Undergraduates’ Perception of Healthcare Expenditure and How to “Tame the Beast”

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Background

We, who are deeply immersed in its provision, all feel we have a clear perception of the raging river of expenditure that fuels American healthcare. Most of us have at least some sense of how cost control might be affected and true value-based delivery established. How divergent, however, are our views from those who are not intimately associated with the system? We have access to a number of undergraduate students and sought to solicit their perceptions and opinions on the subject.

We have previously studied the general healthcare delivery knowledge base of providers and students and found it to be shockingly lacking. Here we focus more on perception and opinion. Undergraduate students generally are well separated from concerns about health. The elaborate machinery of healthcare delivery is a foreign land to them. Perhaps their only interface with the challenge that is before us are the often one-sided “debates” that are waged in the social or mainstream media- particularly around the time of national elections.

We have put on a rather unique undergraduate course in conjunction with the Virginia Tech School of Neuroscience in which we immerse undergraduates in the rough and tumble world of academic neurosurgery in a busy acute care and level 1 trauma center. We have watched student’s appreciation for the complex problem grow through their experiences and wanted to share some of our observations.

The students represent an important block of potential voters and influential citizens: bright, educated, articulate individuals who have had little education in the socioeconomicms of healthcare and very little interface with its actual delivery. What would be better in establishing a more nuanced perception of the challenges than “embedding” these individuals in “units” out there in some of the hottest and most costly “frontlines” of modern healthcare – the delivery of tertiary level neurosurgery?

Results

80 undergraduate students have participated in this course, all have been queried extensively on this subject. Early in the course, perceptions and opinions were scattered and myriad. Grasp of the facts was very limited. There was a general consensus that expenditures are alarmingly high and are wasteful, but most had no idea of what percentage of the GNP was devoted to healthcare.

When questioned in an open fashion, only 10% of students could list three cogent cost-saving measures. When given options, the majority favored a single-payer system (governmental) and some form of rationing (particularly in the care of the aged). The majority thought that large savings could be made through better preventative care. The majority felt malpractice should be reigned in and that most physicians practiced ethical and fiscally responsible medicine. Most felt the insurance companies were behind driving up the costs of medicine but had no idea how much impact administrative activities had on overall cost.

The majority did not feel that physicians, and specifically neurosurgeons were overpaid, but most underestimated pay by at least 100%. A significant majority felt that the course “opened their eyes” to the intricacies and problems involved in correcting healthcare expenditure.

Discussion

We have previously studied the healthcare delivery general knowledge base of providers and students and found it to be very limited. Undergraduate perceptions of, and opinions on, healthcare expenditure may at first blush appear limited, naive, and idealistic, but they are not without nuance and genuine concern. They are not totally oblivious to the mounting crisis, although the associated data and details are somewhat foreign to them. There is a strong tendency to see heroes and villains in the picture with insurance makers and pharmaceutical companies wearing the black hats, and the government and the physicians wearing the white. Most are oblivious to the potential costs of litigation via the practice of defensive medicine. They seem to be quite susceptible to arguments put forth in the mass media. For example, they put a lot of hope into the practice of preventative medicine, but cannot articulate how it will actually affect cost control.

When presented with the realities of day to day care, these students evolved in their processing of the healthcare debate. By the end of the course they were able to list numerous examples of factors that legitimately drive up the cost in the U.S. They began to understand the profound complexity of reigning in cost. They are not totally oblivious to the mounting crisis, although the associated data and details are somewhat foreign to them. There is a strong tendency to see heroes and villains in the picture with insurance makers and pharmaceutical companies wearing the black hats, and the government and the physicians wearing the white. Most are oblivious to the potential costs of litigation via the practice of defensive medicine. They seem to be quite susceptible to arguments put forth in the mass media. For example, they put a lot of hope into the practice of preventative medicine, but cannot articulate how it will actually affect cost control.

Methods

In conjunction with the Virginia Tech School of Neuroscience, we designed, initiated, and conduct twice yearly, a semester-long, experiential, deep immersion, undergraduate course entitled “Clinical Neurosciences in Practice.”

In this course, our team holds weekly seminars on various nervous system disorders, their medical management, and the related socio-economic and ethical ramifications. Students prepare discussions on various disorders and evaluate and critique related scientific journal articles. Students, then spend 4-6 hours per week with our team in all activities including surgery, rounds, and consultations. They actually scrub in on several operations during the semester. Students write weekly papers on various “related questions of the week” (predominantly socio-economic, ethics, and personal-response-related). They prepare personal statements and undergo mock graduate school interviews, patient encounters, and even malpractice depositions. As a “final exam”, students must give in-depth presentations on specific patients, their radiological studies, their hospital courses, and related discussions about their disorders. They are also required to take two full nights of neurosurgical call with our team twice in the semester. Multiple seminars and one on one discussions focus on the socioeconomic challenges facing modern medicine.

We studied through “paper and Pencil” survey, assigned essays, and interview, the perceptions of undergraduate students about American healthcare expenditure, its shortcomings, and ways to correct it.