**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?

In my opinion Marsha should have contacted her PCP as soon as she noticed the tingling in her arm. She was referred to different providers many times, at different locations. I think that her PCP did the right thing by ordering the x ray as well as the ct scan, and then referring her to a neurologist. I don’t think it was necessary for the neurologist to refer Marsha to another neurologist in a city far away. That added 4 extra weeks on to her receiving treatment. I feel the neurologist already knew and just wanted a second opinion. They could have treated Marsh themselves. Agree- she could have also worked with her insurance company to find providers all in the same healthcare system who also used the EHR.

1. What are ways that Marsha could have shared her information between all of the facilities?

The EHR is a perfect way for all facilities to be able to share Marsha’s medical records. We are not quite there yet, but I believe there should be one universal system that healthcare organizations use to share patient information. In pre-EHR days, patients could have carried their paper records with them. The providers could fax or scan and attach to an email to the next facility. Access to patient portal. Create her own personal health record (PHR).

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

Marsha having to carry around her medical record to every provider she saw was unnecessary. Her provider and the first neurologist she saw should have EHR for every patient. I feel for the times we are in there is no reason not to switch from paper records to the EHR. In a perfect world all healthcare providers and organizations should be able to share patient information through one system. Until that happens, Marsha should not be responsible for carrying around her record. I think that the medical records dept or release of information dept could have faxed or mailed the information that was needed for her consults. The providers could be a part of the health information exchange where information is shared across various providers.

**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 all of the facilities not using a common EHR it can make it harder for medical staff to identify a patient. Patients are seen at more than just one facility, and having a different medical record number for each can make treatment more difficult.

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

The HIM director will have to work with all departments of the hospital, and all external locations to ensure that this project is successful. Each dept and facility will need to transition to the hospitals EHR.

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

# When all facilities are sharing the same EHR, identifying patients at multiple locations becomes easier. And sharing patient information is smoother as well.

# 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.

While doing a self breast exam, Linda felt a lump in her left breast. She called her PCP and was able to be seen within the week. Her PCP ordered imaging to be performed. Linda had these done within the week. After reviewing the images her PCP refers Linda to a breast specialist. Linda’s appointment isn’t for 6 weeks. The breast specialist runs additional testing and biopsies of the lump in Linda’s breast are taken. Results are not completed for a few weeks. The specialist sends Linda a letter with her recent test results. She has stage 3 breast cancer. Linda has surgery to remove her breast and has several rounds of chemotherapy, but the cancer has already spread to other parts of her body. Her PCP suggests that she consider hospice at this stage. Good

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.

The breast specialist should have called the patient directly rather than send her a letter. I

feel that providers just go through the motions of treating patients they forget to personalize the care provided to patients. Patients want to feel empathy and that their care

is designed just for them. I think patients would be happier if they felt their providers really cared about their health.

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 | Develop the hospitals strategic direction, the mission, vision, and values of the hospital. They establish bylaws in accordance with the organization’s legal and licensing requirements, select qualified administrators, approve the organization and makeup of the clinical staff, and they monitor the quality of care. Yes- overall direction of the hospital |
| Medical staff | Physician’s objective is to provide high quality care to patients that come to the hospital. They diagnose illnesses and develop treatment plans. They also make help make decisions on the hospitals governing board. Medical staff are granted permission to perform clinical services. Physicians who have received extensive training. |
| Administrative staff | The administrative staff are responsible for implementing policies and the strategic direction set by the board of directors. They build the executive management team that is responsible for finances and ensuring that the hospital complies with all federal, state, and local rules, standards, and laws. |
| Patient care services | Nurses are responsible for around the clock treatment and support for hospital patients. They have a role in treatment planning and case management. More responsibilities include performing patient assessments, creating care plans, evaluating the appropriateness of treatmean, and evaluating the effectiveness of care. Patient care services also provide emotional support with patients and their families. |
| Diagnostic services | Diagnostic services also includes therapeutic services. These services are provided by allied health professionals. Diagnostic services include clinical laboratory, radiology , and nuclear medicine. Therapeutic services include clinical lab services, radiology, and radiation therapy. |
| Administrative support services | Admin support services provide business management an clerical services. These services are provided to admissions and registration, claims and billing, accounting, information services, human resources, public relations, fund development, and marketing. |

**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 Medicaid will pay for Medicare premiums.

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