**A**

**1.** A health survey was conducted in a representative sample of adult males in Chicago of all ages and occupations. Mr. F was included in the sample. He was selected by random chance from the list of participants.

Please rank the following statements in terms of which is most likely to be true of Mr. F. (1=more likely to be true, 6=least likely)

1. \_\_\_\_ Mr. F smokes more than 1 cigarette per day on average.

2. \_\_\_\_ Mr. F has had one or more heart attacks.

3. \_\_\_\_ Mr. F had a flu shot this year.

4. \_\_\_\_ Mr. F eats red meat at least once per week.

5. \_\_\_\_ Mr. F has had one or more heart attacks and he is over 55 years old.

6. \_\_\_\_ Mr. F never flosses his teeth.

**2.**  Imagine that the U.S. is preparing for outbreak of an unusual disease, which is expected to kill 600 people. Two alternative programs to combat the disease have been proposed. Assume that the exact scientific estimates of the consequences of the program are as follows:

A. \_\_\_\_ If Program A is adopted, 200 people will be saved.

B. \_\_\_\_ If Program B is adopted, there is a one-third probability that 600 people will be saved and a two-thirds probability that no people will be saved.

Which treatment would you recommend?

**3.** The patient is a 67-year-old farmer with chronic right hip pain. The diagnosis is osteoarthritis. You have tried several nonsteroidal anti-inflammatory agents (e.g., aspirin, naproxen, and ketoprofen) and have stopped them because of either adverse effects or lack of efficacy. You decide to refer him to an orthopedic consultant for consideration for hip replacement surgery. The patient agrees to this plan.

Before sending him away, however, you check the drug formulary and find that there is one nonsteroidal medication that this patient has not tried (ibuprofen). What do you do?

1. . \_\_\_\_ Refer to orthopedics and also start ibuprofen.

2. . \_\_\_\_ Refer to orthopedics and do not start any new medication.

**4.** Imagine that one of your patients suffers from migraine headaches that last about 3 hours and involve intense pain, nausea, dizziness, and hyper-sensitivity to bright lights and loud noises. The patient usually needs to lie quietly in a dark room until the headache passes. Out of every 365 days (1 year), this patient has a migraine headache on about 100 of those days (8.3 per month). Of course, on a day when the patient has a headache, she doesn't spend the entire day in pain, but only about 3 hours of that day.

You are considering three medications that you could prescribe for this patient. All three medications have only negligible side effects, and any side effects are the same for the three. Each medication comes in the form of pills that must be taken once per day.

The medications differ in effectiveness and cost. The patient has a low income and must pay the cost because her insurance plan does not cover any of these medications. And of course the patient is also the one who appreciates the effectiveness.

Drug A: . \_\_\_\_ reduces the number of headaches from 100 days with a headache per year to 30 days with a headache per year. It costs $350 per year.

 Drug B: . \_\_\_\_ reduces the number of headaches from 100 days with a headache per year to 50 days with a headache per year. It costs $100 per year.

Drug C: . \_\_\_\_ reduces the number of headaches from 100 days with a headache per year to 60 days with a headache per year. It costs $100 per year.

Which treatment would you recommend?