NMNEC Concept: **Health Care Economics**

Mega Concept: Professional Nursing

Category: Care Delivery

Concept Name: Health Care Economics

Concept Definition:
The process by which health care resources are allocated to consumers.

In addition, health care economics can be defined as a social and behavioral science concerned with the study of how people deal with finite resources and scarcity. Two basic assumptions of health economics are 1) human behavior is goal-directed and purposeful and 2) human desire and demand for health care resources are unlimited but the resources are finite (Keller, 2017).

Scope and Categories: The primary problem addressed in the study of health care economics is how to allocate limited resources within the context of unlimited demand and how to finance the distribution of those resources.

Resource Allocation:
As noted, health care resources are limited but the demand for those resources is unlimited. As capitalism is the basis for the U.S. economy, the distribution of health care resources is considered to take place in a *market*. In markets, resources will be distributed to those purposes that consumers value the most, so producers of health care goods and services will produce what is required to satisfy that demand (Feldstein, 2019). An example would be cough drops. When consumers have a cough, they will highly value a cough drop and buy as many as necessary, along with tissues and throat spray. The consumer wants cough drops, not eye drops or bandages. The producer of cough drops will produce as many as consumers will buy during the influenza season but this same producer has no incentive to produce cough drops when demand falls. After the influenza season ends, the demand for cough drops is likely to decrease, so resources will be diverted to other demands valued by consumers such as bandages, eye drops or possibly the production of sunscreen.

In a free market, prices will adjust over time as supply and demand is balanced and an equilibrium price for a product is established. At equilibrium, there is no shortage or surplus of the desired product or service. The resources required for providing that product or service is efficiently and effectively distributed (Unruh & Spetz, 2012).

The purchasing behavior of health care consumers is complex and highly influenced by insurance, health system practices, culture and the pharmaceutical industries. Consumer purchasing power in the United States market signals the value that consumers place on healthcare goods and services. Therefore, when health care consumers prefer medical interventions, such as insulin, to control diabetes the market responds by increasing health care resources directed to those medical interventions instead of prevention strategies such as diabetes self-management education.

The result is a form of rationing based on price (Feldstein, 2019) that leads to gaps and inequities in the provision of health care goods and services. Rationing by price limits the demand for health care goods and services although it does not limit the need for these same goods and services. Access to insulin is assured for those who are able to pay the price but access is limited for others without the means to pay. To need a health care good, such as insulin, yet not be able to obtain it because the price is unaffordable is a violation of the principles of social justice.

Health Care Finance:
One way to expand access to health care goods and services is to increase the means for purchasing these resources across a wider market through the provision of insurance benefits. The most common way that health care is financed in the United States is through insurance benefits, either based on employment or through large government programs such as Medicare and Medicaid. Expanding access to health care resources through insurance financing assures that more individuals are able to purchase health care goods and services.

Employer-sponsored insurance coverage is common in the U.S. Government programs such as Medicare and Medicaid finance health care services for the elderly, for disabled persons, people who suffer from end-stage renal disease, and individuals whose income falls below a percentage of the federally-determined “poverty line”. Other federal programs cover special populations such as military members and veterans. The variety of insurance programs and plans in use across the country creates a patchwork of financing options in the United States that fail to provide consistent and comprehensive access to those who cannot qualify for a government program or are not able to obtain employer-sponsored health insurance.

As discussed earlier, assuring access to health care by providing insurance to a wider population means that upward pressure is placed on health care prices through increased demand. In free markets, increased demand results in increased prices and more resources being devoted to those services with the highest price. As the demand for health care services is unlimited, it

becomes obvious that the health care financing would consume more and more resources that would have to be pulled from alternative uses, such as housing, food, and education. This results in an intolerable social situation that concerns everyone. Much of health care policy decision-making about health care financing is an ongoing process to balance supply and demand in the health services market.

Attributes:

Asymmetry of Information:

Market theory assumes that consumers and producers in a market are making purchase and sales decisions based on knowledge of the service or product exchanged in a transaction. However, the consumer in a health care market is often at a disadvantage in that they do not have the same knowledge of the product as does the producer/seller. Most health care consumers are able to determine that they need a cough drop or a bandage. In the case of more complicated health concerns, the consumer is less able to judge for themselves. The consumer might require a diagnosis, might need extensive care and services delivered by a variety of health professionals in a specialized setting, or they might need a treatment regimen that includes multiple medications and ongoing interventions. Or the consumer might be a small child, have limited cognitive or language skills, or be a relatively healthy individual who has developed an acute condition, such as appendicitis. In these types of situations, the consumer is at a disadvantage when entering a transaction with health care producers, many of whom have professional educations and superior knowledge of the product or service.

Health care provider:

Health care is a very broad and complex service sector that requires knowledgeable and highly skilled workers. As health care goods and services become more sophisticated in terms of knowledge and technology, a variety of skills are needed to maintain high quality health care. The initial education of health professionals is usually long and arduous and the expectation is that these professionals will continue to obtain continuing education throughout their careers. Their advantage, in terms of knowledge and experience, over consumers in the health care market is great and there is great potential for providers to derive a greater benefit than the consumer during the transaction (Feldstein, 2019).

Incentives:

Health care financing creates *incentives* that affect both the provision and consumption of health care products and services. An incentive influences the behavior of people in that they expect a reward or a punishment based on what they perceive to be the costs or benefits of that action. For example, health insurance prompts people to consume health care goods and

services since the real cost of those goods and services are hidden. If an insurance policy provides for 80% of the cost of a physician office visit, the consumer is able to visit the physician more often than if the consumer was paying for that visit with their own funds. This works to expand access to physician services but it also acts as an incentive to over-consume based on the consumers' perceived benefit from additional services.

Theoretical Links:

- Agency relationships: In health care situations where there is asymmetry in information, such as that between patient and health care provider, the provider is considered to have a professional and ethical responsibility to serve the best interests of the patient. An *agency relationship* exists where the health care provider is the *agent* acting on behalf of the patient. There is always a risk that the agent will fail to act in the patient's best interest, a situation known as *moral hazard* (Mankiw, 2015) A variety of incentives can be created that promote moral hazard in the agency relationship. For example, reimbursing health care providers based on the quantity of services delivered creates an economic incentive to increase the amount of services delivered, regardless of patient need (Feldstein, 2019).
- Cost-effectiveness: Health care economics seeks to find the best way to satisfy the unlimited demand for health care with limited resources. The resource and cost implications of this goal means that the benefits of a health care good or service have to be evaluated in relationship to its cost (Keller, 2017).
- Efficiency: According to Italian economist, Vilfredo Pareto, efficient allocation of health care resources is met when no one can be made better off without another being made worse off. The distribution of resources is in equilibrium (the Pareto Efficiency). Efficient allocation of resources would also mean that these resources are not wasted (Keller, 2017).
- Value: Cost-effective and efficient allocation of resources results in value (Keller, 2017). System efficiencies can be measured, such as the amount of nursing hours required to provide care in a particular unit. However, health care outcomes are not always measurable. For example, what value can be measured from the large consumption of resources required to keep preterm infants or elderly parents alive? Some values in health care relate to ethical considerations and are unmeasurable, at least in terms of monetary value. However, many other values are indicators of quality that can be measured. For example, a simple measure of quality might be the number of days required for rehabilitation care after hip replacement surgery. If it is expected that an elderly patient will spend 10 days in a rehabilitation unit after surgery and that patient is discharged by day 9 at the expected level of function, some assumptions can be made about the quality and relative value of the care received for the amount of money spent on that care.

- Transaction Cost Theory (TCT): The links to cost-effectiveness, efficiency and value can be illustrated by Williamson's Transaction Cost Theory. In this theory, health care transactions serve one of two purposes, (1) the production or delivery of care or (2) the coordination of care (Keller, 2017). The goal is that coordination of all the various transactions that occur as a patient is participating in the health care system should result in a seamless and efficient manner. This theory is relevant because health care goods and services are delivered and consumed in complex organizations where there is a great need for efficient and effective coordination among multiple departments, units and among many different providers. As a patient moves around the system, multiple exchanges occur between the many people involved with an episode of care. Each exchange (transaction) experienced by the patient has a cost in terms of valued outcomes for either the patient or the organization. There is the potential at each exchange for errors or omissions that result in increased transaction costs. For example, during a handoff between two units, a critical piece of information is not communicated and this results in a delay in treatment. The result could be additional costs in terms of unexpected costs to the patient, provider or organization that are a waste of resources and a loss of system efficiency.

Context to Nursing/Healthcare:

- Patient Protection and Affordable Care Act of 2010 (PPACA)
  The PPACA is the federal health care reform legislation enacted to expand access to health insurance to many uninsured people in the United States primarily through a combination of insurance market reforms and the option for expansion of state Medicaid programs.

- The Center for Medicare and Medicaid Innovations continue to test various payment and service delivery models that aim to improve patient outcomes, curve fiscal healthcare spending and encourage healthier communities. The quality payment programs include but are not limited to Value based Purchasing, Accountable Care Organizations, Next Generation Accountable Care Model and Meaningful Use Programs. These innovative models address the high cost of health care by encouraging the development of and restructuring of healthcare delivery to decrease transaction costs and limit the fragmentation of health care delivery systems. These organizations might take a variety of forms, but the common structure is a combined system of multiple providers that collaborate to coordinate care. The networks of providers may include acute care hospitals, home health agencies, long term care facilities, physician groups and rehabilitation centers that work together to provide comprehensive care for elderly Medicare and Medicaid beneficiaries.

- Pay for Performance
  Government "pay-for-performance" programs were developed to incentivize providers to improve the quality of care by tying provider reimbursements to certain outcomes. For example, one outcome that would result in higher reimbursements for the hospital organization would be that all patients admitted with pneumonia are administered an influenza vaccine. Another pay-for-performance action would be to stop reimbursing hospitals for the treatment of hospital-acquired conditions, such as pressure ulcers.

Knowledge	**Skills**	**Attitudes**
Examine the relationship between supply, demand, resource allocation and costs	Demonstrate knowledge of how organizations and health care providers are reimbursed	Appreciate the need to conserve resources while optimizing care provision
Evaluate the difference in government vs private financing of health care services	Demonstrate knowledge of major government health care financing programs, i.e., Medicare and Medicaid. Demonstrate a basic knowledge of insurance market reforms, i.e., the " individual mandate" Demonstrate an understanding of how economic and financial incentives influence behavior	Appreciate how health care economics and financing promote access to care. Appreciate how incentives promote moral hazard. Appreciate how financial incentives are used to promote quality of care.

Interrelated Concepts:

Health care economics should not be considered conceptually without taking into account the interrelated concepts of **Health Policy** and **Health Care Law**. Health policy and the health laws established to support and regulate health care delivery have a definite impact on the development, delivery and coordination of quality health care services within any health system. This almost always includes an economic impact. For example, the implementation of Health Insurance Portability and Accountability Act (HIPPA) resulted in additional administrative expenses for most health care facilities as new measures were taken to protect the personal health information generated during care activities. Some of this expenses involved changes to information technology systems, additional training for health care workers about the law, and, in some cases, actual changes in the physical layout of health care facilities resulting in

increased construction costs. The economic implications of changes in health policy and health laws should always be considered, especially the potential effect of a policy or law on the distribution of scarce health care resources.

New Mexico Nursing Education Consortium (NMNEC) Required Exemplars:

- Financing Access
  - Patient Protection and Accountable Care Act (PPACA) Medicare
  - Medicare
  - Medicaid
  - Private Insurance
- Pay for Performance
- Cost of patient care episode
  - Different financing
  - Facility

Optional Exemplars:

- Transaction Costs
  - Hand-offs
  - Case management
  - Interdisciplinary communication
- Centers for Medicare and Medicaid Services (CMS)
  - Innovation Center
    - Quality Payment Program (Centers for Medicare and Medicaid Services (CMS), 2019)
- The economic basis of health disparities: minority health
- Uninsured and underinsured populations: “working poor”

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