Module 2: Physician Agency and Treatment Decisions

Agency and fee-for-service payments

Ian McCarthy, Emory University
Econ 372, Spring 2021

What are fee-for-service payments?

- Fee-for-service (FFS) means providers are paid a set payment for a well-defined service
- More services = more payments
- Potentially encourages overuse
- Supplemental Google Slides from 3/2

How are FFS payments calculated?

Step 1

$$((\text{Labor} \times \text{Wage Index}) + \text{Capital}) * \text{DRG Weight} = \text{Base Payment}$$

Step 2

$$\text{Base Payment} \times (1 + \text{DSH Adj} + \text{Teaching Adj}) = \text{Final Payment}$$

Let's look at some of these in real life...

In-class Problem: Agency and fixed prices

Assume $B(x) = 4x^{1/2}$, $NB^0 = 0$, anc $c = 1$. Further assume that prices are fixed administratively at, $\bar{p} = 2$. Note that, in this case, we work only off of the patient's net benefit constraint.

1. What is the physician's and patient's optimal amount of care provided?
2. The government is considering increasing the price to $\bar{p} = 3$. What are the new optimal levels of care for physicians and patients at this new price?
3. How would the price change affect the difference between the patient and physician's optimal amounts?

Comparative statics

An increase in the administratively set price leads to a **decrease** in quantity of services provided. And vice versa, a reduction in price leads to an **increase** in quantity provided. Why?

$$b(x)\frac{\mathrm{d}x}{\mathrm{d}p} - x - p\frac{\mathrm{d}x}{\mathrm{d}p} = 0$$

$$\frac{\mathrm{d}x}{\mathrm{d}p} = \frac{-x}{p - b(x)} < 0.$$

Why does this matter?

Say we want to reduce health care utilization, and we try to do so by cutting payments. Will this work?

Fixed payments in practice

Real life is a little more complicated!

- Often more than one treatment to consider
- Often more than one payer (private and public) to consider