

Health Care Research Project Ideas

Thanks for giving me to chance to explore these ideas. I have no doubt that these ideas are unoriginal and I have not searched through the medical literature for existing research, but I would still find it interesting to confirm or answer some of these questions:

- 1) While it may be taken for granted, I would like to estimate a dollar value in increased health care cost per BMI point above or below recommended levels.
- 2) Using a series of AB tests in the EMR product, I would be interested in testing the outcomes that occur after various decision check lists and interview scripts that doctors go through. They can either be required or volunteer to take before completing certain EMR tasks.
- 3) This next idea came from a discussion with a surgical resident. We talked about how after an initial treatment or after a prescription to mitigate one problem, there are often increased complications that can arise from later and unrelated incidents – in other words, not direct side effects. Coumadin is a drug that is prescribed to prevent stroke in patients with atrial fibrillation by thinning the patient's blood. The problem, however, is that most patients on Coumadin, who are elderly, tend to fall. The hypothesis is that being on Coumadin increases the likelihood of brain bleed after falls. Similar to how we make decisions on certain screening procedures, the question here might be, "Looking at aggregate outcomes, is it worth prescribing Coumadin to the elderly in the first place?"
- 4) The concepts of food "deserts" have been written about in the past. These are areas of the United States or otherwise developed economies, typically in urban areas, where the availability of nutritious food is limited. I am interested in finding health care "deserts" and if they may exist in the United States, particularly in rural areas.
- 5) A final research idea would be to look at compliance (proper completion of treatment, medication, etc by patient) rates across marital status, age, insurance attributes such as proportion out of pocket to overall treatment costs, and out of pocket as a proportion of income, and then controlling for severity of ailment. Mainly I am interested in whether people take their care more seriously, if they pay more for it.