## 19

## Population Aging and the Future of Health Policy

## **Comprehension Questions**

Indicate whether the statement is true or false, and justify your answer. Be sure to state any additional assumptions you may need.

 Population growth in the developed world is contributing to population aging.

**FALSE**. In order for a population to exactly maintain its size from generation to generation, each woman must give birth to about 2.1 children over her lifetime. This special fertility rate is often called the population replacement fertility rate. In the last few decades, the total fertility rate in the developed world has fallen below that level. Higher fertility rates in developing countries are actually slowing the aging of the world population.

2. Japan's population is not aging along with the rest of the developed world.

**FALSE**. Japan is the one of the starkest examples of a population rapidly going gray. Indeed, the proportion of elderly in the Japanese population will increase at a far faster rate than in any other industrialized nation. Projections indicate that 27.3 percent of the Japanese population will be over 65 by 2025, the one of the highest rates in the developed world.

3. In a world of population decline, many national health systems are not solvent because they were predicated on the assumption of population growth.

**TRUE**. Many of these health systems are predicated on a bedrock assumption of population growth, which seemed reasonable up until the last few decades. However the twin forces of rising life expectancy and declining birthrates will bankrupt these programs unless they are reformed.

4. In recent years, each years' Medicare tax receipts have been sufficient to cover that year's services on behalf of enrollees.

**FALSE**. In 2007, Medicare Part A expenditures exceeded payroll tax collections for the first time, and the Medicare Trust Fund has been on the decline since then.

5. In the 1970s, researchers were worried that, while Americans were living longer than previous generations, they were actually less healthy during old age than before. This phenomenon is known as the "compression of morbidity."

**FALSE**. This finding is evidence *against* compression of morbidity, which occurs when disability and illness are delayed until later in life.

6. Reducing mortality from one disease necessarily increases the sum of the total mortality risk from all other causes of death.

**TRUE**. The inevitable rise in mortality from other causes that results from a reduction in mortality from any one particular cause is known as the competing-risks problem.

7. If a costless drug were created that effectively cured a prevalent and deadly disease, health care expenditures would decrease.

**FALSE**. For example, overall health care expenditures might rise as a consequence of a new magical cancer treatment, even if the treatment itself is basically costless. This might occur if the costs of caring for heart attacks and other competing risks are more expensive than caring for cancer.

8. Disproportionate spending on end-of-life care is never clinically justifiable.

**FALSE**. Some end-of-life health care is wasteful or even prolongs the pain of a dying patient, but in many cases, disproportionate spending on EOL care is clinically justifiable, as in the case of emergency surgery for patients with badly clogged arteries or chemotherapy capable of arresting the spread of a cancer.

- 9. Advance directives allow patients to indicate their own preferences about EOL care, but they cannot be acted upon if a dying patient is too sick to communicate with doctors.
  - FALSE. An advance directive is a binding legal document that indicates a patient's wishes regarding end-of-life care. The patient can specifically indicate instructions for situations in which he can no longer communicate.
- 10. Aggressive natalist policies have successfully reversed birth rate declines in most European countries.
  - **FALSE**. Natalist policies have enjoyed limited success in France and Sweden, but most European countries still have very low birth rates.