## ESD.864 CLASS CASE: CANCER SCREENING

## **Cancer Screening**

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There has been an increasing interest in the medical community in applying best practices in evidence-based medicine to improve patient outcomes in health care. Evidence-based medicine refers to the use of best available evidence from systematic research in a clinical setting. One area where applying information from technical analyses of outcomes has been particularly prominent in the last several years is the issue of cancer screening. Recommendations for screening in the general population have been issued for a variety of cancers, including breast, prostate, colon and cervical cancers. When cancers are identified and treated before they spread, people in general have a better chance of survival. On the other hand, large-scale population screening has some risks, both the risks of the procedure itself, and the risk of "false positives" resulting in unnecessary procedures such as biopsies and anxiety. Setting evidence-based guidelines for who should be screened and when have been controversial. For example, in 2009, the United States Preventative Services Task Force revised its breast cancer screening guidelines raising the age for most women to start having regular breast cancer screenings at age 50, and recommended reducing screening frequently. This caused some controversy and disagreement among both doctors and patients, as illustrated in the following New York Times article: http://www.nytimes.com/2009/11/17/ health/17cancer.html.

Your task as a group is to assess how guidelines for cancer screenings, based on technical analysis, affect practice. Issue that may be of particular interest in the context of the class are: the role of the public in understanding and reacting to new guidelines; the role of individual vs. collective risks; and the interaction between stakeholders such as doctors, patients, government, and insurance companies. You can choose any type of cancer screening for further analysis, though please be sure to go into depth on at least one.

To get you started, we have posted a few articles illustrating an example of the type of technical/ statistical analysis that underlies many of these recommendations, and background information on the particular decision of the US Preventative Services Task Force as mentioned above. You are expected and encouraged to do further research on your own.

Remember to follow the general instructions for your memo and presentation.

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