

Physician Services Market

The Future Physician Shortage (1 of 2)

- The ACA is expected to increase the number of Americans with insurance by 30 million over the next decade
- Medical infrastructure (imaging facilities, hospitals) is expected to keep pace
- But physician workforce shortage are expected to plague the system, especially in primary care and general surgery
 - Waiting times are already expanding
 - Medicaid expanded, but <50% of physicians accept Medicaid patients

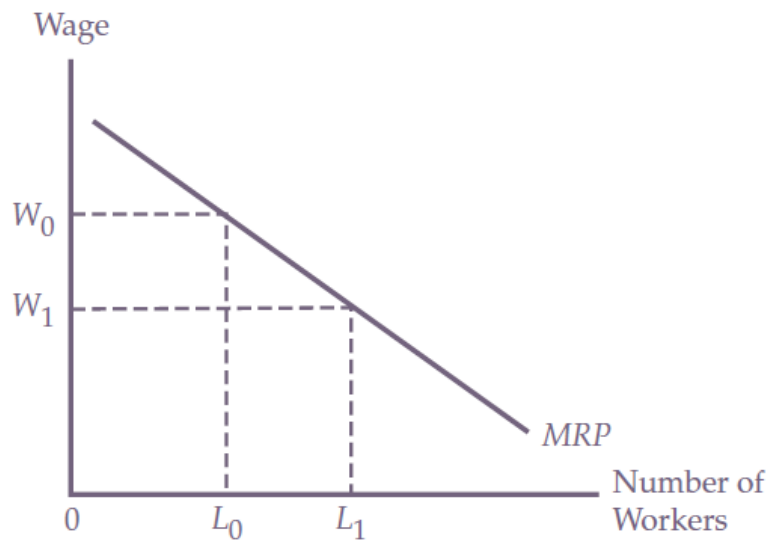
The Future Physician Shortage (2 of 2)

- 2013–2014, Medicaid added ~14 million new enrollees, but <50% of physicians accept Medicaid patients
- Aging baby boomers will increase Medicare rolls by 36%, while during the same period, one-third of physicians will reach retirement
- Shortage could be addressed by increasing residency positions nationwide, but those are funded 75% by Medicare which lost \$740 billion from its budget with the ACA

The Theory of Labor Markets

- Input pricing
 - Derived from the demand for the final product and affected by prevailing conditions in the market
- Demand for inputs
 - The input demand curve is the marginal revenue product curve; see Figure 9.1
- Human capital investment
 - Investment in medical education
 - Rate of return to investment

Marginal Wage Revenue Product



The Market for Physicians' Services

- Between 1970 and 2013, the population of the U.S. increased about 50%
- During same time, the number of active physicians increased by 175%
- About 21% of current U.S. physicians graduated from foreign medical schools, and 23% fill current residencies
- More U.S. citizens are attending foreign medical schools

Specialty and Geographic Distribution; Physician Compensation

- In U.S. less than 40% of physicians in primary care specialties; goal to increase the number to 50%, like most other developed countries
- Concern for declining number of physicians practicing in rural and inner-city areas
- Increasing number of specialists are primary cost driver to health care system
- Median income of primary care physicians in 2010 was \$202,392, but for specialists, 75% higher at \$356,885

Alternative Payment Practices

- Physician payment was dominated by fee-for-service model, but now being tied to productivity metrics
- One alternative: measure and reward amount of work performed rather than number of patients seen and procedures provided (relative value unit or RVU)
- Every procedure assigned an RVU by CMS
- By 2010, almost 2/3 of physicians received bonus based on RVUs

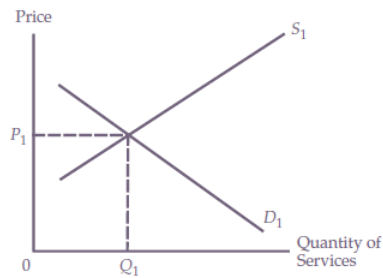
Pricing of Physicians' Services

- Prior to common health insurance coverage, most patients paid physician directly
- Physicians charged patients different prices based on their relative demand elasticities
- As insurance became popular, physicians' fees limited to usual, customary and reasonable charge
- Since 1992, Medicare fee schedule, largely followed by insurers

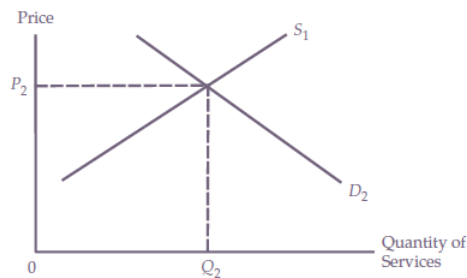
Organization of Physicians' Practices

- Physicians in solo practice has steadily declined over last decade, so that about 1/3 are now in solo practice, while 50%+ are in groups of 3 or more
- Group practices lower overhead cost, may increase range of services to include pharmacy, clinical lab, radiology, CT scan
- Most notable: more than 2/3 of physician practices are owned by hospitals
- Regional variations in surgery, other procedures

Small Area Variations



Region 1

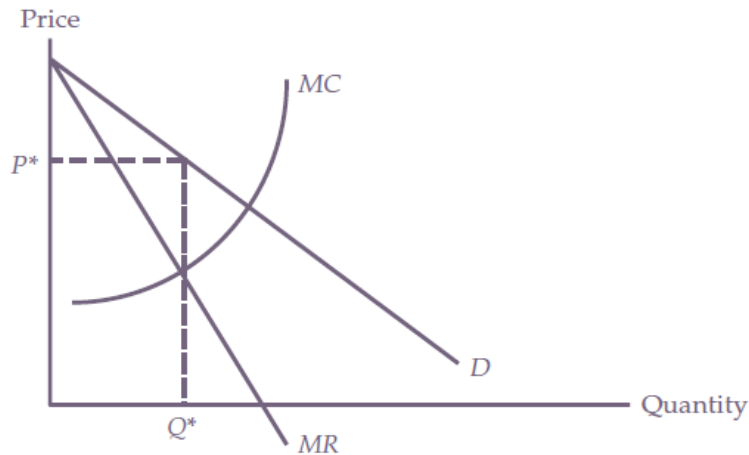


Region 2

Models of Physician Behavior

- The Physician as Monopolistic Competitor
 - Like the standard model of monopolistic competition, each providing a slightly different product or service, trying to differentiate their practices
- The Physician as Imperfect Agent
 - Using the principal-agent model, the perfect (physician) agent will recommend only the treatment that a fully informed patient would demand, but physician is also the provider; dual role creates conflict of interest

Pricing and Output Decision of Physician in Monopolistic Competition



Influencing Physician Behavior

- Two incentive regimes at work that interfere with one another:
 - Financial arrangement between payer and provider, designed to control moral hazard
 - Moral obligation between patient and provider to provide all necessary care
- Health plans have designed incentives including capitation, withholdings, bonuses, utilization reviews, to influence and limit a physician's independence

Do Physicians Respond to Incentives?

- Financial incentives key in explaining lower levels of spending and utilization
- RAND Study: physicians at risk for budget deficits had lower spending per enrollee, attributable to lower specialist referral costs
- Welch: physicians used more services in treating patients in fee-for-service plans than prepaid plans
- Melichar: physicians spend less time with their patients under capitated plans than noncapitated patients

The Market for Nursing Services

- Influenced by marginal revenue product
 - *Theoretically*
- Nursing services provided by different occupational groups, registered nurses (RNs) and licensed practical nurses (LPNs)
- Efforts to curb the growth of health care spending likely to significantly affect market for nursing services
 - Hospitals will use more nursing aides for low-skill, routine care
 - Demand for advanced-practice nurses will rise