

12-7-2015

## Physician Executive Leadership: Student-Led Curriculum to Fill Gaps in Traditional Medical Education

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### Recommended Citation

Shah, Anuj; Modi, Ronuk; Downing, Jessica; Ugorets, Angela; Linder, Kathryn; Jacobs, Michael; Hale, Graham; Fitch, Jeffrey; Kurtzman, Nicholas; and Rosen, MD, Paul, "Physician Executive Leadership: Student-Led Curriculum to Fill Gaps in Traditional Medical Education" (2015). *Physician Executive Leadership*. 1.  
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# Physician Executive Leadership: Student-Led Curriculum to Fill Gaps in Traditional Medical Education

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## Introduction to PEL

**Physician Executive Leadership (PEL) was founded in 2013 as a platform for students to learn about everything outside of clinical medicine that shapes what happens within the clinic and hospital.** We work with nationally recognized leaders in **medicine, policy, and business** to learn about how the system works, how we can fit into it, and how we can change it.

**PEL is student-centered, student-led, and student-driven.** It grew out of the knowledge that today's students are eventually going to be responsible for this health care system, so we need to understand it now.

**"PEL is the pivot point for innovative medical students to engage the larger world, and reimagine health care."**

Donna Gentile O'Donnell Ph.D.  
VP, Innovation Partnerships + Programs,  
Thomas Jefferson University

## The PEL Curriculum

PEL exposes students to aspects of health care often excluded from the traditional medical school curriculum. **We have hosted lectures by leaders in health care and innovation, such as health system and hospital CEOs, entrepreneurs in mobile health, the CMO of the Centers for Medicaid and Medicare Services, The CIO of Independence Blue Cross, a precision wellness director, renown medical malpractice lawyers, and a New York Times best-selling author, among many more.** PEL additionally provides a platform for students to voice and develop ideas on emerging topics in health care with our online publication, *The Diagnostic*, and keeps students up-to-date on current events in health care.

Topics presented between 2013 - 2015 include:

- Medical Malpractice
- Technology + Global Health
- Tele-health
- The Patient Experience
- Genomics-Based Medicine
- Health Care Entrepreneurship
- Innovation in Medical Education
- Medicaid, Medicare + the Affordable Care Act
- Trends in Health Care Reimbursement

To complete the curriculum, students must earn at least four credits over the course of the year by attending PEL lectures and events, or contributing written pieces to *The Diagnostic*.

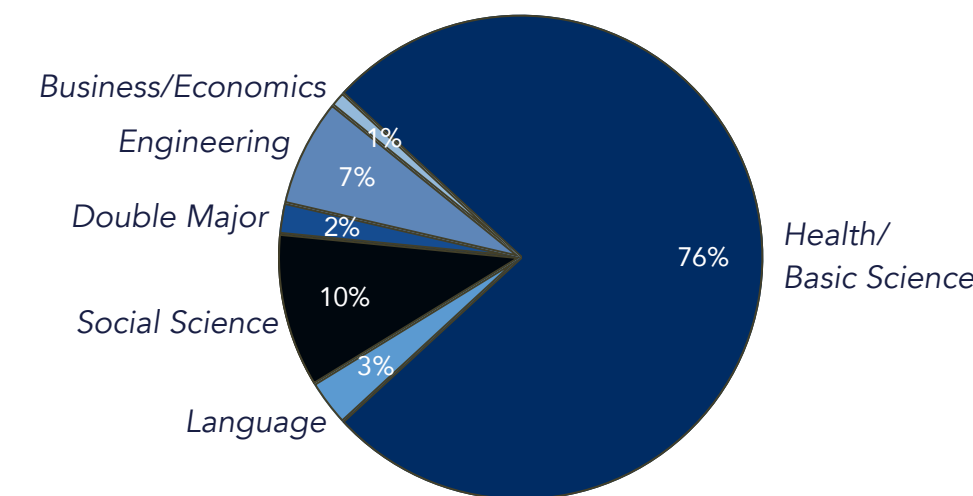
- **78 students completed the program in 2014-2015**, and 16 completed the program twice, in both 2013-2014 and 2014-2015.
- **Membership more than doubled** from 30 students our first year to 84 our second. This year, 128 new students enrolled, 114 of whom are first year medical students (42% of class).

## Identifying Gaps in Medical Education: Survey Design + Student Demographics

One hundred seventy four Sidney Kimmel Medical College (SKMC) students participated in the 2015-2016 PEL survey: 111 first-year, 50 second-year, and 13 third year students. Of these, 50 of the respondents participated in the PEL program in 2014-2015.

### PEL Students' Undergraduate Majors

n = 174

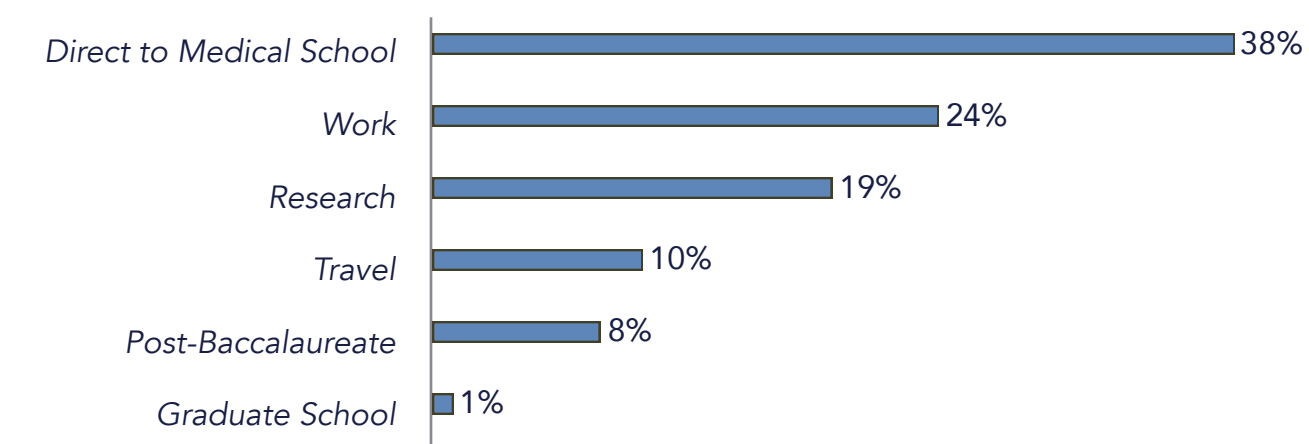


The survey contained 20 multiple-choice questions to assess knowledge on **patient experience, health care reform, health economics, medical education, medicine and the law**, as well as a subjective self-assessment of students' **understanding of and interest in these topics**. The aim of the survey was to identify gaps between student knowledge and interest that we may be able to fill with the PEL curriculum.

At the end of the 2015-2016 school year, we will re-administer the survey to assess **whether the PEL curriculum had a significant impact on students' knowledge of, comfort with, and interest in the same health care topics**, using these results and data collected from students who did not participate in the program as controls.

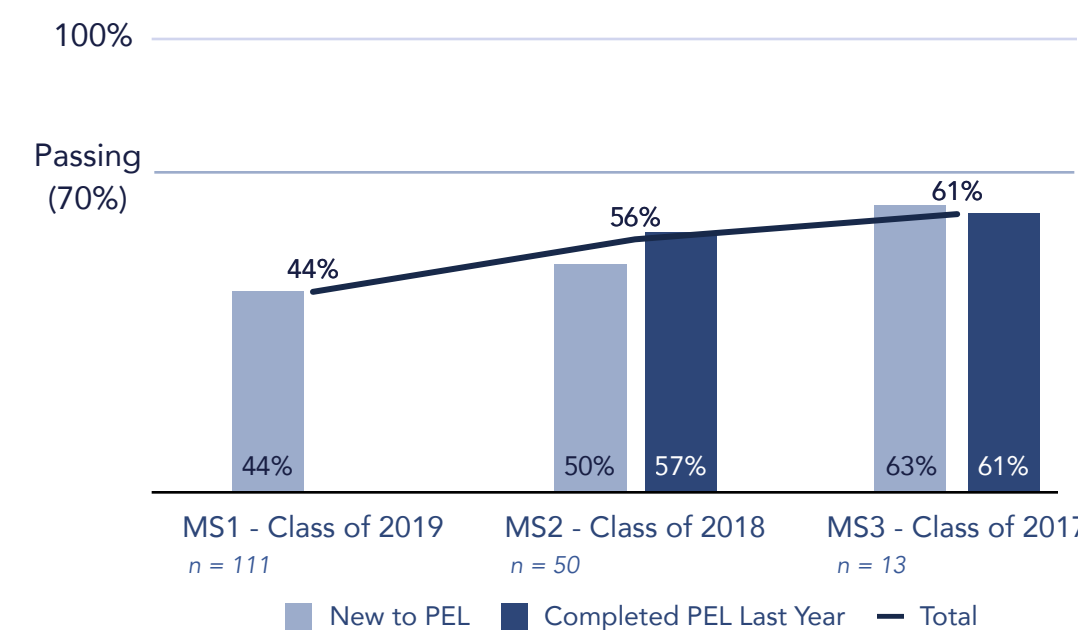
### PEL Students' Experiences Between Undergrad and Med School

n = 174



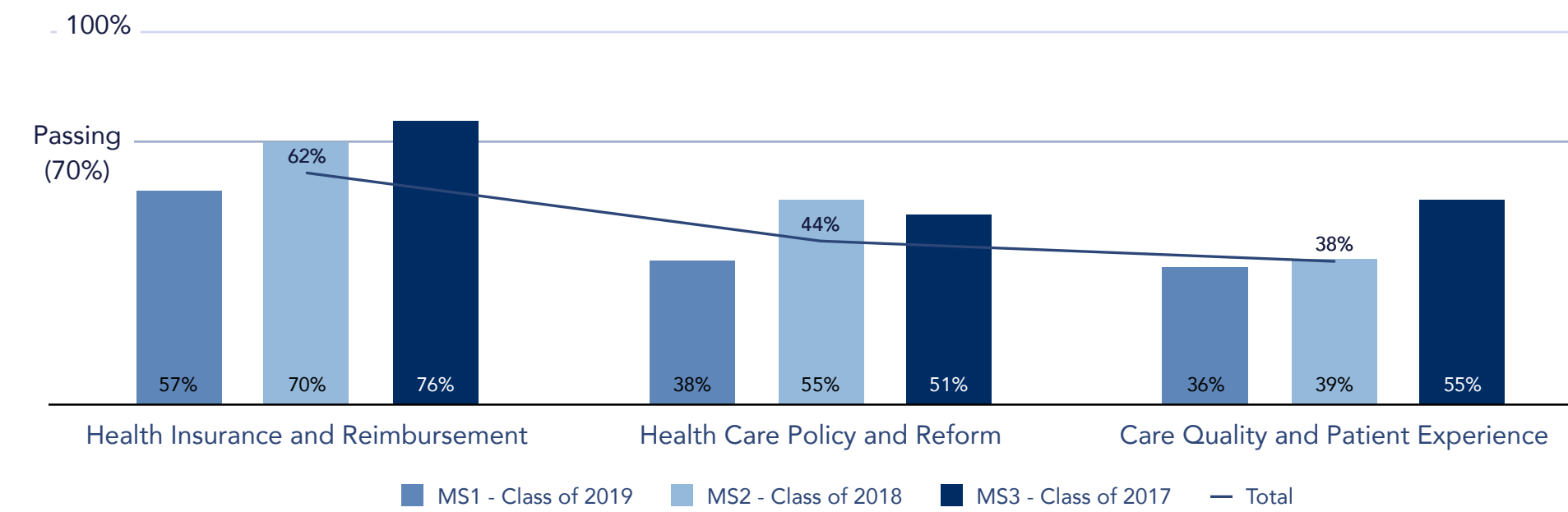
## Survey Results: Key Findings

### Knowledge Assessment by Class Year and PEL Membership



As a group, **students who had completed the PEL program performed better** than their colleagues who did not ( $p < 0.001$ ).

### Knowledge Assessment by Question Topic

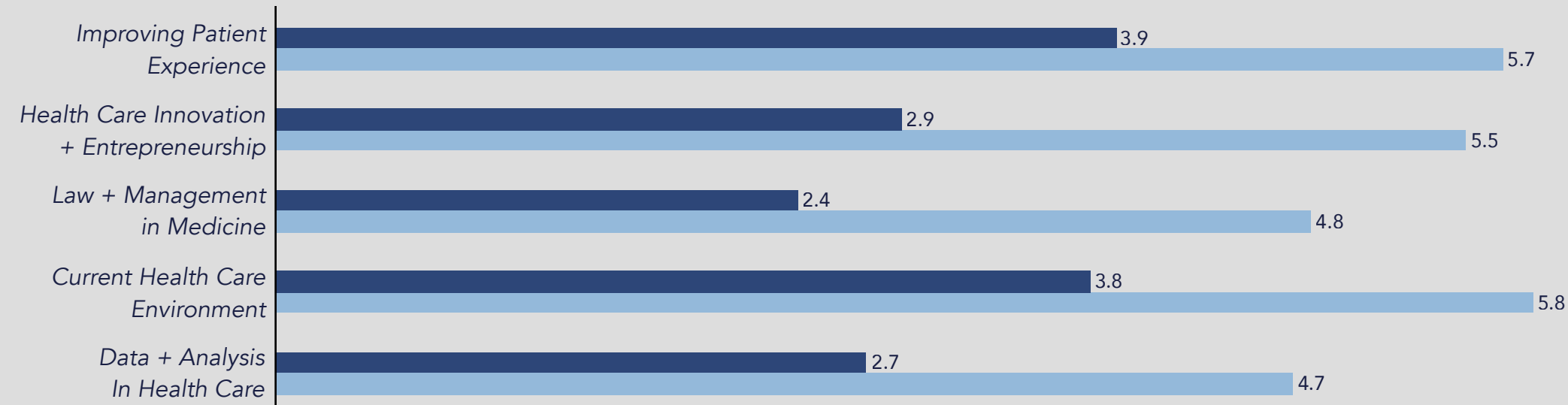


Overall, students performed significantly better on questions related to health insurance and reimbursement ( $p < 0.001$ ) than on either of the other topics. Scores on questions related to health insurance/reimbursement and care quality/patient experience increased significantly with each year in medical school ( $p < 0.001$ ). This assessment demonstrates that **knowledge gained from the medical school curriculum alone is sub-optimal** in all topics.

### Self-Reported Student Interest in PEL Topics

The average level of interest overall for these topics was 5.3 on a 7 point scale, while average understanding was 3.1. The largest gap between interest and understanding was in the health care innovation and entrepreneurship category (2.9 vs 5.5).

Understanding Interest



## Conclusion

Students at SKMC are interested in learning about health care topics that will allow them to both navigate the current health care environment and shape it in the future. However, their knowledge is lacking. **Although the traditional medical school curriculum does significantly improve understanding of these topics, it does not fully close the self-identified gap between what students want to know, and what they feel they fully understand.** PEL aims to help close this gap by providing information and a platform for discussion and collaboration.

By collecting data again after the completion of the 2015-2016 program we will be able to:

- 1 Evaluate whether or not PEL is continuing to enable students to become well-informed on these important health care-related topics
- 2 Tailor our curriculum to meet student interests and gaps in knowledge
- 3 Expand the PEL program outside SKMC

Over the next few years we hope both advance the PEL curriculum within SKMC and expand it to medical schools around the country. We believe this type of curriculum is an **essential component of comprehensive medical education**, and should be made available to every medical student, at every medical school. **We want to partner with students to become innovators in medical education - to change the curriculum in a way that ensures we will get the training we need to become leaders in the changing world of health care**, and we believe that the creation of a broader network of PEL collaborators would allow for the exchange of ideas necessary to make this happen.

**"Medical students at SKMC should have the opportunity to learn these crucial "facts of life" as future physicians. I am awed by the growth that the PEL group has shown over the past two years and believe that it can serve as a model for other medical schools."**

Susan Rosenthal, MD  
Associate Dean for Student Affairs, Career Counseling  
Sidney Kimmel Medical College

