

Supply of health care – Hospitals 2

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- ▶ Last time, we discussed economies of scale and competition.
- ▶ Today, we discuss 2 other topics relevant to hospitals.

Cost Shifting

Are the costs of uncompensated care passed on by hospitals to other patients?

- ▶ Let's assume that hospitals are monopolies in their town – meaning that they can choose their prices.
- ▶ We need monopoly theory to understand.

Monopolies

Defn: Monopoly

1. one seller
2. no close substitutes
3. usually entry is difficult (barriers)

Demand Curves

- ▶ Demand tells you at each price, how much people are willing to buy.
- ▶ Demand curve is downward sloping.

- ▶ In competition (defined last time), demand curve is a horizontal line for any individual firm. They have to charge the price of the market.
- ▶ In monopoly, demand curve for firm is same as industry since only one firm so downward sloping.

Marginal Revenue

- ▶ Competitive Firm: $AR=P=MR$
When produce 1 more, I sell it for $P =$ marginal revenue
- ▶ Monopolist: $AR=P$ but $MR < P$
When produce 1 more, to sell it, P falls (for this unit and all Q) b/c demand curve is downward sloping

Profit Max

In competition, choice is Q and $\text{profit}=0$.

In monopoly,

- ▶ Choices are both P and Q .
- ▶ If I make and sell one more, can I make more money?
- ▶ Compare MC with MR
- ▶ Let's assume that marginal cost is constant (simplifying assumption).
- ▶ Profit Max in Monopoly is $P > MR = MC$ (markup)

Measuring Profit

$$\text{Profit} = \text{TR} - \text{TC}$$

$$\frac{\text{Profit}}{Q} = \text{TR}/Q - \text{TC}/Q$$

$$\text{Profit} = (P - \text{ATC}) * Q$$

Can hospitals shift costs?

- ▶ Monopoly is private sector.
- ▶ Assume there is one public sector program. Reimbursement levels are given.

Scenario 1: reimbursement level $>$ marginal cost at all times

- ▶ Government lowers reimbursement level to R'
- ▶ Profit is down in public sector.
- ▶ Should hospital raise price in private sector?
- ▶ Already at profit max in private sector – can't make more profit there

Can hospitals shift costs? Scenario 1

Can hospitals shift costs?

Scenario 2: reimbursement level falls below MC

- ▶ Government lowers reimbursement level to R''
- ▶ Loss in public sector.
- ▶ If loss in public sector is greater than profit in private sector, this hospital will close.
- ▶ Demand will go up for next nearest hospital.
- ▶ Profit from private sector will go up for that hospital.
- ▶ Price also goes up. → Not cost shifting, but rise in price.

Can hospitals shift costs? Scenario 2

Excess Demand in Nursing Homes

It is argued that the reason for poor quality in nursing homes is because of excess demand – more people need care than providers available.

Excess demand is easy to fix for 2 reasons:

1. If homes make a profit, new firms should want to enter the market, and drive down price. Why isn't this happening?

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Excess demand is easy to fix for 2 reasons:

1. If homes make a profit, new firms should want to enter the market, and drive down price. Why isn't this happening?
 - ▶ Certificate of need laws restrict new homes from opening; if excess demand, then medicaid costs are lower

Excess Demand in Nursing Homes

2. Should shrink if reimbursement rate rises.
 - ▶ home will select private patients whose marginal revenue exceeds reimbursement rate (instead of MC) if $R > MC$
 - ▶ then take all public patients until reach capacity (this is main difference from cost shifting graph)
 - ▶ at capacity, marginal cost goes to infinity
 - ▶ demand for public beds is fixed
 - ▶ when reimbursement rate goes up:
 - ▶ private patients fall (their demand goes down)
 - ▶ public beds goes up
 - ▶ ED goes down

Excess Demand in Nursing Homes