

## Concepts in Economic Evaluation Problem Set #2

Continue to consider the hypothetical scenario from the first problem set (a faith-based organization providing a group activity to learn about HIV transmission and attempt to prevent it). Answer the following questions about productivity costs and contingent market valuation.

- (1) Suppose the faith-based organization has three leaders: (1) a 52 year old, African American male physician in private practice who also holds a PhD; (2) a 29 year old Native American female lawyer also holds an MBA and who works for a large firm that specializes in medical malpractice claims; and (3) a 38 year old, Caucasian male with an MA in art history who works as cook at a local restaurant. Suppose that each of them uses their free time to be a group leader at the faith-based organization. Each person spends three hours a week as a group leader

How would the Panel on Cost-Effectiveness in Health and Medicine put a value on each person's time? Note that this is the inputs taken into consideration rather than actual amounts.

How might a researcher following a more traditional human capital approach put a value on each person's time?

Would there be any friction costs involved with their volunteer activities. If you answered yes, please describe.

- (2) Suppose that one of the participants in the group was infected with HIV. This person worked as a copy editor at the local newspaper. This person received poor care and early AIDS symptoms began three years after the infection. The person missed multiple work days for one year, and then became completely disabled and could no longer work three months after the onset of AIDS. The employer needed the copy-editing to be done each day, but did not decide to replace the person until it was clear that the person's disability was permanent. This occurred one month after the onset of disability at a level that kept the person permanently out of work. The employer took two months to find a suitable replacement. It took one month for the person to start, and it took one more month to get the person up to the level of accuracy of the original employee. The original employee died four years to the day after being infected with HIV.

Using a friction cost approach of interest to the employer describe the productivity costs that would be counted. Show a timeline.

Use Mark Pauly and colleagues' work on different types of production processes to comment on whether the friction cost approach likely captures all that is necessary to describe what is not produced as a result of this person's illness.

- (3) Suppose that the pastor at the faith-based organization decided to start asking for donations for participation, but she wanted to get some idea of how much she should expect to receive. To do this, she designed a contingent market valuation survey for her group approach to HIV prevention. She hadn't taken this class and decided to ask the following question to the members of the congregation:

"If we are going to continue to offer the group discussion service to prevent HIV transmission, we need to be able to fund the activity. While we will never ask the participants to pay, we may ask for increased donations and we may have to give up other activities if we are going to maintain this activity but donations are not increased. Would you be willing to donate \$500 per year (that is just \$10 extra per week) for this cause?"

Following this, she used an iterative bidding process to try to ascertain the exact dollar amount she would get from each member of the congregation. The average income of the congregation members is only \$5,000 per family member per year (i.e. \$20,000 per year for a family of four).

Please comment on each of the following types of bias with respect to the pastor's efforts to correctly ascertain the amount she would likely get in donations: starting point bias, vehicle bias, hypothetical bias, and one other bias of your choosing. Note you are not trying to estimate how much the pastor will be able to collect from families. Also note that the income information is provided to help you think about particular biases these individuals may have.