Chapter 6 Homework

1. Consider who pays for health care in the US.

- a. What fraction of the US population currently does not have health insurance?\
- b. List three differences between an HMO and conventional health insurance.
- c. What fraction of US health care dollars is spent on administrative costs? How does this differ in Canada?

2. Discuss the role that each of the following factors has played in contributing to increases in health care costs in the US over the last decade.

- a. Physician income
- b. Aging population
- c. New technology development
- d. Prescription drugs

3. Cardiovascular disease is the leading cause of death in the US. High blood pressure is a significant risk factor for both myocardial infarction and stroke. High blood pressure can be treated with drugs, but these can be expensive. A recent clinical trial involving more than 33,000 patients compared the efficacy of three different types of blood pressure reducing drugs.

- Chlorthalidone, a diuretic (usual dose 25 mg/day)
- Lisinopril, an ACE inhibitor, for which there is a generic available (usual dose 5 mg/day
- Amlodipine (Norvasc), a calcium channel blocker for which no generic is available (usual dose 5 mg/day)

[Major Outcomes of High Risk Hypertensive Patients Randomized to Angiotensin-Converting Enzyme Inhibitor or Calcium Channel Blocker vs. Diuretic JAMA 12-18-02, 288;23. http://jama.ama-assn.org/cgi/reprint/288/23/2981.pdf]

- a. How much would a one year supply of each of the three drugs cost if you buy your prescriptions online at <u>Walgreens</u> (<u>www.walgreens.com</u>) and do not have health insurance? Present your answer as a bar graph.
- b. Listen to this story from NPR: <u>http://www.npr.org/templates/story/story.php?storyId=1540336</u>.
- c. What is the annual cost for these three drugs if you purchase them in Canada at http://www.canadianprescriptiondrugstore.com/? Add a second series of bars in your graph to compare them to US costs.

4. A commonly used anti-depressant, Zoloft (sertraline), recently became available as a generic drug. The most common regimen is 50 mg, taken daily. Find out how much a year's supply of Zoloft and the generic costs for:

- a. A person without insurance using the Walgreen's online pharmacy
 - i. Zoloft
 - ii. Sertraline (generic)
- b. A Canadian using the online Canadian Prescription Drugstore
 - i. Zoloft
 - ii. Sertraline (generic)
- c. Based on your calculations and the NPR report below, speculate on the reasons for the price differences you identified. http://www.npr.org/templates/story/story.php?storyId=1540336
- 5. Read the following report: <u>http://www.npr.org/programs/atc/features/2002/may/uganda/</u>

Next, listen to this update on the story:

http://www.npr.org/templates/story/story.php?storyId=6915566

- a. How is this system similar to the Oregon Health Plan?
- b. Evaluate this co-op system as a model for the rest of Africa by answering the following questions.

i. Assess this health system in terms of access and likely outcomes for the town in Uganda that was described.

ii. Only about 6% of the population of Uganda has AIDS, in Botswana and Zambia the prevalence is >2x greater. How might the growing AIDS epidemic impact participation in a health care co-op?

iii. What sort of AIDS-related care do you think community co-ops would decide to cover?