**Chapter 2**

**Healthcare Delivery Systems**

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**Real-World Case 2.1**

The American healthcare system is a patchwork of not-for-profit and for-profit entities that provide comprehensive diagnostics and treatment services. Marsha, the supervising coder at her local hospital, became a veteran of this system after she noticed neuropathy in her right arm. She first noticed a tingling in her right shoulder and elbow in February and by July the discomfort had increased so that the tingling had become painful throughout the entire length of the arm to such a degree that the arm was almost unusable and she had to take time off from work. She set up an appointment with her family practitioner and was seen seven days later. He ordered x-rays of the arm as well as a cervical MRI. While the x-rays did not show any involvement in the affected joints, the MRI indicated cervical stenosis at the C4–C6 levels. Her physician prescribed pain medication and recommended that she see a neurologist. Her physician ordered a neurological consult, which took place three weeks later. The neurologist performed an assessment, looked over the MRI results, and referred her to a neurosurgeon at another hospital in a major city to the east to have her neck evaluated and fused. Four weeks later she was seen by a neurosurgeon who wanted her to have a cervical CT scan with contrast. The CT confirmed the cervical stenosis. Surgery was set for November 1. The surgery was successful and after six weeks of convalescence she was able to go back to work. Marsha was convinced that she had the best possible care, though the cost was extremely expensive. During the process she was involved with six medical doctors (her family physician, the neurologist, a radiologist to read the MRI scans, the neurosurgeon, another radiologist to evaluate the CT scans, and an anesthesiologist who was present during surgery) and five different facilities (her family physician office, the hospital where the x-rays and MRI were done, the neurologist’s office, the neurosurgeon’s office, and the hospital where the CT scans and the surgery on her cervical spine were conducted). Throughout the entire process Marsha was required to carry her medical record from one facility to another as the family physician and neurologist were not part of the EHR with the local hospital where she worked, nor was her hospital able to electronically share her information with the hospital where the neurosurgeon practiced. She also made sure to check her patient portal at each hospital to verify appointments and to ensure that the correct information was being entered for each of her visits.

# Real-World Case Discussion Questions

1. How could the length of time from diagnosis to surgery have been reduced for Marsha?

The length of time from diagnosis to surgery could have been reduced if she began right away with a neurologist or to go directly to a hospital with more technology on hand. Unfortunately, though, due to insurance requirements, typically most people have to begin with their primary care and not go straight to a specialist. If she lived in a place that offered a group of specialists and general doctors within one company, she may have been able to see a doctor sooner and not have to wait so long to get in. Information could have been shared, too.



2. What are ways that Marsha could have shared her information between all of the facilities? Due to the lack of the EHR within the hospitals, she may have been able to request the records be mailed directly to each location or scanned and emailed to her (if legally possible) That way she can turn her information into some sort of HER.

1. What could her providers have done to make the sharing of information easier for Marsha?

Her providers could have simply communicated within each other and forwarded the information to them directly then have Marsha do it on her own.

**Real-World Case 2.2**

A municipal medical center in a city of 100,000 residents decided that they needed to diversify if they were going to survive the ups and downs of the economy. The board of directors met with the chief of the medical staff to determine the best course of action. They mutually decided to emphasize a cradle-to-grave approach by acquitting a few selected physician practices and a local nursing home, starting a home health agency, and creating a hospice unit within the medical center. The board then decided to link all of their new acquisitions to the medical center’s existing EHR but ran into a problem with patient identification for medical record purposes. The issue was that the same patient may have been or were going to be in multiple facilities within the new enterprise. However, at each of the present facilities (physician office, medical center, and nursing home) the same patient would have different medical record numbers. A plan for an enterprise medical record number was needed. The medical center administration decided to bring in the HIM director of the medical center to provide expertise and experience in resolving the problem.

# Real-World Case Discussion Questions

1. How is this situation complicated by not having all of the facilities linked into a common EHR?

By not having all of the facilities linked on one EHR, information can be missed or duplicated. Now they have to somehow gather all of the patient’s information from each individual provider/location and create a whole new folder for all of the information and then organize it to ensure it is easy to access and read. You don’t need duplicate information.

1. Whom would the HIM director have to work with to make an EMPI project successful?

The HIM would have to work with other HIMs and HITs. The director would need a collaboration of help from different groups like: financial experts, doctors, accounting, business office, and even leaders within each major institution. It’s a big task and requires a lot of information gathering and organizing and filtering.

1. What are the advantages to all facilities of having a shared health record number?

Once the facilities have a shared health record, you can ensure every patient isn’t missing information, there is simple sharing of information among the facilities, and it’s easier to keep track of costs, patient’s needs and history.

# Application Exercises

*Instructions:* Answer the following questions.

1. Break into small groups. Each group will identify a terminal condition for a patient and determine the pathway that that patient will take starting from their family medicine clinic to ending with hospice care.

Patient has migraines, patient visits primary care doctor and doctor prescribed ibuprofen, she went back later when migraines didn’t subside and doctor requests an MRI, radiologist sees a mass, sends the patient to a brain specialist and wants to determine if tumor is benign or malignant, sends patient to a neurosurgeon, surgeon says it’s malignant, requests body scan, determines it’s metastasized in other parts of body, patient has less than 3 months to live, gets put in contact with hospice and gets a plan, receives hospice and home care assistance and passes away.

1. Once the pathways have been determined for your group’s terminal patient, evaluate the process, looking for bottlenecks and places where the patient will feel neglected or treated as a subject rather than as a person. Make suggestions as to how the healthcare delivery system could be improved for their patient.

Patient is sent to numerous locations. Due to a lack of specialized doctors, she didn’t have any options locally to try some forms of cancer treatment. Due to the doctor not taking the migraines seriously in the beginning, she wasted time. Having more options nearby to receive an MRI quickly may have encouraged the doctor to get imaging sooner.

3. Complete the following table by detailing the responsibilities of each type of staff member.

Organization of Hospital Services

|  |  |
| --- | --- |
| **Staff Position** | **Responsibilities** |
| Board of directors | For successful operation of organization |
| Medical staff | Provide diagnosis and treatment plans for patient |
| Administrative staff | Ensures the organization runs as determined by BOD |
| Patient care services | Provides direct care to patient |
| Diagnostic services | Reviews history, examines patient, lab work |
| Administrative support services | Ensures patients receive great customer service |

**Review Quiz**

*Instructions:* For each item, complete the statement correctly or choose the most appropriate answer.

1. Which of the following places an emphasis on treating individual patients at the level of care required by their course of treatment and extends from their primary care providers to specialists and ancillary providers?

a. Continuum of care

b. Integrated delivery systems



c. Case management

d. Integrated delivery networks

2. As of 2014, what percent of the U.S. economy was represented by healthcare spending?

a. 10

b. 17.5



c. 21

d. 26

3. What is the ideal ratio of medical generalist to specialist?

a. 20:80

b. 40:60

c. 60:40



d. 80:20

4. Registered Nurses are only formally educated at the bachelor’s degree.

a. True

b. False



5. Which of the following is considered an Allied Health professional?

a. Physicians

b. Physician Assistants

c. Registered Nurses

d. Licensed Practical Nurses



6. Occupational Therapists are concerned with a patient’s activities of daily living.

a. True



b. False

7. Which of the following federal laws created Medicare and Medicaid?

a. Social Security Act of 1935

b. Public Law 92-603 of 1972

c. Public Law 89-97 of 1965



d. Tax Equity and Fiscal Responsibility Act of 1982

8. Medicare will pay the Medicaid premiums, deductibles, and coinsurance costs for some low-income Medicaid beneficiaries.

a. True



b. False

9. What is the name of the process to determine whether medical care provided to a specific patient is necessary according to pre-established objective screening criteria at time frames specified.

a. Case management

b. Continuum of care

c. Quality improvement

d. Utilization review



10. HITECH was a portion of which bill?

a. Health Insurance Portability and Accountability Act of 1996

b. Patient Protection and Affordable Care Act of 2010

c. American Recovery and Reinvestment Act of 2009



d. Public Law 98-21 of 1983

11. What is the name of the type of beds in a hospital that are defined by those authorized by the state?

a. Staffed

b. Licensed



c. Regulated

d. Certified

12. To qualify as a Critical Access Hospital one of the criteria is to be located in a rural area.

a. True



b. False

13. One of the functions of the board of directors is to approve the organization and makeup of the clinical staff.

a. True



b. False

14. The “C” in CIO stands for:

a. Corporate

b. Corporate

c. Clinical

d. Chief



15. Health information management departments are considered which of the following?

a. Rehabilitation Services

b. Ancillary Support Service



c. Administrative Support Services

d. Clinical Support Services

16. Hospital-owned group practices are considered ambulatory care organizations.

a. True



b. False

17. One group of patients that prefer treatment at urgent care centers are those whose insurance carriers treat urgent care centers preferentially when compared with physician offices.

a. True



b. False

18. Which of the following is the fastest-growing sector to offer services for Medicare recipients?

a. Urgent care

b. Long term care

c. Hospice

d. Home health



19. Rehabilitation hospitals are categorized as an acute care type of facility in treating patients.

a. True

b. False



20. Which of the following is a main goal in treating hospice patients?

a. Curing the patient of their illness

b. Relive the family of providing care

c. Minimize the stress and trauma of death



d. Reduce the costs for the patient’s family

21. Which of the following is the health profession that focuses on the eyes and related structures?

a. Occupational therapy

b. Optometry



c. Diagnostic sonography

d. Dietetics

22. Public Law 89-97 of 1965 created a number of amendments to which Act?

a. Affordable Care Act

b. Health Insurance Portability and Accountability Act

c. Social Security Act



d. Medicare and Medicaid

23. The Office of the National Coordinator for Health Information Technology was created as part of which Act?

a. Health Insurance Portability and Accountability Act

b. Social Security Act

c. Patient Protection and Affordable Care Act

d. American Recovery and Reinvestment Act



24. Who has the primary responsibility for setting the overall direction of the hospital?

a. Board of directors



b. Chief executive officer

c. Chief financial officer

d. All employees of the hospital

25. The medical staff operates according to a pre-determined set of policies called \_\_\_\_\_\_\_\_\_\_\_.

a. Policies and procedures

b. Medical staff bylaws



c. Medical staff credentials

d. Legal guidelines