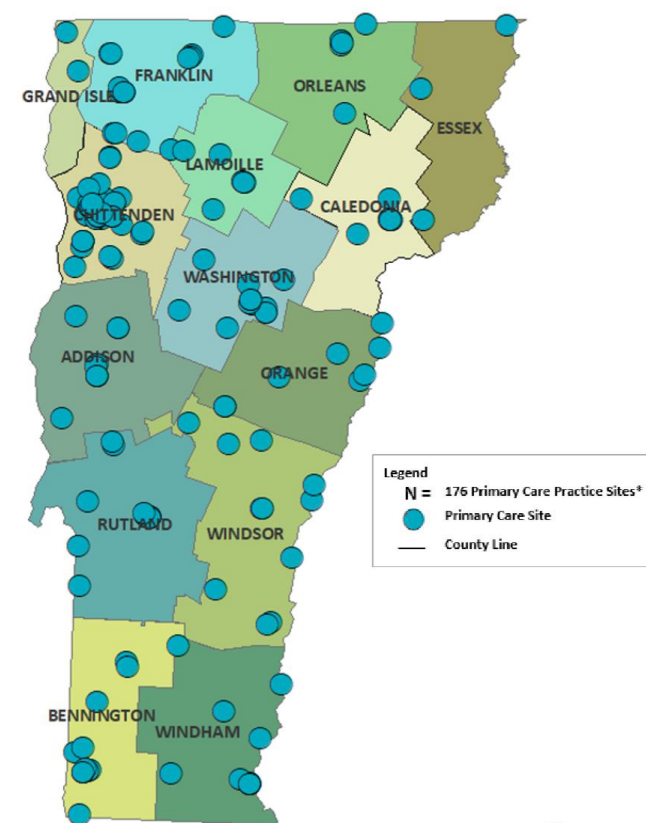
2018 Primary Care Physicians by County



# PUBLIC HEALTH COST

- Primary care providers establish continuous comprehensive care and coordinate specialty care to the community without differentiating patients by sex, disease, or organ system <sup>3</sup>
- Primary care providers carry a patient population of approximately 2,500 <sup>4</sup> and <sup>5</sup>
- 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 <sup>3</sup>
  - Primary care interventions are less costly because they are less technology-intensive <sup>6</sup>
  - Unnecessary specialty visits by patients through self-referrals leads to an increase superfluous procedures resulting in increased health care costs and mortality <sup>6</sup>
- One primary care physician per 10,000 population leads to:
  - 6% decrease in all-cause mortality <sup>7</sup>
  - 3% decrease in stroke mortality <sup>7</sup>
  - 2.5% decrease in infant mortality <sup>6</sup>
  - 3.2% reduction in low-birthweight <sup>6</sup>

Vermont Primary Care Practice Sites  
2018



\*Primary Care Site (AHEC defined): see endnotes for definition  
VT County map created by the VT Center for Geographic Information, <http://vcgi.vermont.gov>

# COMMUNITY PERSPECTIVE

“...there simply aren’t enough primary care providers in Vermont now, and the number is decreasing at an alarming rate... Primary care saves the health care system money. People who have a primary care provider are healthier, less likely to go to emergency rooms, and less costly to the health care system as a whole. Across Vermont, in communities where primary care is available, people get preventive care and management of chronic conditions such as diabetes, high cholesterol and high blood pressure close to home. They are more likely to keep their appointments, work on prevention, and avoid hospitalizations. Primary care providers call on specialists when necessary, but the vast majority of patient needs are taken care of locally. Cost and quality of health care both improve. But the lack of primary care providers in Vermont is a looming crisis. In rural Vermont, some practices have been unsuccessfully recruiting new physicians for more than six years. Recent workforce data shows that there is a need for 70 new primary care providers in Vermont right now. With 36% of Vermont’s primary care doctors over age 60, this need will only escalate. Vermont needs a multifaceted approach to increasing the number of primary care providers across our state.”

## **Excerpt from Fay Homan’s: Lack of primary care providers a looming crisis**

Fay Homan, M.D., family physician with Little Rivers Healthcare in Wells River, Board member of the Vermont Academy of Family Physicians, and serves on the Primary Care Advisory Group for the Green Mountain Care Board

# COMMUNITY PERSPECTIVE

“Health systems with a strong primary care foundation have higher quality of care, better overall population health and lower health care costs. Full spectrum family medicine is shown to be the most cost-effective way to take care of all people regardless of age or sex in rural Vermont. Family doctors save people and the state money by providing prevention services, but my day to day is not just physicals and checking blood pressure. We offer a wide array of services for the entire family to save patients the time, cost and travel to specialty care or the emergency room. Higher risk situations show up, like chest pain, blood clots, appendicitis, anaphylaxis, asthma exacerbations and influenza. Sometimes we refer these to the emergency room or catheter lab, but when we can manage these patients by ourselves, it saves the patient a big bill.... In our community, we have no pediatrician on call for our hospital. The job of taking care of well, sick, or high-risk newborns and attending deliveries is juggled by a group of family doctors. While I enjoy caring for babies, this added responsibility is added stress and time away from my family at night and on weekends. The only reason most of us do it is because without our support, the birthing center would likely close, and patients would have to travel over an hour to have their babies.... Money does matter to our patients. Our patients need a doctor and they need it to be close, competent, and provide comprehensive full spectrum care from obstetrics, pediatrics, and health maintenance.”

## **Quotes taken from Katherine Marvin’s testimonies to the Vermont House Committee on Health Care and the Green Mountain Care Board**

Katherine Marvin, M.D., family physician with Stowe Family Practice and Copley Hospital, and serves on the Primary Care Advisory Group for the Green Mountain Care Board

# INTERVENTION AND METHODOLOGY

## ■ **Intervention:**

- Increase the number of medical student graduates interested in primary care
  - Identify aspects of primary care that attract medical students towards the profession
  - Identify barriers for students entering primary care

## ■ **Methodology:**

- Develop a 10-question survey to be completed by a focus group consisting of 10 third- and fourth-year medical students
  - Interest in primary care
  - What specialties constitute primary care
  - Appeal of primary care
  - Deterrents to primary care
  - Utility of a medical school scholarship in incentivizing students to pursue primary care in Vermont
- Present data on the primary health care shortage to the Vermont House Committee on Health Care and the Green Mountain Care Board at the Vermont State House on January 15, 2020

# RESULTS

- 50% of the medical students interviewed intended on entering a primary care specialty
  - Of those interested in primary care, only 20% planned on working in a primary care setting while the other 80% planned to subspecialize
- Medical students identified family medicine physicians as the most important providers of primary care followed by outpatient internal medicine and pediatric physicians
- 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.)



# RESULTS CONTINUED

- Changes medical students would like to see in primary care that would make the profession more attractive:
  - Equal pay as other specialties within medicine
  - Increased care continuity and better communication between specialty referrals and the primary provider
  - Task shifting administrative responsibilities away from physicians so they can focus on patient treatment
  - Do away with 15-minute time constraint of an office visit
  - Address stigma associated with medical students entering primary care
- About one-third of interviewed medical students stated they could envision themselves practicing in Vermont
- About a quarter of interviewed medical students stated compensation influences their specialty choice while a majority stated work-life-balance is a larger influencer
- Most medical students did not see a scholarship for primary care as an incentive for students to pursue the field
  - Scholarship would benefit those who are already interested in the field
  - Loan repayment under a contract to practice in the state of Vermont could help recruit providers to the state
  - Make federal and state loan repayment education part of medical education so students interested in pursuing primary care have a better understanding of the financial help available

# EVALUATION OF EFFECTIVENESS AND LIMITATIONS

- Evaluation of effectiveness:
  - Survey lead to insightful and robust conversation on primary care
  - Conducting data collection in a focus group allowed for medical student conversations outside the scope of the survey
  - Ideas brought up during group discussion revealed major attractors and deterrents of primary care
  - New ideas where generated on how to generate medical students' interest in primary care and how to recruit providers of primary care to Vermont
- Limitations:
  - Small sample size possibly not representative of the medical student population as a whole at the Larner College of Medicine
  - Limited time to conduct survey and arrange for students to meet

# RECOMMENDATIONS FOR FUTURE INTERVENTIONS/PROJECTS

- Distribute the survey to the entire Larner College of Medicine
  - A larger sample size with a more diverse opinions on primary care
- Acknowledge medical schools' cultural biases towards family medicine in order to eliminate them
- Partner with OneCare Vermont, Green Mountain Care Board, and the state of Vermont Legislature to help increase primary care compensation and restructure patient visits
- Develop easy to understand and straightforward loan repayment legislation that would incentivize primary care providers to work in the state of Vermont
- Develop an educational session on loan repayment programs offered for providers in the state of Vermont to be conducted at the Larner College of Medicine
  - Reduce debt burden and student anxiety about entering a primary care specialty

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