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# Healthcare Management Primer

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# Healthcare Management Primer



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## An Introduction to the Management & Organization of Healthcare

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# Population Health

## Chapter 1

### Learning Objectives

- Understanding Population health - what is it and how do we achieve it?
- Understanding the social determinants of health
- How to determine the needs of the community
- What population services organizations provide

### Terms to know:

- **Value-Based Care**
- **Triple Aim Approach**
- **Accountable Care Organizations (ACO's)**
- **NHEA**
- **Community Needs Assessment**

### Introduction

In order to fully understand the concept of Population Health, one must acknowledge that the definition of “Health” is “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (“Constitution of WHO...”, n.d.). With that being said, the goal of achieving optimum population health is to address and improve the broader factors that influence “the health outcomes of a group of individuals, including the distribution of such outcomes within the group”, in order to reduce inequalities in health (Kindig, Stoddart, 2011). Effective implementation of measures taken to improve population health will benefit not only the members of the community, but the healthcare organization that will become more profitable as a result of preventative care eliminating the need for costly acute and chronic care

procedures. If communities are successful in these measures taken to improve the health of their populations, the entire nation will benefit from the overall healthier population which, in turn, will lead to higher quality care and a reduction in cost for procedures that aren't occurring as often. In this chapter, we will discuss the factors that contribute to inequities and poor health within a population, known as the "determinants of health", as well as discussing the method of determining community health needs, approaches in implementing population-based health care, examples of health services performed in a community and the sources of funding that contribute to improving the health of a population.

## **Social Determinants of Health**

Out of all of the many factors that contribute to the overall health of an individual and community whether it be policies, social and economic factors, health services, behaviors, genetics, or even just simple exposure to germs, it is social factors (social determinants of health) that have the greatest impact on overall population health. The interaction between individuals and these factors known as "determinants of health" ultimately determines the health of the overall population. When attempting to improve the health of the population, it is crucial to understand that "social determinants of health are conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks" ("Social Determinants of Health, n.d.) When factors such as socioeconomic status, education, social support services, public transportation, and safe housing negatively impact the individuals of the community, stress is more likely to occur which will result in poorer health. It was found that "though health care is essential to health, research demonstrates that it is a relatively weak health determinant" and that "social factors, including education, racial segregation, social supports, and poverty accounted for over a third of total deaths in the United States in a year" (Heiman, Artiga, 2015). When attempting to improve overall population health, it is imperative that a community identifies and addresses the social determinants of health.

Given that most people have limited control over most of the factors that determine their health, strategies to improve population health typically revolve around targeting multiple determinants and eliminating disparities. In an effort to address the determinants of health in a given population, a community may implement a strategy that aims to assist an individual in more ways than just providing health care. Even though providing health care will benefit the individual who needs it at the time, it will not help the individual in the long-run as it is not addressing the root of the problem. As an example, take the community of Camden, New Jersey which is known as perhaps the most impoverished community in the country. With that being said, "individuals were having difficulty accessing primary care along with a number of behavioral, social, and medical issues. In response to these challenges, the Camden Coalition of Healthcare Providers created a citywide care management system to help connect high utilizers

of hospital emergency departments with primary care providers” (Heiman, Artiga, 2015). As a part of this individualized system, a provider and a social worker would meet with patients to help identify and try to improve both medical and social needs. Upon receiving assistance with medical and social needs, it was found that hospital and emergency department utilization from these patients had significantly decreased.

While it may not always be easy, it is extremely important that a community address the social determinants of health in order to improve overall population health. Since all communities may not be able to address each individual social need, it is crucial that communities attempt to address *some* of the population’s social needs. By holding a job fair, opening a community-funded day care center, or creating a family-friendly park, a community could reduce even the slightest amount of stress on the population which would make all the difference in improving overall population health.

### *Knowledge Check #1*

*What is one way that a community can address the social determinants of health?*

## **Health Needs Assessment**

In 2010, with the new implementation of the Affordable Care act and Patient Protection Act, there were many new changes in the healthcare sector. One change, consisted of updating of the standards that nonprofit hospitals are required to meet in order to qualify for tax exemptions. One specific requirement includes conducting a Community Health Needs Assessment, as well as then developing an implementation strategy, every three years.

A Community Health Needs Assessment consists of a long term written report plan that uses data to analyze and understand the health within a specific community. These assessments include information on risk factors, quality of life, mortality, morbidity, social determinants of health to assess the community health and prioritize the community’s health needs as they can. This data is collected and used to develop and implement strategies to serve the communities’ health needs and identify issues within the specific community. These assessments are followed with improvement plans or processes that work to address the specific health needs found in the assessments. Many of these improvement processes include developing new policies, collaborating with community partners, or designing and implementing new resources and services to benefit the community (“Definition of community health assessments...”, n.d.) “The regulations require that the assessment address not only financial and other barriers to care but also the need to prevent illness; ensure adequate nutrition; and address social, behavioral, and environmental factors that influence the community's health or emergency preparedness” (James, et al., 2016). Any hospital that fails to comply with the community health needs assessment is subject to a \$50,000 excise tax penalty.

North Country Hospital (NCH) conducted a Community Health Needs Assessment in 2015, in which they identified issues that are affecting their community's health based on data from community surveys and quantitative data sources. North Country hospital is a non profit, acute care community hospital located in the rural northeast area of Vermont, and serves over twenty-two communities ("Overview: where caring runs deep", n.d.). Following a lengthy process of collecting qualitative and quantitative data, NCH along with community stakeholders identified six priority health concerns the community is encountering, and they believe can create a positive impact through implementing strategies to meet those needs.

After reviewing the data and community survey results, the advisory team for NCH found that the main health concerns were tobacco use, substance abuse, obesity, access to medical care, dental care and mental health and substance abuse care when needed. In order to create the Implementation Strategy, representatives from local agencies and partners, along with the advisory all got together to discuss the best ways to address the identified health needs.

NCH added group and one-on-one coaching and free access to nicotine replacements, as well as adding two tobacco treatment specialists. They have also renewed a grant to allow schools to apply for tobacco prevention. NCH added a fourth full time social worker, as well as continuing their inter-agency collaboration through the Hub and Spoke Model for opiate treatment. They have worked to increase cancer screenings, mammograms and pap tests to improve prevention and early detection. NCH continued its collaboration with the VT Blueprint for Health to provide education regarding diabetes, as well as creating a diabetes support group, adding another full time dietitian, and offering many different physical activity options at the wellness center. NCH has partnered with more agencies around the community to be able to improve the access to different health services for community members. Overall, this is just one example of how one hospital has used their community health needs assessment to work to improve the health needs of the community, and improve population health ("North Country Hospital – December 2015 CHNA appendix C", 2016).

### *Knowledge Check #2*

*What is a community health needs assessment?*

## **Population Based Healthcare Approach**

A major part of population health, is in deciding where to spend and focus resources on the patients in the community. The North County Hospital in Vermont, uses a population based health care approach called the four quadrant model, in which helps them to choose where they need staffing, where their money and resources should go, as well as what they can do to prevent people from becoming sicker.

The four quadrant model is essentially four different categories in which groups individuals depending on their health status, complexity of care and risks. The first category is

the healthy/well people, which contains about forty-four percent of the population. The focus in this group is to maintain health through preventative care and community based wellness activities. Most of the people are considered healthy and low risk, and do not require much care or assistance. The second category consists of people who are at medium risk and are early onset to a chronic illness or have a stable chronic illness, and are about forty percent of the population. The focus of this group is to optimize health and self management of chronic diseases. The third group consists of ten percent of the population, and are high risk people who have full onset chronic illness and their risk is rising. The focus for this group is to manage this chronic illness and identify the social determinants of health that may be affecting their chronic disease. The last group consists of six percent of the population in which contain the highest risk people who need the mostly costly and complex care. This group's goal is to address their complex medical and social challenges by creating goals, action plans and prioritizing tasks.

NCH is rising the number of primary prevention programs- to detect illness sooner and educate them about how to stay healthy. They're creating wellness campaigns – with health education and resources, wellness classes and parenting education. They also have home visiting programs to ensure individuals are staying healthy- by exercising and eating right. They have peer to peer collaborative learning, and a patient resource library. NCH is coordinating and sharing plans amongst team members as well as having meetings with care teams to coordinate the best care for the patients. Forty percent of spending, is spent on the very high risk and high risk populations. This means that hospitals and healthcare organizations need to use their resources as well as they can to manage their spending and the patients as well as they can.

With different geographical locations, the population groups may have different percentages, or may require different needs. For example, NCH is in a rural area, but in a hospital in Manchester, NH where there is a big city with low income people, a lot of poverty, poor education, may require different resources and population health percentage groups. It's important for hospitals and healthcare organizations to know what the issues are and where to spend the money/ resources.

*Knowledge Check #3*  
*Describe the four quadrant model.*

## **Services for the Community**

The community serves a large role in being able to determine what you will use to address the population health of your community's unique demographic. Once the **Health Community Needs Assessment** has been conducted and analyzed you can see which areas need to be improved on. It is important to remember that while you are grouping a set of people together to better adhere to their needs, there will still always be outliers who need certain care. Some examples of services that may be provided by a community hospital include, but are not



limited to: Care Managers, Clinical Dietitians, Transportation and Wellness Centers. These are all ways to address populations to take advantage of healthy opportunities as well as provide for those who have trouble accessing them.

Care Management has been widely adopted by many healthcare organizations because of its unique ability to target certain populations. If a certain rural area has many geriatric patients, then one way to address their health would be to assign care managers. These managers help guide patients to the most appropriate care that they need. They keep an eye on their patients when families may live far away or cannot find time to care for their loved ones. Unfortunately, many families do not utilize care managers and subsequently spend more money while caring for their loved ones. (Care Management, 2015)

Clinical Dietitians help patients with planning and maintaining good nutrition. This is important because a healthy diet is a huge help when it comes to implementing preventative care. If patients are already aware and are participating in eating well, then they will be more likely to avoid nutrition-related diseases. Hospitals utilize dietitians to inform their patients about ways in which changes in their diet can change how much the care they receive affects them. (Rolls, 2016)

Transportation barriers can prohibit people's access to healthcare. This is the third most common barrier in accessing services for the older population. To address this, Health Care organizations can establish volunteer driver programs, operate buses and shuttles and inform eligible patients of Medicaid non emergency medical transportation. (Health Research, 2017)

Wellness centers are also a good way to entice people to get active and participate in a healthy lifestyle. Many hospitals are affiliated or own wellness centers because they improve overall health within their communities. Wellness centers provide cooking and educational health classes as well as provide a safe space for healthy activities such as spinning, yoga and weightlifting. These wellness centers also often include rehab centers for those who need rehabilitation after an injury or surgery.

When an HCO identifies its needs, it can then develop strategies to address the health concerns of its target population. By promoting healthy eating and exercise as well as helping those with access barriers, hospitals can create an environment focused on the overall health of all those in the community that it serves.

#### *Knowledge Check #4*

*What are some services that hospitals provide to address health in their community?*

## **Population Health Funding**

So far, many questions have been answered on what is population health and how to address it, but one more large question still looms. How do we pay for it? This is a tough

question to answer because there are many variables and factors that make it difficult to calculate how much is funded to public health, but there are agencies that attempt this calculation.

The **NHEA (National Health Expenditure Accounts)** are a system that accounts for spending in the U.S. on healthcare and where the funds come from. (Index, 2014) Per NHEA, 3% (\$77.2 Billion) of the nation's budget for healthcare was spent on government public health activities in 2009. This equates to a per capita expenditure of \$251 per person on public health. Only a relatively small slice of the funding came directly from the federal, state and local governments. Out of the \$77.2 Billion, 14.9% is funded by the federal government and 85.1% is attributed to local and state governments. (Committee, 2012)

Historically, public and population health has seen vast underfunding as well as budgets that do not maximize the potential benefits of implementing population health. Thus, many areas of population health fail and there are large gaps in the quality of care created in their wake. Not for-profit hospitals are funded in a variety of ways including payment from, medicaid and medicare, grants and private insurance. In light of the lack of funding there have been aims to implement changes in preventative care in order to cut the growing costs. However, population health is one department that can receive incentives for providing quality and preventive health. As the health model of fee for service begins to turn into a model based on the quality of care, rather than the amount of people in hospital beds, this will in turn end up making population health a more attractive area to fund. As HCO's become even further detached from the fee for service model funding for programs based on population health that are preventative in nature and use the **triple aim approach** will receive more funding for the quality of care will go up and the costs will be lower.

One way this is being done is through **ACO's (Accountable Care Organizations)**. When an organization becomes an ACO it does so voluntarily. This process involves physicians and staff to work together with their organization to make sure that those who need the most urgent care receive it and those who can be limited to less visits are addressed. (Overview, 2017) This way healthcare dollars are spent more efficiently by avoiding duplicate services, adverse events and can be allocated to those who are in desperate need and very ill.

There is still much work to be done when it comes to funding the population health model, and as more and more healthcare organizations follow this approach, policy will subsequently have to catch up. But with having quality of care as the driver the surmounting healthcare costs will eventually see a decline in costs within the transition towards **value-based care**.

#### *Knowledge Check #5*

*What percent of the nation's health care funding goes towards population health?*

## **Answers to Knowledge Check:**

1. Holding a community job-fair.
2. Community health needs assessment is an assessment required for non profit hospitals every three years, in which works to improve the health needs of the community.
3. The four quadrant model is a model designed to group populations together based on the complexity of their health and amount of health risks they have. The four quadrants are low risk, medium risk, high risk and very high risk, which is used to determine where and what resources to spend money on.
4. Wellness centers, care managers, clinical dietitians, transportation and many other services.
5. 3%

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# Board Responsibilities

## Chapter 2

### Learning Objectives

- Understand who the members of the board are
- Comprehend the committees of the board
- Define how board members of the board are chosen
- Understand board members duties and responsibilities

### Terms to know:

- Board of Governors
- Board of Directors
- For-profit
- Non-profit
- Good governance
- Bylaws
- Committees
- The Duty of Care
- The Duty of Loyalty
- The Duty of Obedience

- **Stakeholders**
- **Fiduciary Duties**
- **Direct Retirement**

## Introduction to Boards

Within a healthcare organization (HCO), there are many people responsible for what goes on within a hospital. For instance, within a non-profit hospital, you will have a Board of Governors which can be comprised of CEOs, CFOs, community members and more. One of their main priorities is to navigate the HCO towards a solid, profitable future that follows a specific mission that the board decides upon. Keeping that in mind, the **Board of Governors** strives towards a similar priority as a Board of Directors. The **Board of Directors** belongs in for-profit HCOs. For both non-profit and for-profit hospitals, they have similarities and differences that separate them. Overall, boards govern the hospital and provide structure to an HCO making them very important.

Boards typically discuss events happening with the hospital. A Board could ask questions such as, “what is of concern, how can we address it and is it alarming?” (Joyaux, 2015). Instead of reading over an agenda during the meeting, board members can read over the information given to them before the meeting through a “Board Book”, as professor Anne Jamieson, a Wentworth Douglass board member, called it (A. Jamieson, October 23, 2017, personal interview). The “Board Book” was actually on an iPad that was given to Professor Jamieson and had vital information about events going on the hospital. Professor Jamieson was expected to read over the material it provided and be able to discuss and give her opinion at the next board meeting (A. Jamieson, October 23, 2017, personal interview). This is just one case of how Wentworth Douglass provides information to their board members and is not structured across every HCO.

### *Knowledge Check #1*

*Is the Board of Governors a **non-profit** or **for-profit** entity?*

## Non-Profit Governance

To get more specific into the roles and responsibilities of the Board of Governors, we must learn to differentiate its structure from a for-profit Board of Directors. The Board of Governors belongs in a **non-profit** HCO and they are known to be more charitable organizations. In accordance with the National Council of Non-profits, the board must follow the term **good governance**. This means that a non-profit board must be accountable, transparent, responsive, consensus oriented, participatory, inclusive, following rule of law and efficient (National Council of Non-profits, 2017). Now this is typically used to control how members are selected within a board. To provide you with an example, take Anne Jamieson, a Dover, New

Hampshire resident. Jamieson was selected to be on Wentworth Douglass' Board of Governors due to her location, status in the healthcare world and her contribution to the hospital. For Wentworth Douglass, Jamieson is a community member that is a representation of Dover as a whole (A. Jamieson, October 23, 2017, personal interview). Other members include senior management, residents, stakeholders and hospital executives like the CEO and/or CFO. In total, the Board of Governors equals about 12 people (A. Jamieson, October 23, 2017, personal interview). Essentially, a good governing board must follow specific rules to enhance the organization of a hospital to ensure it runs smoothly.

### *Knowledge Check #2*

*How many people make up the **Board of Governors**?*

## **For-Profit Governance**

Within a **for-profit** Board of Directors, it is important to understand that for-profit hospitals are NOT a charitable organization. Even though the common goal for both a non-profit and a for-profit hospital is ensuring the profitability of an HCO, the structure of a for-profit is much different. A Board for a for-profit HCO is comprised of stockholders who are people that are financially interested in the hospital's growth (McNamara, n.d.). Some of the responsibilities that the Board is also responsible for include providing continuity of the organization, select a Chief Executive, govern the organization and accounting to the stockholders or public for the products and services of the organization and expenditures (McNamara, n.d.) To think in simple terms, for-profit does exactly what it is called, it works FOR the PROFIT of the organization. Essentially, the Board of Directors must make sure that their HCO is working effectively for the mission statement and that it supports the staff in the best way possible. For example, Portsmouth Regional Hospital's mission statement is:

“To serve our community with innovative care delivered with compassion and a commitment to excellence” (Portsmouth Hospital, 2017)

Within the statement, it declares that it has a commitment to excellence and that does not simply apply to its patients. Even so, with the knowledge you have of a for-profit hospital, it can be assumed that its commitment is also geared towards the stockholders who have invested their money into the HCO. In conclusions, for-profits generally work towards the common goal of collecting money to ensure quality for their patients.

### *Knowledge Check #3*

*What do you call a Board in a for-profit hospital?*



## Bylaws

For a board to function effectively, they must abide by the bylaws. Bylaws are rules adopted by an organization for the government of its members and the regulation of its affairs, to keep order. Organizations have bylaws because they want to maintain consistency in the organization. They use bylaws to communicate organizational rules so internal disputes and conflict can be avoided. Bylaws are updated and revised monthly before the meeting to incorporate up-to-date information. Members are expected to review them before each meeting in order to accurately represent the community. Bylaws for a non-profit are important because they are a legal document and map for the organization's actions. With a for-profit organization, the owners are its shareholders, but for a non-profit, the ownership belongs to the public, represented by the Board of Directors (Fritz, 2017).

*Knowledge Check #4*  
*What is the importance of Bylaws?*

## Members of The Board

### *Non-Profit Board:*

Each person on a for-profit or non-profit board must be asked to become a representative on the board. Typically, they are chosen by other board members electing them. Before a person is fully committed to being on a board, they must pass the interview and voting process. The process begins with a nominating committee that recommends potential new members to the board. After this is completed the members will construct an interview and vote on the prospective candidates. When choosing new members, the nominating committee or the governance committee, will usually look at members who are involved in the community. The nominating committee also looks at prospective candidates that can give a donation. Some non-profits have bylaws that insist board members must donate to become clients within the organization. An example of this is at Lamprey Health, a Federally Qualified Health Center (LQHC), that struggles financially making the board member's donations extremely important (Bonica, 2017). Board members appreciate donations because they are a positive contribution to the governance of the hospital.

### *For-Profit Board:*

For for-profit organizations, boards receive compensation for their work and tend to be more selective with their nominations. For-profit corporations have an expectation and an obligation to bring back financial return to the shareholders within the organization. For-profit HCOs need board members that have proven they can grow a successful business financially. The process to interview and vote for potential candidates is similar to non-profit as it is more like a job interview. During the interview, the potential board member must explain how they can bring value and success to the HCO (Collamer, 2017). Even though the interviewer has a lot

of convincing to do to the board, the members must weigh different criteria. For example, board members must vote on topics such as succession planning, crisis management and acquisitions (Collamer, 2017).

#### *Summary of Non-Profit and For-Profit Boards:*

An HCO, whether for-profit or non-profit, has governance through a board, however they have some differences. One difference is that for-profits board of directors are actually paid for their work. The compensation levels vary depending on the size, sector and financial health of the organization. Some people incorrectly think that non-profit and for-profit organizations have different commitments to the organization and wrongly assume that non-profits are more dedicated to their mission and values and for-profits only care about the financial return. In reality, the success of a for-profit or non-profit organization is based off a strong foundation in governance. The success is also supported by a well understood mission, strong governance principles, strict adherence to a set of core values, respect for all people, and willingness to adapt and embrace change (Shaw, 2017). Similarly to non-profits, for-profits also have governing policies such as bylaws, and outlines of **fiduciary duties**. These duties are useful in governance because it outlines their commitment to loyalty, obedience and caring to bylaws and the board. Common elements of the bylaws include roles and responsibilities of the board as a whole, board committees, and individual directors. As for for-profit fiduciary duties; they have two that are associated with duties of care and loyalty. A breach of either of these duties can lead to dismissal and potential personal liability for a board member (Shaw, 2017). For-profit and non-profit HCO's have similar characteristics with their governance, however they can be run differently in accordance with their fiduciary duties and structure.

#### *Knowledge Check #5*

*Can a board member sit on the board without being elected?*

## **A Warm Welcome from the Board**

Separately, a proper welcome can help new board members take on their roles in the organization quickly and comfortably. Allowing for an easy transition into being a member of the board assists people into feeling more connected to the organization and better understand the vision, mission, and their roles in the organization in the same way. When welcoming a new board member there should be three key steps:

1. Advanced preparation,
2. Aelcoming
3. Training (Section 5, 2017)

During the advanced setup it should be decided who is going to attend the training. The whole board is usually in attendance because they will be working together in the future. Possibly even pairing an older member with the new member as a mentor in the early months can be a great

way for a new members to learn about the organization (Section 5, 2017). Overall, these key steps are vital into adding a new member to a board in a for-profit or non-profit HCO.

## Board Training

In order to be a productive board member of an organization, members must go through educational training through continued learning experiences even after becoming elected as a member of the board. Board members must be knowledgeable on the federal, state, and local laws regarding their HCO in order to understand how the laws can affect the hospital (Pakroo, 2017). Through educational training, board members learn to understand and assess financial reports. Board members are usually trained by the organization in order to understand the financial reports and financial responsibilities of the HCO through fundraising, communication and grant writing trainings. To further define these trainings:

- Fundraising training allows for board members to learn how to successfully raise funds for their organization in order to be a productive member of the community and the board
- Communication training within the board members themselves is important but, it is also important the board is successfully trained in communicating with the community, as well as benefactors and sponsors of the organization
- Grant writing training is important in order for the organization to have a greater chance in obtaining a grant due to the fact that being awarded a grant comes with high competition (Pakroo, 2017)

Despite the importance of these different types of trainings, some might think they are intuitive. However, providing these trainings to board members is excellent for continued learning experiences to keep the HCO and members updated.

## Duties of the Board

*Duty of Care, Loyalty and Obedience:*

Board members have multiple duties related to their organizations summed up into the duty of care, duty of loyalty and the duty of obedience. The **duty of care** is defined as the ability to do what is right with any situation, with the given information (Basic Responsibilities, 2009). Legally, the duty of care allows for board members to make proper decisions that reflect the best interest of the organization without any repercussions, but only if the rationale for the decision is fair and reasonable (Basic Responsibilities, 2009). Another legal aspect of a board members duty is to follow the duty of loyalty. The **duty of loyalty** states that board members must act in the best interest of the organization and the stakeholders of the organization, as opposed to making a decision based off of personal preference (Basic Responsibilities, 2009). Conflicts of interest are occasionally inevitable but, board members may not be a part of the organization if there is a current conflict of interest. Along with the duty of care and duty of loyalty, board members are also legally responsible for following the duty of obedience. The **duty of obedience** requires

board members to obey the laws of the organization, as well as support the goals, mission, value, and bylaws of the organization (Basic Responsibilities, 2009). Essentially, board member's responsibilities have several duties to ensure the longevity of the organization.

#### *Financial Duties:*

For-profits have is ensuring the organization's financial health. For-profit boards are focused on net earnings, the stock price, and the dividend rate. Terms that are commonly banded about in the boardrooms of publicly traded companies would never be heard during a non-profit board meeting (Shaw, 2017). Although finances are extremely important the organization can't just focus on the revenue. High quality of care is imperative to reach that financial success and are often even intertwined together. All boards, whether for-profit or non-profit, need to recognize the importance of excess revenue. Being able to keep shareholders happy by returning their capital is definitely one big piece. However, that excess revenue also allows hospitals to maintain adequate buildings, facilities, and machines which in turns keeps quality of care up to par (Basic Responsibilities, 2009). The board in for-profit are responsible financially and are of extreme importance to the HCO.

#### *Finding a CEO:*

The board is also responsible for tasks that affect day to day operation in the organization. One of the biggest responsibilities of the board that affect the operations is task of employing the organizations CEO. As the CEO is often the single connection between staff and the board it is imperative this decision is made with care. Another responsibility that can directly affect the staff and they way they can conduct care is the duty of finalizing and approving the budget (McNamara, n.d.). Other smaller responsibilities that are shared with non-profit organizations are tasks like attending board meeting regularly while offering important contributions back to the organization. Boards also have a responsibility to select other capable board members that will carry on the culture and who have the same aspiration for the organization as the present board.

## **Committees Within a Board**

Within a board, there are multiple committees that help the board perform its duties and meet its responsibilities. These committees consist of the executive board, audit committee, finance, planning, and quality and community health committee. The **executive committee** enables a board to conduct urgent business when a regular meeting is not in session and the full board cannot be brought together. The makeup of this committee should be stated in the bylaws and should include the officers of the board and other leaders, like committee chairs. The bylaws should clearly define the role and authority of these members in relation to the full board. The key function of the executive board consists of: providing advice to the board chair on the appointment of committees and committee chairs, serving as a sounding board for the CEO,

helping the chair develop the governance goals and objectives for the coming year, determining CEO compensation as well as directing the CEO evaluation process.

The **audit committee** is typically overseen by the finance committee. The primary purposes of an audit committee are to oversee financial reporting and controls and to identify and manage risk. Their functions include: recommending the selection and compensation of the external auditors to the board, overseeing the hospital's internal audit function for the board, reviewing and being responsible for the financial reporting and controls, reviewing and assessing the organization's business risk-management process, and reviewing and approving the code of ethical financial conduct.

The **finance committee** helps the board maintain and improve the financial soundness. The functions of the finance committee include: drafting finance policies for board review and adoption, developing key financial ratios to be used by the committee and specific ratios for the board, reviewing the draft budget, including revenues, expenses and capital expenditures for the upcoming year, and completing a regular review of all board policies and decisions regarding finances.

The **governance committee** is in charge of overseeing the board's composition, organization, and effectiveness. The functions of this committee include: establishing the duties and responsibilities of the board and its members, evaluating the board and its composition, nominating members for the board, and monitoring policies and practices of the board.

The **planning committee**, also known as the strategic planning committee, helps the board develop policies and goals as well as determine the overall direction the board wants to head in. This board's job is to develop and recommend the strategic plan for the organization, develop mechanism to monitor that plan, and reviewing proposals submitted by management for board recommendations.

Lastly, the **quality and community health committee** help to assure the board that the organization is providing quality care and addressing the health of the community. The quality and community health committee ensure systems for measuring quality care in the hospital or health system are established, they draft policies regarding all aspects of quality for review and adoption by the board, identify the community's health status and needs, and identify potential collaborations with other community health providers to enhance population health.

### *Knowledge Check #6*

*What does the Governance Committee do?*

## **Term Limits**

A not-for-profit organization is not required to have board member term limits, yet most of the time it is suggested that organizations set term limits for their board members (A. Jamieson, October 23, 2017, personal interview). Term limits allow for the organization to

remove board members who may be unproductive, or board members who have lasted on the board for an extended period of time (Board Term Limits, 2014) Also, term limits allow for an organization to have new perspectives on the board, which will allow for a more successful board. When describing term limits in the bylaws, it is crucial that an organization states how long a term lasts, and how many consecutive terms are allowed (Board Term Limits, 2014). Most non-profit organizations have two or three year terms, but again, the bylaws of an organization will state specifically how long a term is and if it is possible to be reelected on the board after the term is completed.

It is not a law or requirement for for-profit organizations to have set term limits. However a vast majority of for-profit boards have a policy on **direct retirement**, with the mandatory age ranging anywhere from about 70-75. The average age of for-profit board retirement has been increasing with 72 being the most common age. There is no standard to how long or if there even should be term limits in for-profit and non-profit organizations. However, term limits for a for-profit CEO who is also the chairman of the board is generally governed by the retirement age of an employee (Shaw, 2017). There are usually set term limits for a non executive chairman or lead director of for-profits, but the length varies. It is frequently seen as two successive terms of about three years per term.

## Summary and Conclusion

HCO's boards have many different responsibilities that ensure good governance. Although for-profit and non-profit boards have variances, a board's major priority is to provide guidance for the rest of the hospital. Some topics that come up in a board meeting include events happening within a hospital, the addition of new board members and assisting the HCO financially. Specifically, non-profit hospitals, the Board of Governors is structured as a charitable organization that relies heavily on donations. Opposingly, the Board of Directors is for a for-profit hospital that governs with stockholders; an example of a for-profit hospital is Portsmouth Regional Hospital. Both types of hospitals whether for-profit or non-profit have a similar goal of making sure the hospital runs smoothly. Using a set of bylaws, HCOs can have rules and regulations that maintain consistency through conflicts. Non-profits take bylaws very seriously because their ownership belongs to the public so they need legal documents that are clear for every type of person on the board. Regardless of with type of hospital, the board members are usually nominated due to their stature within a community. For example, people who can give a donation are generally more accepted than those who cannot. Another aspect that will give someone a better chance of being a board member is if they fully understand the mission, vision and values of an HCO. Before the acceptance of a new member, board members must understand the importance of a warm welcome, required training and continuing education to further enhance knowledge. Board members must also know the duties of a hospital; duty of care, loyalty and obedience, financial duties and finding a CEO/board member. With the

continued educational experience when sitting on the board, a board member can enter different committees that have different duties for the HCO. Overall, regardless of how much knowledge a person acquires when being on the board, there can be strict term limits regarding retirement or other rules. However, a board is extremely important to an HCO because it provides good governance and helps a hospital substantially.

## Answers to Knowledge Check:

1. Non-profit
2. 12
3. Board of Directors
4. Bylaws maintain order within the board
5. No. Board members must be elected
6. Found within text: The governance committee is in charge of overseeing the boards composition, organization, and effectiveness.

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# Improvement

## Chapter 3

# Process

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## Learning Objectives

- Understand industry best practices for performance improvement
- Understand how real life organizations work on performance improvement
- Understand the challenges that come with implementing a performance improvement initiative
- Understand how both Lean and Six Sigma allow for organizational processes to be as productive and efficient as possible

## Terms to know:

- **Process Improvement**
- **Chief Performance Officer (CPO)**
- **Project managers**
- **Lean**
- **Six Sigma**

## Introduction to Process Improvement

Process Improvement is a critical concept in regards to quality of care. **Process improvement** is “the proactive task of identifying, analyzing and improving upon existing business processes within an organization” (What is Process Improvement, 2017). It is crucial that senior executive leaders take initiative to train and share knowledge with employees. Once problems in the organization are identified, executives must analyze the issue and seek a solution. Throughout this chapter we will discuss industry best practices, performance improvement at Wentworth Douglass Hospital and challenges that face performance

improvement. Later in the chapter, we will discuss Lean and Six Sigma, and conclude with information on the “Seven Deadly Wastes”.

## **Industry Best Practices**

In order to improve the quality of an organization, it is critical that the organization identifies the needs of the hospital. The critical aspect of an industry best practice is for the senior leaders to choose an improvement method and go forth with it. An industry’s best practice is a technique that uses all knowledge and resources in order to have the most successful organization (Hansmann, 2017). Best practices are used throughout the entire healthcare industry. There are many process improvement methodologies including, Six Sigma and Lean. The most important aspect is not only just simply choosing an improvement method but, committing to follow through with the method that was decided upon. For an organization to be successful, it is critical that the organization is supported by the senior leadership. Due to the integrated healthcare system in the United States, healthcare providers implement process improvement to increase the quality of care of the organization. The most successful manner to implement process improvement, is to connect it to the goals of the organization. According to Keith Bartlett of Wentworth Douglass Hospital in Dover, New Hampshire, “linking process improvement with the goals of an organization, accountability, and through messaging and communication” an organization can be most successful.

The national salesman of Point B, a company that specializes in Management Consultation and Property Development, interviewed five healthcare executives across the country to discuss the best practices of the healthcare industry. The healthcare executives offered 5 insights regarding the best practices of the industry regarding their employees and working with benefit providers (Mueller, 2014).

The five insights provided include:

1. Providing employees with health information
2. Optimizing data to plan for benefit structures
3. Reducing healthcare costs while improving the health of employees
4. Raising awareness within the organization
5. Working with both benefit providers and employees

In order to run a successful organization, the senior executives must be committed to leadership. Employees must be trained in all aspects of process improvement. By following the five insights in regards to employees and providers provided by healthcare executives, executives will witness the best outcomes for their organization.

### *Knowledge Check #1*

*What role does process improvement play in regards to the quality care of an organization?*

### *Knowledge Check #2*

*What is the most important aspect of an industry best practice?*

## Performance Improvement at Wentworth-Douglass

Even though there are industry best practices done by people throughout the healthcare industry, performance improvement is done differently at every organization. At Wentworth-Douglass Hospital in Dover, New Hampshire, they have a **Chief Performance Officer (CPO)**, Keith Bartlett, whose role is to help the organization identify, set, and prioritize its goals. The CPO works to align the goals throughout the organization and establish what needs to be done in order to achieve them. He oversees the process in which leaders look at data throughout the hospital and determine what the hospital might need to improve on. At Wentworth Douglas, the performance improvement department is called Operational Excellence (OE). OE is a combination of process excellence, which includes project management skills, lean and six sigma leadership skills, and leadership to align project work to organizational goals. They have people throughout the organization who are trained to lead and run projects that help them achieve their goals. The organization is made up of people who get various levels of training in OE, classified by either a green belt, black belt, or master black belt. There are also **project managers** who go through a four day course and learn project management skills.

The CPO oversees and makes sure that they have the right infrastructure in place to do the work that they need to do. He makes sure that they have the right systems, processes, skills and people to get the work done. He spends a lot of his time working with his team and helping people in his organization identify projects that need to happen. His department plays a “coaching and mentoring” role for the different parts of the organization. They work closely with anyone leading a project for their own team within WDH. The performance improvement has a lot of data analysis skills to figure out where to work and what areas need help.

One example of a type of project that the performance improvement department at Wentworth-Douglass is decreasing the number of phone calls that are sent to voicemail when people call the hospital. They look at the data to see how many calls are coming into the hospital, how many people are hanging up, and how many are being sent to voicemail. A project charter is written and a project team studies the process of who is where when the phone rings, how to ensure who will answer the phone, who is responsible for those calls, and to identify changes to reduce the number of calls to voicemail.

Some short terms goals for the department are around completed projects and percentages of projects that finished on time and met their goals. Every leader in the organization has goals for completing projects and on time so they try and focus on that when looking at annual improvement. Long term goals are looking at deployments and thinking about what they are going to do in the future. They always have to be looking at what they can do to change and improve what they are doing (Bartlett, 2017).

## Challenges for Performance Improvement

In the United States, health care organizations have been making strides towards improving the quality of care and patient safety. Through the work of performance improvement, they can formulate changes that will lead to higher quality of care and better patient outcomes. They utilize objective measures to monitor and evaluate the quality of services provided to the patients. By using a systematic approach, it provides them with opportunities to improve the quality of care and resolve the identified problems. However, enforcing a performance improvement initiative comes with its own challenges. It is important to note that everyone may agree on the demand for better quality, but not on what defines better quality and how they should go about achieving it.

There are multiple barriers when it comes to implementing a performance improvement initiative. The key challenge in any healthcare organization is introducing a change. Keith Bartlett points out that “all performance improvement have to change something and by definition, change is hard to do.” When it comes to improving performance in any healthcare organization, convincing employees that the solution will work to their advantage is a difficult task. Health care professionals want to understand why this change is happening and how will it affect the way they can do their job. Achieving change requires the project manager to challenge the precedent, and requires perseverance against the habits and norms of established behaviours (Al-Abri, 2007). In addition, it requires a massive time commitment from the manager and the organization itself. Implementing a change can mean going against the traditional philosophies that healthcare professionals have abided by. To alleviate concerns from employees, performance improvement managers have to provide them with sufficient data and research that supports their plan.

Implementing a performance improvement initiative tends to be a lengthy process of learning and adapting to the changes. Some organizations that implement these initiatives tend to be successful- others are not. A major reason performance improvement efforts fail to produce desired results is that organizations mistakenly think of performance improvement as a series of one-off projects, each with its own beginning, middle and end (Brown & Falk, 2017). Once a solution has been devised and the initial results show progress, it is up to the organization to continue onward with that solution, as opposed to retreating back into their old ways. All healthcare professionals must understand that each of them holds a responsibility for the quality of the product (internal and external) of the organization (Messner, 1998). To achieve substantial and lasting results, there must be a mutual commitment from the employees to maintain the quality of care.

Complying with a performance improvement initiative can be one of the most significant decisions a healthcare organization can make, as it involves changing the organization's culture and environment. There are difficulties when it comes to carrying out a change in the healthcare

field, as health professionals tend to be cautious about straying away from techniques they have used for most of their career. When done successfully, the results from the performance improvement project can have a positive and long lasting effect on the quality of the organization.

#### *Knowledge Check #3*

*What does the project manager have to do in order to achieve change in a healthcare organization?*

#### *Knowledge Check #4*

*Explain why some performance improvement efforts tend to fail.*

## **Lean and Six Sigma**

Lean was created in 1950, by the Toyota Motor Sales Company, Ltd. Their goal in creating Lean was to reduce and then eliminate any production activities which did not result in value being added to the product or service they were providing, from the perspective of the consumer (Zidel, 2007). The basic premise of **Lean** principles was to do more with less, and eliminate any activities which allow waste to become a part of the production process (Zidel, 2007). Although the concept was developed in the automobile industry, its principles transcend to healthcare seamlessly. According to Wentworth Douglass Hospital's Chief Performance Officer, Keith Bartlett, the main purpose of Lean is to eliminate waste from any process. Given this definition, it is easy to see how lean principles are intertwined with the practices of process improvement. In essence, Lean is comprised of five key principles. These principles include:

**Value; Value Stream; Flow; Pull; Perfection.** Bartlett references these principles as follows:

1. **Value:** Pinpoint the value of activities determined by your customers
2. **Value Stream:** Specific activities needed to satisfy your customers from the point of receiving an order, all the way until cash collection
3. **Flow:** Ensure the flow of value without interruption
4. **Pull:** Allow your customer to pull value: upstream suppliers are not supplying until there is a signal given by a downstream customer
5. **Perfection:** Strive to reach perfection by eliminating waste from your processes- ensure all activities in value stream create value

Regarding value, Lean involves three primary operations. These are: **Value Added; Business Value Added; Non-Value Added.** Bartlett references these as follows:

1. **Value Added:** Activities or tasks which work to transform the deliverables of a process in a way that makes customers willing to pay for the improved deliverable

2. **Business Value Added:** Needed to support Value Added steps. These activities should be minimized
3. **Non-Value Added:** Activities that when omitted, do not directly impact the customer and/or business. These activities should be eliminated from any process.

As explained by a Kwak and Anbari study (2006), Six Sigma is a data-driven process, which strives to eliminate all defects in an organization. Six Sigma is comprised of five steps. These steps are:

1. **Define:** the organization must first define: expectations of customer; project boundaries; overall process
2. **Measure:** next, the organization must measure the process in order to ensure the customer's needs are met; develop data collection methodology; compare gathered data to identify any issues
3. **Analyze:** then, the organization must analyze the source of variation/defects; determine what the variations are; establish methods for improving the process in the future
4. **Improve:** next, improve the process by way of eliminating variation; brainstorm alternatives and initiate new and improved plan
5. **Control:** finally, control variations in your process in order to meet the needs of the customer; create a strategy which allows for the improve process to be monitored; implement improvements on a system-wide level

According to Bartlett, **Six Sigma** is a process in which perfection is strived for by eliminating “defects” from products or services. He further clarifies by explaining that a defect means a “non-conformance” and defective means a “nonconforming item.” In essence, Six Sigma measures variation. Bartlett explains the importance of measuring variation in that customers are sensitive to variation, and the presence of variation causes a reduction in confidence in the process. To conclude the main purpose of both Lean and Six Sigma, Bartlett explains that lean is about process speed and Six Sigma is about process accuracy. In order for any healthcare organization to perform optimally, both Lean and Six Sigma principles should be implemented.

## “Seven Deadly Wastes”

Bartlett introduced a concept known as the “Seven Deadly Wastes,” which he explains as being, “Inherent in every process.” He references a known acronym for the Seven Deadly Wastes, called **TIMWOOD**. Lean principles work to recognize these wastes, and remove them from the system.

- **Transportation:** also known as conveyance
- **Inventory:** having too much inventory

- **Movement:** unnecessary worker movement
- **Waiting:** down or idle time
- **Overproduction:** unneeded inventory
- **Overprocessing:** “misused capacity”
- **Defective Products:** also encapsulates the correction of defective items

#### *Knowledge Check #5*

*In regard to Lean principles, explain which operation an organization would strive to work toward 100% of the time; which operation an organization would attempt to minimize; and which operation an organization would attempt to eliminate entirely.*

#### *Knowledge Check #6*

*Explain the first step in the Six Sigma Process, and why it is the arguably the most necessary step*

### **Answers to Knowledge Check:**

1. Process improvement plays a critical role in regards to the quality of care for an organization. Process improvement connects with the goals of an organization, accountability, and through messaging and communication.
2. The most important aspect of an industry best practice is that senior leadership is fully committed to increasing the quality of care for the organization.
3. The project managers have to challenge the precedent, be willing to go against the established norms and behaviors created by the organization’s culture and time commitment.
4. Performance improvement efforts tend to fail due to the lack of commitment from health professionals. Not only that, organizations have this idea that performance improvement has a series of one-off projects. In other words, they think that this is something that happens or is done only once.
5. An organization which adheres to the principles of lean would strive to achieve Value Added operations at all times; minimize Business Value Added operations; completely eliminate Non-Value Added operations.
6. The first step in the Six Sigma process is **Define**. This means that the organization specifically defines what their customer expectations are, what the project boundaries must be, and the definition of the process at hand on a macro-level. This is the first and most important step in the Six Sigma process because, as with any task, it is paramount that those worker on the project have clear definitions of the end-goals of the task. Without the **Define** step, the mission to remove defects in any process would become incredibly difficult.

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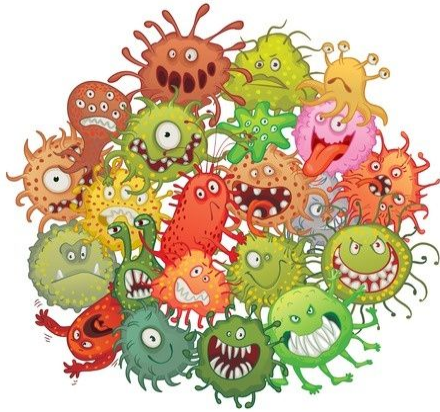
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# Infection Control

## Chapter 4

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### Learning Objectives

- Describe what infection control is and why it is so important to healthcare organizations.
- Know what HAIs are and be able to list examples.
- Understand how infectious disease outbreaks are prevented and controlled in health care organizations.
- Describe techniques used by hospitals to prevent the spread of HAIs today.

### Terms to know:

- **Infection control**
- **Health care-associated infections**
- **Donning**
- **Doffing**
- **OSHA (Occupational Safety and Health Administration)**

### Introduction to Infection Control

The purpose of **infection control**, also known as infection prevention and control, is to prevent or stop the spread of communicable diseases in all healthcare settings, such as hospitals, clinics, or long-term care centers. Infection control is an evidence-based approach which incorporates knowing the epidemiology of diseases, what risk factors increase a patient's risk for an infection, and what practices, procedures or treatment that result in infections (“Infection Prevention and Control,” n.d.). This chapter will outline different risk factors that contribute to infections, precautions to take, and action plans to spread of an infectious disease once it has started.

## Health Care-Associated Infections (HAIs)

A critical role of infection control is the prevention of **health care-associated infections (HAIs)**. HAIs is an infection acquired by a patient during the delivery of care in a healthcare setting. This infection was not present or in an incubation period during the time of admission. Patients, visitors, and employees are susceptible to be affected by HAIs. Most HAIs are caused by microorganisms, for example urine, chest, blood, and wound infections are of the most common. (“Health care without avoidable infections,” n.d.).

HAIs prolong hospital stays and can cause long-term disability or death; they’re linked to high morbidity and high mortality. In addition to all this, they create unnecessary economic burdens. Healthcare views have shifted to see HAIs as unacceptable, yet roughly 1 in every 25 U.S. hospital patients is diagnosed with one or more hospitals related infections (“Winnable Battles,” 2006). Establishing risk factors and setting precautions within the healthcare organization can help bring this rate down and reduce the numbers of morbidity and mortality.

*Knowledge Check #1*  
*Who can be affected by HAIs?*

## Precautions

A set of standard precautions is used for all patient care. These standard precautions are not generalized to a specific protocol that most facilities have, but they are basic guidelines to ensure a sanitary and safe environment. Some common, standard precautions include performing proper hand hygiene. Teaching employees how to properly wash their hands with soap and warm water as opposed to just using an alcohol based hand sanitizer is an important precaution to emphasize primarily due to the fact that its importance is not as prioritized. While soap and water is the most efficient way to stop the spread of any germs and infections, keeping alcohol based hand sanitizer around health care facilities is beneficial so long as the alcohol concentration is greater than 60%. The use of PPE (Personal Protection Equipment) when there could even be a slight indication of an infectious disease is crucial. All staff members in a healthcare facility should be able to locate where to find PPE and should be trained on **donning** and **doffing** equipment. It’s also important for all health care professionals who are in contact with sharp objects and needles are trained on how to properly use and dispose of materials after they are finish with them to avoid any accidental sticks and potential transfers of infectious diseases. In case of an infection such as mumps or measles, having all staff members practice isolation precautions is important. If a staff member takes notice to a patient that has noticeable symptoms such as puffy cheeks or legions, staff members should take proper standard precautions and put on the proper PPE, protect that infected patient, and then be sure to prioritize the patients in the waiting room and take infected patient to an isolated room.

## **What Increases Patients Risk Factors?**

Prevention HAIs is of the top priority for the U.S. Department of Health and Human Services. They have created a steering committee for the Prevention of Healthcare-Associated Infections and have developed many resources to help organizations prevent infections (“Healthcare-associated Infections,” 2015). There are many circumstances that put patients at risk while being cared for, for example catheters or intravenous catheters (IVs). The longer these are in, the higher the risk of an infection is. Patients can reduce their risk of getting a central line-associated bloodstream infection by making sure caretakers are following infection prevention practices (“Healthcare-associated Infections,” 2010). Urinary tract infections (UTIs) are also a common HAI infections. Prolonged use of a urinary catheter is the biggest contributing factor. Like IVs, patients should make sure they’re not in longer than necessary and to make sure caretakers are following infection prevention protocols (“Healthcare-associated Infections,” 2017). Many HAIs can also develop from surgical sites, ranging from skin infections to more serious infections involving tissue under the skin, organs, or implanted materials. As a patient, you should inform your doctor about any medical problems and not shave near surgical sites. Make sure all wounds and dressing are cleaned and watch for redness and pain around the surgical site. If symptoms of a infection become present, taking action immediately is crucial (“Healthcare-associated Infections,” 2010). Ventilators are also a huge source for lung infection can one can develop ventilator-associated pneumonia. Raising the hospital bed and removing the ventilator as soon as possible helps decrease risks of infection (“Healthcare-associated Infections,” 2010). The CDC has worked to help prevent these four types of infections because they’re threats to patient safety and can be avoidable if the right precautions have been taken.

## **Infection Prevention Control Plans**

Having an effective infection prevention control plan within a healthcare organization requires constant action and revision from all levels of the healthcare organization (“Health care without avoidable infections,” n.d.). Many hospitals have protocols in place for emergency room departments to prevent the spread of infectious disease. Wentworth Douglass Hospital specifically screens patients for infectious disease the second they walk through the door in the ED. Wentworth Douglas also has a cart ready and set aside for when a patient presents with an infectious disease such as Ebola and sends any contaminated patients to a different section of the hospital to keep the disease and affected persons confined in one area. This cart is prepared with gear to keep the medical staff from becoming contaminated as well as materials to clean and kill any germs or diseases that have been brought and spread throughout the emergency room department. This helps maintain a clean and healthy emergency department by eliminating the possibility of outbreaks through the entire department. Even at a smaller health care facility such as the Health and Wellness building at UNH, they have implemented their own infection prevention control plan. Every staff member is required to go through a yearly training program

that refreshes and enforces the building policies and procedures. All staff members are required to go through **OSHA** for Blood Borne Pathogen training. These teaches the proper ways to care, clean and dispose of any materials contaminated by blood. Staff members at the desk helping patients are required to take extra precautions with patients who enter the building. They are trained to recognize symptoms of common infectious diseases such as mumps and how to properly protect themselves, that patient and the patients around them by wearing face masks and escorting them to an isolated room. These control plans go beyond the universal safety precaution. These plans also include the implementation of exposure control plans and engineering control plans. An example of an engineering control plan would be ensuring that there are easily accessible biohazard bins for used needles and other bio-hazardous material to prevent the risk of spreading infections.

## Legislation

The first move toward legislation regarding the spread of HAIs came out of a Surgical Wound Infection Task Force which was convened by the Society of Hospital Epidemiology of America to evaluate how surgical wound infection surveillance should be done, and to identify where more information is needed (Sherertz, 1992). The task force determined that the Centers for Disease Control and Prevention (CDC) definition of surgical wound infection should be used for routine surveillance; direct observations of wounds and traditional infection control surveillance techniques are acceptable methods for hospitalized patients; surgical wound infection rates should be stratified by surgical wound class, plus a measure of patient susceptibility to infection; and finally that surgeon-specific surgical wound infection rates should be calculated and reported to individual surgeons (Sherertz, 1992)

Beginning in 2002, four states have enacted legislation that require healthcare organizations to publicly disclose HAI rates (Mckibben, 2005). Advocates of mandatory public reporting of HAIs believe that patients not only deserve to know this information, but also that making this information available to the public will allow consumers to make informed decisions about their healthcare. Critics have expressed concern regarding the reliability of public reporting systems. Because there is no national legislation, healthcare organizations have some variability in their definitions of HAIs, and in the methods and resources used to identify HAIs. Due to the insufficient evidence on both the advantages and disadvantages of an HAI public reporting system, the Healthcare Infection Control and Practices Advisory Committee (HICPAC) has not recommended for or against the mandatory public reporting (Mckibben, 2005).

Since there is no national public reporting system, legislation aimed at controlling antimicrobial-resistant pathogens via the use of active surveillance cultures to screen hospitalized patients has been introduced in at least two states (Weber, 2007). In response to this proposed legislation, the Society for Healthcare Epidemiology of America (SHEA) and the Association for Professionals in Infection Control and Epidemiology, Inc., (APIC) have developed a joint

position statement. In this position statement, the SHEA and the APIC reviewed the legislation and the rationale behind it, while also examining the scientific evidence supporting it. The following five consensus points were offered. (1) Although reducing the burden of antimicrobial-resistant pathogens is crucial, the APIC and the SHEA do not support legislation to mandate use of active surveillance cultures. (2) The SHEA and the APIC support the continued development, validation, and application of both effective and cost-effective strategies for preventions of infections. (3) The APIC and the SHEA welcome efforts by health care consumers along with private, local, state, and federal policy makers, to focus attention on and formulate solutions for this issues. (4) the SHEA and the APIC support ongoing additional research to determine and optimize the appropriateness, utility, feasibility, and cost-effectiveness of using active surveillance cultures. (5) The APIC and the SHEA support stronger collaboration between state and local public health authorities and institutional infection prevention and control experts (Weber, 2007).

## Vaccinations

Vaccinations and how the needles themselves are handled, play a crucial role in infection prevention. In order to reduce the spread of infections like the flu, vaccinations are a key precautionary measure that patients and staff should take advantage of. Many drug stores provide on site flu clinics that are in most cases free of cost. Each year, anywhere from 5-20% of the population gets the flu which can cost the government anywhere close to eighty seven billion dollars in medical expenses. Stopping into your local clinic or doctor's office to stay on top of your vaccinations can prevent getting yourself sick, spreading the infection to other people and also help reduce the economic burden these preventable infections are causing. Some of the most common infectious diseases; HPV, HIV and HBP can be protected with the use of vaccines that most doctors and clinics have and administer. For example, at the Health and Wellness facility at the University of New Hampshire, they pride themselves on “having just about every vaccine around”. Students and faculty members are able to go to an on campus location to get vaccinations for these common infections such as HIV or the flus which are easily transmitted on a college campus. One thing to keep in mind is that administration is just as important disposal. All staff members that are administering vaccinations should be properly trained on how to dispose of the vaccination needles. The CDC reports on the “safer sharp devices” and “stop sticks” campaign. The creation and implementation of stop sticks on needles has helped prevent accidental sticking and the spreading of infectious diseases. Along with this new technology, it’s also imperative that health facilities contain sharp disposal containers in all patient rooms to ensure that all bio-hazardous material is being properly disposed of.

### *Knowledge Check #2*

*Name at least 4 common infectious diseases*

## **Ebola**

One of the most concerning infectious diseases that has become an epidemic in recent years is Ebola. Ebola Virus Disease (EVD) is also known as Ebola hemorrhagic fever and this is a severe disease caused by infection with a species of the Ebola virus and can often be fatal. (Vanessa Amatucci). Ebola has been a disease around since 1976, however, there was a major outbreak in West Africa in 2014. Ever since this time there has been concerns and cases reported in the United States.

The Ebola epidemic and random outbreaks have caused several healthcare organizations to be prepared for an outbreak. This is due to the fact that Ebola can be fatal and easily spreads. Ebola is transmitted through direct bodily contact such as blood, saliva, urine, sweat, feces and other bodily fluids. (Vanessa Amatucci). Ebola can come from and hide in various animals and organisms. Ebola has often been found in fruit bats which is problematic because Fruit Bats do not show symptoms of the disease. The Ebola Gene sequences in the liver and the spleen. It is critical that the infected individual or medical staff recognize symptoms and begin taking the appropriate steps immediately. Symptoms appear 3-10 days after being exposed to EVD. EVD symptoms include a fever with chills, nausea, diarrhea, and vomiting, weakness, muscle and joint pain and more poor body conditions. Symptoms will become more intense, painful, and fatal as the disease festers in the host.

Many hospitals have very specific protocols to follow when a patient presents with potential Ebola symptoms or the actual Ebola virus. In this case, we will look at Wentworth Douglass Hospital and how they deal with this situation. When someone calls the ER department or shows up at the door of the ER department with Ebola symptoms at Wentworth Douglas Hospital the following steps take place. First Code Indigo is called overhead to inform all personnel that there is an infectious disease case present in the hospital. The patient is then identified by a nurse as tier 0 to tier 1. Tier 1 means that the patient is wet; they are vomiting, bleeding, or have diarrhea. If the patient is identified as Tier 0 it means that the patient is dry; showing no signs of diarrhea, vomiting, or bleeding. If the patient is Tier 1, they must change clothes, be brought to a different room in a separate area of the hospital, and everything they have been in contact with must be cleaned. The medical staff must put on specific gear to protect them such as chem suits, gloves, mask, and eye protection. WDH has an Ebola Cart ready in the DECON room of the emergency department that will then be accessed to assist the patient and clean any affected area with disinfectant cleaner and bleach wipes. The patient is then seen and treated by nurses and doctors. When patients arrive at the emergency department for other purposes there is still an Ebola screening that is required. The nurses will ask the patients ebola screening questions when they are triaging them such as “Have you traveled to these countries in the last month? Have you had contact with blood or other body fluids or human remains of a

patient known to have or suspected to have EVD; or direct handling of bats or nonhuman primates from disease-endemic?” (Vanessa Amatucci).

All of these screenings and protocols are in place to help prevent the spread and outbreak of incredibly dangerous infectious diseases such as Ebola.

### *Knowledge Check #3*

*Identify what Tier a wet patient is as well as what Tier a dry patient is. Define wet and dry patients presenting infectious disease symptoms in an emergency room.*

## **Statistics**

In 1976 health care-associated infections (HAIs) affected 5.7 individuals per 100 admissions, with over 2 million infections occurring in a 12-month period (Haley, 1985). Of these HAIs urinary tract infections, usually due to the improper insertion of a catheter, accounted for 42%. HAI surgical site infections occur within 30 days in the area where the patient had surgery and accounted for 24%. HAI pneumonia is caused by a bacterial infection and typically occurs at least 48-72 hours after admission to the hospital; this occurred in about 10% of HAI cases. HAI bacteremia is diagnosed at least 48 hours after hospital admission and is defined as the presence of gram-negative bacteria in the blood (Blot, 2002), in 1976 this accounted for 5% of HAIs (Haley, 1985).

Today, hospitals use techniques such as isolation and hand hygiene, as well as new precautions to prevent the spread of HAIs. Standard precautions include preventive measures that are to be used at all times, regardless of a patient’s infection status; these measures include the use of gloves, gowns, masks, shoe and head coverings, and proper disposal patient-care equipment. Transmission-based precautions include specific precautions for the different modes of transmission of an infection, including airborne, contact, and droplet (Mehta, 2014). Due to precautions like these, occurrence of HAIs has decreased from 5.7% to 4% (1 in 25 patients) (Winnable Battles, 2016). The CDC reports a 50% decrease in central line-associated bloodstream infections; a 36% decrease in health care-associated invasive MRSA; and a 17% decrease in select surgical site infections between 2008 and 2014 (Winnable Battles, 2016).

## **Conclusion**

All infectious diseases are a threat to the population's health and it is essential that infectious disease control and prevention is enforced. It is apparent how dangerous these diseases can be and how easily they can spread, especially in a healthcare setting. The prevention and control is paramount to the communities health. Without screening, protocols, and prepared prevention plans their would be many more outbreaks and epidemics causing fatality rates to rise. Allowing hospitals to screen for infectious disease and have a protocol in place, such as Wentworth-Douglass Hospital’s infectious disease protocol is key. This allows patients whom

are infected to be treated in a confined area without spreading the disease to all the patients around them. Prevention and control protocols need to continue to be implemented to help succeed in eradicating infectious diseases.

## Answers to Knowledge Check:

1. Patients, visitors, or employees can all be affected by a HAI.
2. HIV, HPV, Ebola, the flu
3. A patient who is “wet” is tier 1; if a patient is “wet” they are vomiting, bleeding, or have diarrhea. A patient who is “dry” is tier 0; showing no signs of diarrhea, vomiting, or bleeding.

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# Human Resources

## Chapter 5

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### Learning Objectives

- Become familiar with general functions of Human Resources
- Introduce basic terminology of Human Resources
- Employee Discipline/Legal- Understanding of “Protected Categories”
- Theories in the field of Human Resources
- Understand why Human Resources is beneficial in management

### Terms to know:

- Human Resources
- Maslow’s pyramid
- Recruitment and onboarding
- Benefits

### Introduction to Human Resources

**Human resources** is defined as the personnel of a business or organization, it is the department that deals with hiring, administration, and training. In this chapter we will discuss how human resource departments work with factors in behavior and theories and how they affect an employee and the organization. The process of how recruiting new employees then leads to training and development with the help of human resources, as well as the relationships between employees and management. Human resources plays a major role in compliance and safety, if anything happens to an employee, they are responsible for taking care of the problem. Lastly, an employee’s compensation and benefits are taken care of by the human resources department. Human resources is core part of having a business or organization run smoothly and work with the employees in an effective manor.

## Factors In Behavior and Theories

The Human resource field requires a lot of planning in terms of hiring, training and retention of new employees to meet all the expectations of the company's strategic goals. To meet these requirements individuals must consider the possible differences in personality, attitudes, perceptions and values. The culture and structure of group mechanisms is what drives the quality of the organization.

Personality differences include how one chooses to manifest themselves; introversion/extraversion, emotional stability, empathy, and how agreeable a person is (Franklin, 2017). These are all factors in organization, because the Human resources department is in charge of placement of who works in what area. Therefore, managers want to assign people that will work well together to avoid conflict in the particular department. It is essential to recognize personality traits if planning on hiring, transferring, or promoting.

Personality and attitude tend to go hand in hand. Attitudes are specifically hard to change, because they grow with the person. Negative attitudes are something that all managers want to avoid, because conflict is likely to occur in the form of anger, argument or dislike. Communication is a necessity to recognize individual mechanisms such as stress level, job satisfaction, motivation, learning ability and morals. Perception could be the result of a past experience, and relates to a person's expectation of needs (Franklin, 2017). This is vital to planning. If the employee perceives an organization in a poor way, they are unlikely to benefit the company. Values refer to moral obligations, wants, interests, likes and dislikes. It is important to get trustworthy employees that have already learned what is morally 'good' and 'bad.' The company will benefit by aligning their values with the values of their employees.

There are two main outcomes in theories of performance (Mabey and other authors, 1999). Human resources want to encourage the employees to have a more effective and efficient work performance. Secondly, employers want to increase workers motivation, and commitment to their job. Henri Fayol is an efficiency theorist who thought it was important to note that employees work harder when management is more efficient. This theory gained attention and agreement, which resulted in the four functions of management; planning, leading, organizing, and controlling.

Setting objectives is one way to measure performance. Edwin Locke proposed the goal setting theory (Mabey and other authors, 1999) and this falls under performance management theory in our textbook. The theory explains how motivation is shown through creating original individual goals. This plays an important role, because the employee will be more motivated to accomplish a goal if they crafted it. In addition, this could be a learned method for the employee to modify their goal making it more realistic if it is not achievable.

Motivation theories seek to describe employee motivation and satisfaction. Managers must have strategies, and understand work motivation to produce the best environment for employees to thrive. The first theory developed on individual motivation was Abraham Maslow

(Mabey and other authors, 1999). **Maslow** studied human beings, and found that there can be an effective hierarchy in organization. He illustrated his theory in a pyramid. At the bottom of the pyramid you can find the basic needs, like shelter and food. Once the basic needs are established the next step was in employee safety and secure in their job. Next, employees want a good relationship with their coworkers like they feel loved and to be recognized for their accomplishments. Finally, there is a desire for self-actualization and the feeling that work is actually fulfilling. At each level the needs must be met before the employee positions themselves on the next tier of the pyramid. The idea is that an employee cannot focus on high-performance goals or promoting themselves to a higher level if they are fearful for their job.

### *Knowledge Check #1*

*What drives the quality in an organization?*

## **Recruitment and Onboarding**

**Recruitment and onboarding** is a process for a business or organization to integrate a new employee. The human resources department of the business is there to help other departments in the business to find the employees to fill open positions. With the help of HR, departments can focus on their everyday jobs rather than having to take time away to find a candidate eligible to fit the job descriptions of an open position.

The process of recruitment and onboarding begins with the department directors deciding whether the open position is necessary or if they can do without hiring someone new. If it is decided that they need to hire someone to fill the position, they typically post online and follow an applicant tracking system. As people apply, the recruitment group will screen the resumes and applications, sending them over to the department director for them to decide who they want to interview. Human resources will set up and put on the interview, assessing not their technical skills but whether the person is a cultural fit for the position. They gauge what the interviewee would require for benefits and salary. Once the interviewing process is over, the department director will choose who they would like to hire and HR hires them for the position.

## **Training and Development**

Human Resource management works, “to establish policies, practices, and systems that influence the behaviors of the organization and promote success throughout (Noe, R. A, 2017)”. A major role of Human Resources (HR) is training and developing staff. Human Resources goal of training and development is concerned with the improving the performance of the individual employees and the different departments within the organization. In this section we will talk about new hire training, popular styles of training, and ongoing development of staff to increase performance. These different situations are common for the Human Resource department to plan for on a daily basis and are important to the success of the organization.

In order to train staff upon hiring, Human Resource team works with department directors in the training of new hires. Because of constant change, employees need to be flexible and adaptive and focused on success of the organization (Source). While there are many different training plans for new hires there are some consistencies which include, new employee orientation, familiarizing with building, obtaining necessary usernames and passcodes, and department work and shadowing.

An example of a process for Hospital new hire is:

- ❖ First Day: New Employee Orientation
  - Organization
    - Finishing paperwork and filling out tax forms.
    - Familiarizing oneself with building and where important places are located such as, bathrooms, printers/copy machines, and emergency supplies.
    - Review Organization Conduct Policies
    - Basic computer, email, calendaring, and phone applications orientation.
  - Department
    - Meet staff and other important colleagues.
    - Review job responsibilities.
- ❖ Second Day: Compliance, Code of Conduct, Emergency Plan
  - HIPAA Compliance Training
    - Protection of Personal Health Information (PHI) for patients
    - Video training, “in-depth review of the components of the HIPAA right of access and ways in which it enables individuals to be more involved in their own care (HHS.gov).”
    - After completing online training receive free Continuing Medical Education or Continuing Education credit.
  - Code of Conduct
    - Confidentiality/ Privacy
    - Social Media, Electronic Communication, and Acceptable Use
    - Anti-Harassment
  - Emergency Plan
    - Organization and department plan for incase of an emergency.
    - Location of fire extinguishers and security buttons
- ❖ Third Day up until First Month : Department works
  - Series of meetings with managers
    - Discussion of work progress and performance
  - Employee Benefit Programs

- Dependent on organization but medical, dental, and life insurance may be provided.
  - If insurance is not needed opt out of provided plan.
- Receive additional resources
  - Additional training for unfamiliar workflows or topics.
- ❖ First Month till Third Month
  - Continue meetings with manager
    - Status meetings to maintain performance
  - Three Month Review
    - Review of performance, behavior, and areas of improvement
    - Trial of whether employment will continue or termination may occur
  - Start to better understand the organization

(BWH Checklist) (Source)

Two popular styles of training that are used by Human Resources departments are High-Leverage Training and Continuous Learning. High-Leverage Training is, “an instructional design process to ensure that training is effective, and compares or benchmarks the company’s training programs against training programs in other companies (Noe, R. A, 2017.)” High-Leverage takes a holistic approach and sets a standard for the organization to follow. In this approach department managers work alongside Human Resource to develop plans, to implement workflows and develop materials for employees to follow. These training materials are documented and distributed to appropriate departments.

Continuous Training builds off of High-Leverage, where “employees understand the relationship between their jobs, their work units, and the company and to be familiar with the company’s business goals (Noe, R. A, 2017.)” This type of training builds off High-Leverage and works to maintain the standard that has been set and continue the success of the organization. When employees from different departments work together there needs to be a developed workflow to insure consistency. For example, email and electronic communications. Organizations develop formats and guidelines to provide consistency and to avoid leaks of information.

After employees are established within the organization, there is still a need to maintain certifications and as mentioned before because of constant change employees need to adapt, be flexible, and focus on success of the organization (Source). While it depends on the organization itself, there are funds that are budgeted per department for employees to gain certifications and attend seminars to further their knowledge and professional skills.

Funds for additional training and certification reimbursement are distributed to departments separately. These funds can be used for additional training seminars and certificates. Examples of seminars range from public speaking to time management to continuing education programs. This added knowledge will give them the tools they need to be successful and to grow with the organization.

From a Human Resource viewpoint, they work with department managers to continue to improve the organization as a whole. Some organizations have required online education that is mandated for all employees. These programs are established to update certifications, enforce new conduct policies, and to deal with situations that may arise based on current situations, i.e. How to deal with an active shooter (Source). Other organizations offer manager orientation for those that one day want to be a leader or department manager. Programs like this not only advance the knowledge of employees but can advance the production of the organization as a whole and often times help with employee retention.

### *Knowledge Check #2*

*What is the key difference between High-Leverage training and Continuous Learning?*

## **Employee and Management Relations**

The key to being successful in any Human Resource position is to remain an equal employment opportunity within the workplace. An equal employment opportunity is a workplace that does not discriminate an employee based on race, gender, sexual orientation or role within the workplace. This allows every employee to be treated with the same respect and judgement so ensure that there is no discriminatory actions occurring. (Mathis, Jackson, 2008) Keeping treatment fair and consistent throughout all departments of the organization and those who manage it is important so that employees do not feel they will be punished more or less severely based on who their manager is.

A Human Resource manager also has the responsibility to be an advocate for employees during an issue that occurs within the organization to ensure they are being represented in every legal way (Mathis, Jackson, 2008). When there is an issue, a decision is never made in an instant regarding the employee's fate following the incident. There is an investigative process conducted that involves all of those who took part, and the HR manager serves as a "mediator" that sees each side in an unbiased way, and looks at the hard facts to identify if any organization laws were broken. It is then, and only then will the HR manager follow through with disciplinary actions if they are necessary (Mathis, Jackson, 2008). This is an important part of the Human Resource Management role because it ensures that no one gets away with any unfair disciplinary actions just because of their role within the organization. It also helps in situations where there may be a management executive and a lower staff personnel involved and the lower staff employee is scared to tell the truth in lieu of their job security. Having the HR management as a mediator helps to insure each person is fully represented.

The last responsibility of an HR manager is to ensure positive moral within the workplace and promote healthy relationships between management and staff. If there is a divide between management and staff, they will not feel comfortable enough when they need to step forward to discuss an issue regarding the workplace environment, inappropriate conduct, or salaries and

benefits. The list could go on, however, the main objective is that if employees do not feel represented or comfortable within an organization their performance will fall and their trust within the organization will be altered. HR management often puts on various staff events to increase relationships within the organization and its departments. This is also important because not only does it create a positive work environment by improving relationships, it also gives employees something to look forward to when they are doing their duties.

## **Compliance and Safety**

Not only is it required by law that various organizations abide by a strict set of safety regulations, it is a key component to ensuring that employees feel safe and represented within an organization. If an employee feels as though their organization cares about their wellbeing, they are more likely to put more effort into their work and give the company more than the bare minimum (Occupational Safety Group, 2017). In 1970, the United States Department of Labor enacted the Occupational Safety and Health Act. This act contains 34 sections detailing a complete set of regulations that assure safe working conditions for men and women of the workforce through various trainings and informational/educational sessions. Federal and State Occupational Safety and Health Administration employees enforce the regulations and ensure compliance by doing various workplace and jobsite visits and by taking disciplinary steps when they are not met (U.S. Department of Labor).

The role of the HR manager is to ensure all employees understand the laws and expectations of a safe work environment. This can occur when employees are hired and also throughout their length of employment as rules and regulations are always changing. Often times, HR management will hold training sessions to properly educate and train employees as well as create a handbook which employees can refer to at any moment when they have questions regarding the rules and regulations. It is also important to communicate any changes in rules or regulations as well as inform staff members about any current issues or risks that may warrant concern or corrective action (Carnovali , Davis, 2010).

### *Knowledge Check #3*

*What is the entity that ensures all workplaces are enforcing and complying with the Occupational Safety and Health Act?*

## **Compensation and Benefits**

Another key task of Human Resources is compensation and benefit review and implementation. HR works to use compensation and benefits to improve success of staff by rewarding employees for the achieved performance. With the help of department director, HR sets the standards for the individual salary increase, mass salary review and the rules for the



bonus as the organization keeps the financial stability (Community Foundations of Canada, 2013).

Organizations determine salaries based on market pay rates, or based upon what other organizations are paying similar positions within the same region of country (Heathfield, 2017). Typically in organizations salary varies based on the level of education, knowledge, skill, and experience needed to perform each job. Salary ranges often follow a similar pattern where executive-level positions have the largest range in salaries, while lower-level have a much more narrow range (Heathfield, 2017).

**Benefits** are non-wage compensation that employees can receive in addition to salaries. Generally benefits include Social Security, workers compensation, and unemployment insurance. It is under the discretion of organization if they want to offer additional benefits such as, medical and dental insurance, paid time-off, retirement plans, and education reimbursement. Benefits are an investment organizations make in their employees.

Benefits work to motivate employees and help with staff retention. While salaries are competitive based upon market statistics, benefits can vary depending on the organization. The cost of benefits can often be more than salaries but are a crucial part in the success of employees. Often benefits offer a piece of mind to employees, knowing their organization is concerned with their well being in case of illness or injury.

## Answers to Knowledge Check:

1. The culture and structure of group mechanisms is what drives the quality of the organization.
2. High-Leverage training establishes the base knowledge that one must have in order to succeed, while Continuous Learning builds on the knowledge one has.
3. Federal and State Occupational Safety and Health Administration; their employees with do onsite visits and audits.

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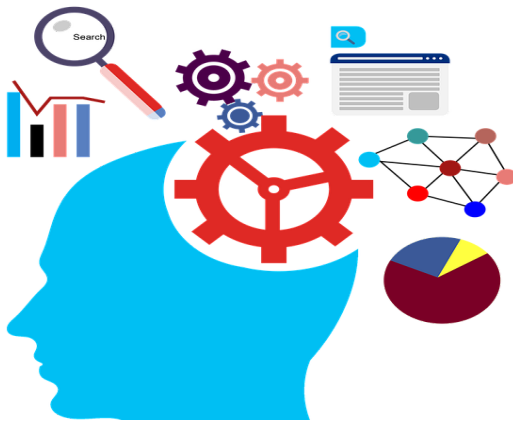
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# Marketing and Public Affairs



## Chapter 6

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### Learning Objectives

- Understand the scope of Marketing and Public Affairs in Healthcare
- Understand the specific functions and purpose within an organization regarding marketing and public affairs
- Understand the contribution of marketing and public affairs to an organization's foundation
- Understand the dynamic shifts regarding marketing and public affairs

### Terms to know:

- **Marketing**
- **Public Relations**
- **Target Market**
- **Crisis Management**
- **Branding**
- **Job Satisfaction**
- **The Marketing Mix**
- **Competition Analysis**
- **Patient Engagement**

## Summary

Marketing and Public Affairs encompass multiple responsibilities which foster the business growth, reputation and community benefit of an organization. This includes crisis management, employee relations, image management, media communication, strategic development and much more, that helps an organization remain effective throughout the changes and trends of healthcare. This chapter discusses these key factors and their importance.

## Introduction to Marketing

### *Purpose and Concept*

The most widely accepted definition of **marketing** is from The American Marketing Association which defines marketing as “the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large” (American Marketing Association, 2013). The key functions of marketing include, understanding your market, developing relationships within your organization, and communication with customers and potential customers (Kennett, Henson, Crow, & Hartman, 2017). According to our interviewee just like marketing in other organizations marketing in healthcare is multidimensional and is continually evolving, it can be segmented into both internal and external categories (Source, 2017). The foundation of effective strategic marketing is knowing not just what your organization is promoting, but more importantly, knowing to whom you are marketing to. Effective messages delivered through the right communication channels means knowing your target audience. Market research is essential to developing and executing plans that achieve defined goals. Market research, which includes “systematic gathering of data for customers to identify their needs” is essential. (Berkowitz, 2010, p.6).

Comprehensive market research includes knowing your organization and your competitors brand awareness and brand image/reputation, as well as the reputation of your providers as clinical expertise and quality of care (Source, 2017). It also encompasses knowing your market including the demographics of a population and census predictions for future years. Identifying your target audiences for marketing requires understanding how and where to reach populations by age, income, health status, and insurance coverage. Sound marketing strategy also respects internal audiences as **target markets**, as employees can be virtual ambassadors as they are credible resources and experts within their spheres of influences in a community. It is important to be able to decipher between your distinctions for quality and service while keeping your financial and business scope in mind. This is an important fact considering many healthcare organizations have very different missions and value statements. In essence, effective marketing strategy aligns messaging with a delivery that influences perceptions that reflect the image of your organization as a trusted, accessible provider of quality care (Source, 2017).

## *The Marketing Mix*

**The marketing mix** encompasses four fundamental marketing tools used in marketing strategy, they are known as the 4 P's. They include;

- 1.Product: goods, service or ideas offered by an organization
- 2.Place: area relating to goods and services being distributed often by means of location or channels
- 3.Price: monetary or nonmonetary costs
- 4.Promotion; advertising and communication

(Center for Disease Control, 2011).

The marketing mix is essential to establishing a strong competitive presence in a diverse and dynamic market.

### *Knowledge Check #1*

*What is the first thing you must know in regards to marketing?*

## **Introduction to Public Affairs**

### *Purpose and Concept*

The Institute of Public Relations defines **public relations** as the “the deliberate, planned and sustained effort to establish and maintain mutual understanding between an organization and its publics” (Pinkham, D. 2017). Public affairs have a significant influence on a customer's perception and determination of an organization, business or hospital's reputation. A public affairs (or public relations) department, in a hospital, is responsible for executing effective and constructive communication with key stakeholders including community leaders, local media, staff, board members, local/state/federal representatives, providers, donors patients, and the community at large. Universal functions of the public affairs (or public relations) department are to establish an amicable relationship between their organization and stakeholders based on consistent, credible, and effective communication channels.

Also, part of comprehensive public affairs management is effective **patient engagement**; a strategy used to achieve the "triple aim" of improved health outcomes, better patient care, and lower costs (James, 2013). Tools like electronic medical records (EMRs) and privacy protected digital communication channels are tools that many healthcare organizations use to keep patients informed, engaged, compliant and loyal (Source, 2017).

### *Crisis Management*

One of the most important responsibilities of a hospital's public affairs department is to manage communications in the event of a real (or potential) “crisis”. How an organization manages information can be the difference between being seen as a responsible and reputable organization or ineffective, unworthy of the communities trust, in essence bad publicity.

Unfortunately, for most organizations encountering a crisis is not a question of ‘if’, but a question of ‘when’. Being prepared means having defined plans to deploy as soon as a potential crisis situation arises. An article from Hospitals and Health Networks states, “putting together a team and a plan before a crisis occurs can help to minimize the damage” (Neisloss, S. 2014). The term “Crisis” in a healthcare organization can refer to any situation that could require an emergency response including mass casualty events, natural disaster, information technology breakdown, security breach or even a internal systemic breakdown (for example: a flood or major equipment failure). It is crucial that public affairs staff engage with media and other audiences with transparency, responsiveness and consistent communication. Common protocols demonstrated by public affair representatives are to provide the media with simple, reassuring facts to deter fear and avoid speculation before the entirety of the story is released. In a time of crisis, personnel are likely to be in a heightened state of urgency and it is the job of the public affairs staff to deal with the media and any other outside sources and keep the reputation of the hospital.

### *Community Relations and Outreach*

Community outreach is the practice of conducting local public awareness and education activities through both broad and targeted interactions. Community engagement is a long-term, in-depth relationship building process, with the goals of fostering partnerships beneficial to all parties involved and cultivating a sense of pride in the important contributions that an organization makes of a community. Examples of outreach activities include health education programs, health fairs or presentations at public events, health training, public services announcements and community newsletters (Riesch, 2013). Through community relations and outreach, organizations have the opportunity to enhance or strengthen their reputation by their commitment to health and well-being, and most of all fulfilling the organization's mission.

#### *Knowledge Check #2*

*What are some events or circumstances in which the public affairs department is needed?*

## **Image Management and Development**

### *Branding*

**Branding** reflects the overall reputation or image of the organization and conveys its competitive advantages through simple and memorable ways (Griffith, 2010). Effective brand strategy establishes your organization as worthy of trust, loyalty, and deserving of a strong reputation for quality and service. Brand is more than just an icon or tagline and brand messaging should be consistent across all communication platforms ;signage, website, marketing materials,

corporate id. Effective branding promotes good reputation and ultimately demonstrates the organization's commitment towards its mission statement.

To achieve good branding, the brand must be:

1. Differentiable – not the same as every other organization
2. True and Credible – able to deliver on the promise
3. Memorable – easily recognizable
4. Compelling – resonates with the needs of intended audience
5. Easily Understood – immediately communicates individuality
6. Exclusive – a position unique to others, and thus can stand alone can own in the market

With an effective brand strategy, an organization can benefit with measurable improvements including:

- Strong awareness of brand
- Better **competition**
- Increased funding- stakeholders convinced to donate money
- Employee engagement- greater sense of purpose/ increase retention rate
- Attraction new employees (new talent)
- improve patient loyalty

### *Knowledge Check #3*

*Is branding a long term process or short term process?*

## **Employee Relations**

### *Internal Communications and Stakeholder Engagement*

Internal audiences of a healthcare organization are profoundly valuable and important to an organization's success. Not only do staff have the ability to implicitly influence how their families, friends and community perceive the quality of care of an organization, but they can also have an impact on if and how an organization is perceived as an employer, supporting or detracting from the ability to attract quality staff. Internal communication is the connective tissue of a complex healthcare organization. Again, mindful that internal audiences can be broadly generalized as "entire staff" or categorized in more specific terms, such as nursing, management, providers or administrative staff, strong organizations understand that all employees need to feel as though their contributions are valued and that their roles are connected to the mission, regardless of where they serve.

Internal communications strategies and tactics should be responsive to the needs, interests and habits of staff across the organization. Effective communications allow for messages to be delivered in a variety of forums and channels to reach and engage staff at all levels and on all shifts. From inter and intra-departmental staff meetings and "socials" to other channels like

facebook, e-newsletters and emerging technology that allows for organizations to leverage internal communications and achieve strong internal cultures that possess loyalty and affinity that extends beyond the staff.

All employees should understand and have the opportunity to engage with leaders and management teams about the organization's mission, business objectives, industry, competitive challenges and financial performance. By facilitating dialogue, employees have the opportunity to understand how their role individually and collectively, contributes to an organization's success. Effective communication and cultivation of a team culture are especially important if strategic planning results in changes or begins moving the organization in a new direction.

Internal communications also support employee recognition for jobs well done, highlight the contributions of staff less directly involved in patient care (such as engineering, food services or IT) and reflect back the good work of the organization in serving its mission and making contributions to the community.

Essential effective internal communication is a two-way channel of dialogue between different categories of staff, including leadership and staff, providers and staff, and providers and leadership. One of the most effective ways to assure connectedness, open communication, and also assure staff feel valued by the leadership of an organization is the concept of "rounding". Rounding is when individual leaders of an organization, administrative and medical staff, leave their offices or day-to-day responsibilities and visit patient care and support areas of an organization to see how staff, visitors and patients are doing. These interactions allow staff to feel like leadership understands their challenges and responsibilities, patients to feel like hospital and provider leadership care about their experiences and like everyone is part of serving the organization's commitment to delivering exceptional care and service (Source, 2017)

Effective internal communication also respects that fact that employees are not monolithic in their needs, interests and circumstances. Employees are individuals with families, friends and spheres of influence that extend well beyond an organization. With proper attention and strategy, Marketing and Public Affairs uses established external communications channels to showcase, celebrate and congratulate individuals and departments for a variety of reasons: quality achievements, positive patient feedback, community service activities, unique hobbies or interests, etc. Social media can be an optimum conduit for not only sharing internal communications, but expanding and engaging others in the community.

Such leveraging of internal communication opportunities via external channels can reflect an organization's commitment to culture and respect of staff, not only encouraging employee retention, but supporting staff recruitment. Providers and staff want to work for organizations where they feel valued, where individuals feel connected to a mission regardless of where they serve in an organization and where they believe their voices are heard and their opinions matter.

### *Support Employee Retention and Acquisition*

Employee Relations is arguably one of the most important aspects of healthcare. Patients will come back to your hospital if they receive quality care, which is often dependent on skilled



and talented employees. Good outcomes for patients equates to them continuing to receive their care there, which equates to more profit for the hospital (Advanced Employee Relations, n.d.). Effectively communicating internally within an organization helps support employee retention, as well as employee acquisition. The overall goal of internal communications is to boost staff morale and sense of community, and engage new talent through new employees (Source, 2017).

How to communicate internally?

1. Variety of communication vehicles: newsletters, facebook, specific websites dedicated to employees
2. Internal communications team
3. Responsive: always responding effectively and efficiently to needs addressed by employees

Example: Management taking part in handing out turkeys at Elliot Hospital during the holiday season in a way to engage in the community. They want the community of greater Manchester to know that Elliot Hospital is for the community and always willing to help.

#### *Knowledge Check 4*

*What is the best way to make employees feel valued ?*

## **Business Development**

### *Importance of Research*

Data selections and analysis are foundational to excellent marketing. Research allows for strategic marketing plans that are responsive and effective as strategies evolve from answers to marketing questions that include the follow areas:

- Consumer research – what is brand awareness, image compared to competitors (quality, services, clinical specialties, providers, etc)
  - Brand awareness
- Preferences, behaviors and habits that determine how consumers make decisions
  - 57% of consumers said that a hospital's social media presence would strongly influence their choice regarding where to go for services (Ventola, C 2014)
  - 81% customers believe social media is an indication that a hospital offers cutting-edge technologies (Ventola, C 2014)
  - 12.5% of surveyed health care organizations reported having successfully attracted new patients through the use of social media (Ventola, C 2014)
  - U.S., eight in 10 Internet users search for health information online, and 74% of these people use social media (Ventola, C 2014)
- Competitive and market share research

- Who are competitors and how/what/who do they market to?
- How do competitors and your organization share the market for services ?(like ob/maternity, cancer care, emergency department care, cardiovascular procedures)
- How much of the market is commercially insured, government or self pay?
- Website analytics
  - Who goes to the organization's website? (male female)
  - How do they access the website? (mobile, desk-based, tablet)
  - What are most frequently accessed page?
  - How long do visitors spend on the site?
  - How many new page visits versus returning?
- Community Health Needs
  - What are major community health issues?
  - inadequate access to care?
  - death from preventable diseases such as lung cancer or heart disease?

Without having the information to answer these important questions regarding the target population it would be impossible to know how to go about marketing to them.

### *Strategy Development and Implementation*

Strategic planning provides the structure to make day-to-day decisions that align with the organization's objectives and creates direction and actionable tactics to achieve defined marketing goals. From improving brand awareness and reputation in a community to targeted marketing of a clinical service line or specialty area, effective strategic planning defines efficient channels to deliver consistent and compelling messages that influence opinions, preferences and decisions. A well-defined strategic marketing plan respects that different audiences consume information in a variety of ways, and, increasingly, rely on mobile technology and social media platforms to share experiences, information and opinions. Sound marketing strategy allows an organization to anticipate, assess, implement, monitor and optimize executional tactics based on performance. Such a plan is an essential business tool for hospitals, medical groups or provider practices.

How is Strategy developed and implemented?

1. Starts by defining mission; needs to be short, concise, and show values
2. Vision: ultimate goal of the organization/hospital; this includes both short term goals and long term goals
3. Assessment: situation assessment concerns itself not only with the external environment but with the organization's internal environment as well.
  - a. Internal strengths and weaknesses (ex: how staff views organization)
  - b. External demographics (ex: economic trends, competition, overall environment)

4. Determine specific strategies that will improve the organization (examples include: clinical priorities for growth, how implementations will differentiate and/or add unique attributes, improvements to quality performance, bring more clinical expertise and a more diverse employee network).
5. Strategies: There needs to be multiple that ultimately address the Strengths, Weakness, Opportunities, and Threats (also known as S.W.O.T.); It's important to know which resources can be brought to bear against opportunities and threats, Marketing must understand the organization's strengths and weaknesses, and any obstacles that could undermine the strategy.
6. Action: the goals must be attainable, achievable goals. To successfully implement a strategy, there needs to be communication of goals with an understanding of personal roles; every employee must know their purpose in an organization. In addition, implementing new strategies needs to have measurable tracking/outcomes.

SMART goals are a technique used to identify an appropriate goal;

S=specific, significant, systematic, synergistic

M=measurable, meaningful, motivational

A=achievable, agreed-upon, action-based, accountable

R=relevant, realistic, responsible, results-oriented, rewarding

T=tangible, time-based, thoughtful

### *Strategies and Tactics*

Based on the organization's needs and opportunities to leverage brand awareness, to build brand preference, and support clinical volume growth, strategic marketing requires the ability to define and distinguish not only the key differentiators and attributes of the organization itself, but also defined priorities for growth.

Marketing strategies must be responsive to how consumers form opinions and make decisions – how they “shop for” care or select a service. For example, consider the difference between primary care marketing and specialty service lines. (Suzanne Tammaro, Vice President of Marketing at Southern New Hampshire Medical Center). Consumers seeking primary care providers want convenience, ease of access (online booking), Saturday or evening hours. On the other hand, consumers who are seeking specific specialist services typically get referral from primary care but then may ask friends or family for their opinion. This can be a “influence/decision” point where a patient may be encouraged to consider seeking care from a competitor with a stronger reputation in the particular area. Patients lacking knowledge or confidence in a specialist referral, or struggling with decisions regarding serious, even-life threatening conditions are particularly subject to the influence and opinions of others within their sphere of influence. Increasingly, patients are looking for guidance online, via online rating and review sites, including Facebook groups, google reviews and other social media channels.

In addition to prior strategy recommendations including use of social media and target marketing to build awareness and reputation, sound marketing strategy should include tactics that engage and inform patients from the moment they enter into an organization's care delivery system. Emphasis should be on consistency in messaging and information that builds confidence and the image of an organization and/or its clinical specialties before they may need service, using tactics that can include newsletters, email reminders, web site/patient portals and integration of social media.

### *Knowledge Check #5*

*How and why is research essential to strategy development?*

## **Current Challenges and Trends in Healthcare Marketing and Public Affairs**

Healthcare is among the most complex and dynamic industries in the country. Healthcare organizations must be prepared to anticipate and respond to changing market forces and policy shifts that impact how consumers shop for care, how payers reimburse for care, and how providers deliver care. The most prominent current challenges and trends include:

1. Legislative pressures/uncertainty
2. Shortage of providers; fewer people going into medical school, shortage of behavioral health providers
3. Aging baby boomers and increased need for care
4. High costs of care
5. Increased influence of consumerism- with the rise of high deductible plans, consumers are increasingly limited in choices (narrow provider networks). They are shopping evaluating options based on out-of-pocket costs, looking for value based on research about providers through patient evaluate experience of care via social media and established rating sites
6. Technology changes- reliance on mobile technology, and use of health related apps is emerging as a new delivery model for healthcare provider organizations.

## **Conclusion**

Healthcare organizations have clearly experienced diverse change over the years which has contributed to the new norm and encompasses a more dynamic and rapidly shifting market. In order to have a successful healthcare organization, marketing and public affairs needs to be executed in an effective way and must maintain a positive "face" within the community. As a source from a New Hampshire health system said, it's important to cultivate relationships with people so when you need something it's not the first time you have spoken to that person or organization. In today's world, everything is in the public eye and it is vital for an organization to

understand the importance of maintaining a positive image. Marketing and Public Affairs are imperative to ensuring the future of your organization.

## **Answers to Knowledge Check:**

1. Your audience and organization.
2. Some circumstances and or events in which the public affairs department is needed include crisis' like mass casualty events, natural disasters, information technology breakdowns, security breaches or even a internal systemic breakdowns (for example: a flood or major equipment failure).
3. Long term: it is a process that requires in depth knowledge on those who are the target of marketing
4. Promote internal communication
5. In order to market effectively, it is key to know who the market it and how to captivate the audience.

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# Medical Staff Management

## Chapter 7

Pixabay (2017, February). *Healthcare* (Infographic).  
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### Learning Objectives

- Structure of the Medical Staff Governing Body
- History of Medical Staff
- Employee Titles and Responsibilities
- Quality Assessments

### Terms to know:

- Medical Executive Committee
- Chief Medical Officer
- Chiefs of Staff
- Division Chief
- Medical Staff
- Chief Executive Officer
- Medical Director
- Contracted Services
- Credentialing and Privileging
- Ongoing Professional Practice Evaluation
- Focused Professional Practice Evaluation
- Peer Review

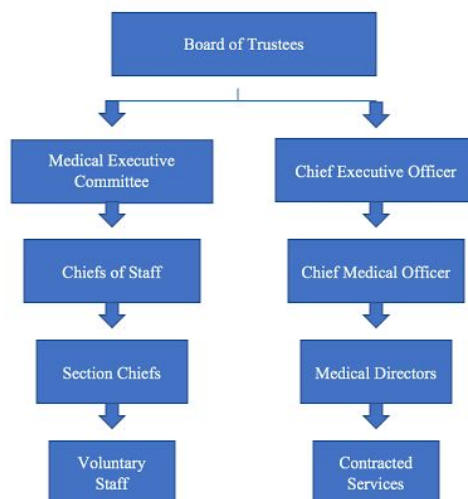
### Introduction to Medical Staff Management

In this chapter we will focus on the makeup of a hospital's medical staff, the roles of each person on the governing board, how the medical staff has evolved, reviewing physicians and quality measures the medical uses to keep up to benchmark. This chapter focuses on the structure within a hospital setting such as Exeter Hospital because they are a large organization. Keep in mind that each medical staff structure may look different depending on the size of the

organization, what type of organization it is and how many patients they see in a given period of time.

## Medical Staff Pyramid

Within a hospital, the medical staff team is governed mainly by the **Medical Executive Committee** (MEC) and the **Chief Medical Officer** (CMO), which is overseen by the Board of Trustees. The MEC's role is to "make key leadership decisions related to medical staff policies, procedures, and rules, with an emphasis on quality control and quality improvement initiatives" ("Medical Executive Committee"). Dividing the governing body of the medical team into two, on the MEC side this team oversees chiefs of staff, section chiefs and voluntary staff. On the other side where the CEO is, this person oversees the CMO, **medical directors** and **contracted services** (Burroughs, 2015). A visual of this is provided.



## Structure of Governance

Each medical staff team has a governing board under the MEC to keep the hospital running smoothly and efficiently. At the top of the pyramid is the elected president followed by the vice president and the treasurer. The president doesn't need have a specialty in the medical field but they are typically apart of the actual medical staff. The President is elected and term limits depend on the hospitals bylaws and can range around 1-10 years. Their duties involve guiding the MEC, creating quarterly reports, and gathering the medical staff to have quarterly meetings get the overall rundown of the medical staff within the hospital. The President is also invited to important meetings regarding future plans of the hospital and planning with strategic committees. The vice president's role is normally to substitute in for the President when he/she cannot attend a meeting for fulfill their role and aid the President in tasks they need completed. The other officer of the medical staff, the treasurer, is responsible for distributing medical staff funds, approve payments with the budget acquired from the MEC and more (Snelson, 2012).



These three roles exist with every medical staff and sometimes there can be a secretary on the board as an officer who keeps meeting minutes and organizes meetings.

Following the officers of the medical staff is a **chief of staff**. This person can either run for their role or be elected by the nomination committee under the medical staff governing board by receiving input from the whole medical staff and being voted in. Chiefs of staff can look over anywhere from 2-15 departments that could include emergency medicine, general medicine, surgery, pathology, anesthesia, obstetrician-gynecologist, pediatrics, radiology and more. At Exeter Hospital, this position is held by two people, one who over looks medical and the other who overlooks surgical. Typically, the chief is involved in reviewing quality reports twice a year for all medical staff positions and would be tasked with reviewing the mortality rate within the hospital. To divide the work up more and create more categories there are section chiefs, also known as **division chiefs**, under each chief of staff. For example, under the chief of staff for surgery, the division chief would overlook ears, nose and throat surgery department. They can also look at, for surgeons, what is the turnaround time in the operating room and how can we better it? Each governing position plays an important role in the quality of care given.

### *Knowledge Check #1*

*While a chief of service may overlook many departments, why might a hospital have division chiefs under them?*

## History of Medical Staff Management

Going back in time, the governance of the **medical staff** was a little different. Before the 1950's, medical management first started as a group of doctors and surgeons working in a hospital together that would provide medical services, who would meet monthly, and **peer review** each other. The Joint Commission on Accreditation of Healthcare Organizations started to require peer reviews at all United State hospitals in 1952. However, in 1986 there was economic abuse of the peer review process, which led to physicians fearing possible consequences of peer reviews due to a court ruling. In 1986 the HealthCare Quality Improvement Act was put in place by the U.S Congress to make it clear that peer reviews are for physician quality improvement (Vyas, Hozain, 2014).



The medical staff is an extremely traditional structure, “It has a proud and rich legacy but now must change or become obsolete (Burroughs, 2015).” In 1919, “Minimum Standard Document,” was a set of principles created by the American College of Surgeons. This set of principles took six years to come together with the work of Ernest Amory Codman, and the ACS’s Committee on Standardization. The medical staff was defined as “a group of doctors who

practice in the hospitals inclusive of all groups (Burroughs, 2015).” The medical staff was like a membership, which was strictly made of physicians and surgeons who were trained and licensed. These physicians and surgeons had to be capable in their field and have good character with professional ethics. The “Minimum Standard Document,” asked that the members follow all rules, regulations and policies that the hospital asks. These include, regular monthly meetings, analysis of care provided, complete accurate records, and supervised diagnostic and therapeutic facilities (Burroughs, 2015).” The Joint Commission on Accreditation of Hospitals (now The Joint Commission) was founded in 1951 with the help of the ACS due to their successful medical staff model. The Health Care Financing Administration mandated the concept of the organized medical staff was going to be used for healthcare to receive payments from the federal government for the healthcare services. The classic organized medical staff has the skill to manage peer evaluations, **credentialing and privileging** as well as the quality management function. Today, medical staffs are frequently split between those peers that understand the need for interdependence and those who don’t, creating a difficult, bitter environment. Physicians typically have a difficult time adapting to change that they do not see necessary. There needs to be a balance when it comes to change that supports physician interests and transforming their care at a high quality with a low cost. (Burroughs, 2015).

As time goes on, physicians start moving away from hospitals and start gravitating towards healthcare organizations and other healthcare services. Since physicians are venturing off from hospitals, the classic medical staff structure starts to become irrelevant. Since older physicians want to work long hours and are very traditional they followed that structure of the medical staff. The younger physicians do not want to attend any staff meetings or functions because they aren’t interested in working long hours or attend these meetings on their own time. The redesigned medical staff should include changes to its leadership model, operational process, organization structure and the relationship between the staff and management. To start with the new medical staff model there needs to be a physician leadership group that is stable and accountable. All physicians that would like to be a part of the leadership group will have to complete leadership training. In this training the physicians will learn the medical staff structure and purpose, credentialing and culture, peer review and performance, legal and financial obligations, and lastly performance improvement, patient safety and leadership skills. After the physicians are trained they should continue to have coaching to help with transitions. Physician leadership used to be strictly volunteers that did not receive any compensation for their roles. Now this is shifting to these physician leaders being compensated in these positions. The physicians are now being compensated for having more responsibilities with the role. Some of these responsibilities include but are not limited to, preparation and commitment to the medical staff structure, being held to performance expectations, and meeting and exceeding the ROI standards. (Burroughs, 2015).

The next step of the medical staff structure is to reorganize the structure. In doing so the structure has to be vital, responsive and has to partner with the management department in order

to have effective change. It would be ideal to have a small Medical Executive Committee (MEC) that includes physicians and leaders from the hospital as well as the ambulatory department. These members of the committee will have the role of being representing best interests to all of the medical staff. The new medical staff structure should also include a credentialing committee and peer review committee. By having these committees there is more transparency, because those peers work specifically with the committee. When the departmental committee ran the peer review there were conflicts of interest. The next implementation is service line leadership, which typically follows a triad model, including a physician leader, an admin nursing manager and an executive leader. In such a service line the reporting relationships do not need to linear, there are services and departments that could be involved in a service line. (Burroughs, 2015).

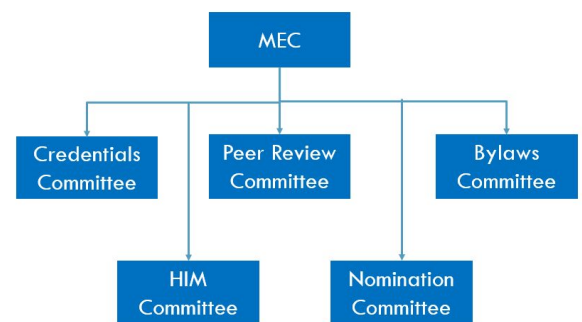
Since the medical staff structure is changing over time, the new model still needs to remain successful. In order to have a successful medical staff the organization needs to have a shared mission, vision and strategy. All physicians should have an agreement with the organization that has the medical staff bylaws and performance expectations, incentives, benefits, and compensation plan. With this agreement the relationship between the physicians and managers are legally, clinically and economically interdependent. It is possible that the medical staff structure will continue to gradually change over time since the structure has already changed since 1919. (Burroughs, 2015).

### *Knowledge Check #2*

*What was the medical staff defined as in 1919?*

## **Employee Titles and Responsibilities**

The board of trustees oversees the Medical Executive Committee (MEC) and the Chief Medical Officer (CMO). The MEC and CMO are responsible for governing the team of medical staff within the hospital. As previously stated, the MEC's role is to make key leadership decisions regarding medical staff policies, procedures, and rules. These decisions are to be made with a focus on quality assurance and improvement. The MEC oversees the chiefs of staff for each department, these departments could include emergency medicine, surgery, radiology, etc.



Source: (In class pptx source, 2017)

Typically there are 5-12 chiefs of staff who are then responsible for their respective section chiefs, including quality, operational, and disciplinary duties. Section chiefs are critical

because they are able to relieve some of the pressure put on their chief of staff by assuming a portion of the responsibility in governing the staff of one particular focus of each department. For instance, the chief of the surgery can better manage the entire department of surgical services when they have section chiefs managing each team of surgical specialties. In addition to the members of each medical staff department, all voluntary medical staff members report to division chiefs as well. Voluntary medical staff are those physicians who are privileged to practice in the hospital, but they are not employed by the hospital (Casalino, 2008). Each section chief of staff is involved in quality assessment and improvement, equipment changes, and many of the other day to day activities revolving their department, however one section chief may be more involved than another depending on the volume of patients seeking their specialty.

The MEC is responsible for assuring quality and supervising improvement throughout the medical staff. An important duty of the MEC is credentialing and privileging physicians and related professionals. This process is meant to ensure the continued effectiveness and reliability of all clinical teams. Privileges are determined according to specified terms involved in each clinical procedure and they are limited to two years (Griffith, 2010). Quality assessment starts with credentialing. New physicians applying for credentialing are put through a review process that starts with primary verification of your qualifications and educational background. The credentialing committee must first verify this information to ensure that the physician is in good standing and that all their professional claims can be confirmed. The credentialing committee can use this opportunity to identify potential red flags throughout the physician's record. It is a careful process that accounts for the fact that not all physicians are going to be forthcoming with information that could be seen as a red flag. By identifying anomalies such as gaps in employment or subpar letters of reference, the credentialing committee can better advise the MEC and the BOT on final approval of all physicians seeking appointment.

The second level of quality assurance is OPPE, or **ongoing professional practice evaluations**. These ongoing feedback reports are reviewed by the chiefs of staff throughout each year to make sure that there's no trends that look alarming. If there are issues found during the OPPE they are addressed during the third level of quality assurance; **focused professional practice evaluation** (FPPE). It is standard for many new physicians to enter a FPPE at the beginning of their careers, this provides an overview of their skills and reinforces their claims and professional abilities. For example, a new surgeon may be required to have a proctor during their first few cases to ensure that their capabilities match their initial claims. There is a fourth level of quality assurance that involves peer review. In addition to assuring continued quality, the MEC is also responsible for quality improvement. The major difference between quality assurance and quality improvement is the purpose behind them. Quality improvement starts with the identification of a problem, typically one found during the quality assurance process. Once the problem is identified the following actions can be taken: plan, do, check, and act.

It is extremely important that physicians monitor each other. They do this by peer reviewing each other. According to Vyas and Hozain, "Peer review is the process whereby doctors evaluate

the quality of their colleagues' work in order to ensure that prevailing standards of care being met (Vyas, Hozain, 2014).” The administration of the hospital can ask for peer reviews of any specific physician at any time that can be either accepted or denied by the hospital’s peer review committee. The purpose of peer reviews are to discipline those physicians that are incompetent or unethical with their work. Before there was a national data bank of disciplinary action, there were physicians who avoided disciplining actions by moving to other states or hospitals that did not know of their previous actions. Now that the national data bank of disciplinary action does exist it helps other hospitals in other states research potential employees in the database to verify there were no previous incidents. These reviews are not very standardized. Only 62% of hospitals do consider the peer reviews to be very standardized (Vyas, Hozain, 2014).

On the opposite side of peer reviews they can really be beneficial and a breeze for those physicians that have done nothing unethical. In order for peer reviews to work effectively the office needs to have very good culture. There needs to be culture of transparency in the way that the physicians evaluate each other. In attempt to promote culture of transparency “a leader’s actions and behaviors fabricate a workplace climate that generates trust, engagement, and buy-in from employees (*Creating a Culture of Transparency, n.d.*).” Related to culture of transparency, there has to be a sense of protection between the peers. Without a sense of protection between the physicians there won’t be a culture of transparency. If a lawsuit on a physician is not protected from his or her peers there won’t be transparency. However, there is balance between transparency and protection. It is extremely important to know when to break the protection and transparency. A good time to do this is if a physician does something unethical and or reportable (source, 2017).

### *Knowledge Check #3*

*Why might a new physician be required to enter a focused professional practice evaluation when starting at a new hospital?*

## **CEO**

“A Great hospital CEO, I believe, is one, where people are doing things under his or her supervision because it’s the right thing to do and they want to do it, not because you told them to do it.”

Vincent Caponi,  
St Vincent Health System, Indianapolis

The **Chief Executive Officer** of a hospital holds the highest management position within the entire organization; this person works directly with the Board of Directors in order to inaugurate strategic planning for the organization. In order to obtain long-term success, a way to

equalize managing the daily procedures and handling the strategic development initiatives is needed.

The Board of Directors is the “boss” of the CEO. When interacting with the Board, the CEO has open communication, they have very clear expectations when it comes to evaluating the CEO, they do these performance evaluations periodically. The Board has a structure that the CEO must enforce between physician/clinical staff relations. Lastly, they vigorously involve themselves in succession planning; they are in charge of replacing, firing, recruiting new leadership for the healthcare organization, such as the CEO (Punnoose, 2014).

Being the CEO of a hospital comes with a number of duties and responsibilities, such as the obligation to sustain a strong financial performance and ensure financial solidity and strength by endorsing services in a profitable way. The CEO has to be sure that clinical policies and procedures are implemented and applied to the hospital's daily functions; along with this, the rules and regulations of the Government must also be followed. When dealing with compliance regulations of the Government, the individual holding the role as CEO must be sure that the entire organization is functioning in accordance with each and every regulatory agency and accreditation body. The CEO must offer and demonstrate the standards for operational excellence; this individual guarantees that the objectives and goals of the hospital are achieved through selection, growth, organization, motivation, management, assessment, and the promotion of human resources. He/she must be sure that the staff being hired and retained are highly qualified. Also, he/she is responsible for forming relationships with both internal and external stakeholders in order to promise that patient care is high quality. Lastly, the CEO must generate a positive and productive culture through strong leadership. Leadership is one of the most important skills of a CEO (Punnoose, 2014).

When having the tremendously important role of being a CEO, there are seven extremely necessary skills you need to have in order to succeed:

(1) leadership; “inspirational leadership, take-charge leadership, strategic leadership, ethical leadership, and visionary leadership”. These are all essential in an executive role; you must have multiple different forms of leadership in order to be on top. (2) Strategic thinking and execution; thinking strategically, setting up a strategic direction, and executing a vision is something an individual must be capable of when holding such a significant role. (3) Technical and technology skills; technical skills are essential. Having a strong understanding of specific forms of knowledge, like law, financials and technology are skills that are most definitely increasing as a necessity. As a CEO, it is important to understand how much technology affects an organization such as a hospital. (4) Team and relationship building; having a strong team with a good relationship can help to meet goals and objectives, it helps to improve strengths and reduce weaknesses of employees and make them stronger. (5) Communication and presentation; this is important in every aspect of a business, it helps form relationships, get things done accurately and efficiently, to achieve goals etc. Presentation skills help to reduce miscommunication and are also a huge need when being the CEO. (6) Change management; being able to lead and

achieve change throughout the organization. (7) Integrity; as a CEO, having integrity and behaving ethical are greatly valued, being honest, and having strong moral uprightness (Punnoose, 2014).

Along with the duties, and required skills of a CEO, there are six traits that make a CEO exceptional:

- servant leadership- receptive, gratitude, integrity, genuineness
- communication- frequently and distinctly
- mentorship- having one and being one
- role model- setting an example
- sense of humor- reducing stress
- balance- maintaining an equal weight for each responsibility (Punnoose, 2014).

Each trait serves an extremely important purpose as to why and how it makes a hospital CEO exceptional. Being a CEO involves making difficult decisions, having an overwhelming amount of workload, but provides a chance to make a difference in patients lives, employees lives, the organization, and health care overall.

## **Chief Medical Officer**

Having the role of a Chief Medical Officer is much different than the roles of other clinicians. CMO's spend about three-fourths of their time to an administrative role, and only about 13% in clinical practice. They spend only minimal time teaching and researching, they are physician executives, not clinicians, physician-scientists, or physician-educators. Many believe that when preparing to become a CMO, you follow leadership roles in medical staff organizations and evolve. What actually happens 32% of the time is that they acquire advanced degrees, usually aligned with business or healthcare- MBA, MPH, MHA, or MS in administrative medicine or healthcare management. 80% of those with advanced degrees indicated that having the degree places a big part in obtaining the position as CMO. This extra education shows enhanced knowledge and provides credibility (Longnecker, Patton, & Dickler, 2007).

The CMO has a significant role that is in the middle of the administrative side and the clinician side. One CMO said, "Your physician colleagues will believe you have gone to the dark side and your administrative associates will consider you an enigma." But, CMO's offer understandings to unintended consequences from administrative and policy decisions that those who don't have experiences on both sides may not, there also might be an advantage because of their clinical backgrounds when implementing new policies and procedures. Throughout the workday, CMOs spend a lot of time and effort on patient safety, coordination of inpatient and outpatient series, and clinical quality. The third largest amount of their time as an administrator,

9%, is devoted to Graduate Medical Education (GME-in teaching hospitals). The range of activities involved when being a CMO shows that these individuals have an extremely assorted set of responsibilities. Their top three administrative areas, quality and safety, clinical services, and GME, only take up 61% of their time. The other 39% is extensively scattered among several activities that incorporate a wide variety of responsibilities, containing very different activities, like information systems or nursing services. CMOs identified on their own that their most significant accomplishments are those involving clinical practices as quality and safety initiatives. Most of the CMO's responses themselves contained remarks including "established center of clinical effectiveness and patient safety," "development of evidence-based practice culture," "organizational approach to patient safety and clinical excellence with improved outcomes," and "developed program to detect and understand 'near misses.'" Along with those accomplishments, activities linked with internal communications and relations with physicians were big as well. These comments included, "improved medical staff relations," "built connections among like disciplines across the network," and "aligning goals of medical staff and administration." Among the CMO's accomplishments, financial services ranked third. CEO's recognized financial concerns as one of their top three worries in a 2005 annual survey performed by the American College of Healthcare Executives. Concerns of CMOs and CEOs seem to be closely aligned. Difficulties for CMOs include "financial resources to support mission," "escalating gaps between cost and revenues," "living within a shrinking budget while patient numbers continue to grow," or "lack of fiscal resources." Human relations issues and clinical operations issues are ranked closely behind financial concerns, continuing to challenge these physician leaders (Longnecker, Patton, & Dickler, 2007).

## **Medical Director**

The role of a medical director has the main responsibility of medical supervision and the overall regulation of all medical aspects that may have an impact on the institutional healthcare system. This individual holds the senior administrative position in a medical group practice. As a medical director, he/she must supervise the behaviors of physicians, including the recruiting and credentialing processes. The individual also must report to the CEO or governing body of the organization. He/she is in charge of a numerous amount of activities correlated to the delivery of medical care and clinical services, like cost management, utilization review, quality assurance, and medical protocol development.

Just as any other administrator does in an organization, the medical director has a number of duties and responsibilities. According to the MGMA Medical Directorship and On-Call Compensation Survey 2012 Report Based on 2011 Data, there was an increase in many duties and responsibilities reported by medical directors:

11% increase- handling "quality and appropriateness of care"

15% increase- engaging in strategic development



12% increase- providing guidance and leadership for performance guidelines

14% increase- handling physician relations and representations

As a medical director, the individual must attend board meetings, committee meetings, etc. Being a part of the administrative staff requires the need to provide input and assist in decision making. He/she must develop a budget and present financial reports each month to the practice staff. While supervising the pertinence and quality of medical care, the medical director also must deliver leadership and guidance for performance guidelines, including policies and procedures, and strategic development. The medical director is responsible for directing clinical peer reviews, along with documentation and care planning. This is a way to be sure that clinicians are up to the standards of care, and care planning and documentation are being done correctly and efficiently.

The medical director is also a big supporter of physician education, the individual must monitor physician relations and representations, and make sure their behavior is appropriate and there are no impairment issues. On top of supervising the physicians, this role requires the individual to also assist with clinical patient complaints, oversee community relations, and address emergency issues (Hyden, 2012).

## **Contracted Services**

Contracted services are managed by the governing body in a healthcare organization. It is when an independent contractor is employed for a fee to perform a task or project. The contractor of service must provide services only that fulfill the conditions of participation and standards for the contracted services.

There must be a list comprising of all contracted services in a healthcare organization, containing the scope and nature of the services. The services provided by contracted services must be delivered safely and effectively and should be observed and assessed just as other services provided by the organization are, clinical and nonclinical. These contracted services are expected to receive the same procedures as other employees, background checks, health screenings etc., especially when dealing with clinical contract services. Clinical contracted services are outlined in writing, approved and observed by the leadership of the organization. Clear expectations of the clinical performance are comprised within the contract. Being a part of the medical staff or being a clinical leader allows the individuals to provide advice and recommendations about the contracted service (Niespondziani & Hepola, 2011). Contracted services within a healthcare organization are responsible to comply with the rules and regulations of the hospital and also must allow the hospital to obey the policies of the Government.

### *Knowledge Check #4*

*In your opinion, what is the most important quality of a leader? Justify your answer.*

## Quality Evaluations

In our previous discussion about quality assurance we briefly discussed what OPPE and FPPE are (refer to page 7). Starting with OPPE, the purpose of this evaluation is to guarantee that the medical staff of the healthcare organization evaluates the practitioner's clinical competence and behavior continuously. The information received is used to help with the decision of whether or not to continue existing clinical privileges, revise, or revoke them. OPPE is an evaluation that establishes routine measures for the medical staff of physician's performances. These measures include peer review cases through review screening criteria, referrals for adverse events, and aggregate performance measures. OPPE has three main goals, (1) to make assessments of the physician performances more convenient in order to identify the performance trends of medical staff members as ongoing and not just reappoint every two years, (2) to acquire data for all six of the general competencies (patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, system-based practice), (3) to provide opportunities for improvement before the decision of reappointment is made. OPPE equation:

Effective OPPE= Systematic Measurement + Systematic Evaluation + Systematic  
Follow-Through (Marder, Smith, & Sheff, 2007).

Next, is the FPPE the purpose of this assessment is to follow up to establish the validity of the outcomes found in the OPPE. It is generally only applied to the minimal number of physicians identified by the OPPE. The outcome of the FPPE is significant, so the review, decision, a follow-up must be unbiased and able to determine if a physician's performance is not acceptable (Wise, 2013). An FPPE is an evaluation that is needed when a healthcare organization has an absence of specific information concerning physician performance, there are three situations in which an FPPE is usually used, (1) New physician that is not yet apart of the medical staff, (2) physician seeks new privileges, (3) Issue concerning a physician who has privileges, due to concern from OPPE or because they may not have used their privilege for a prolonged period of time (Marder, Smith, & Sheff, 2007).

### *Knowledge Check #5*

*What are the main differences between the OPPE and FPPE?*

## Answers to Knowledge Check:

1. Chiefs of service focus on a specific area of the medical or surgical service departments and this allows the medical team to have a direct person to relay information to that can help lead the team and review the quality of the department. They help find specific tasks

to increase efficiency in, while chiefs of service oversee the flow of the entire department and the quality of the overarching division.

2. The medical staff was defined as “a group of doctors who practice in the hospitals inclusive of all groups (Burroughs, 2015).”
3. It is standard for many new physicians to enter a FFPE at the beginning of their careers, this provides an overview of their skills and reinforces their claims and professional abilities.
4. Opinionated, must be justified.
5. The OPPE is used to decide if a physician who currently has clinical privileges is performing well enough to keep them or not, where the FPPE is used to evaluate the outcome of the OPPE, assess new incoming physicians, and physicians who are requesting further privileges.

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# Department of Nursing

## Chapter 8

Pixabay (2017, November). Healthcare (Infographic).  
Retrieved from <https://pixabay.com/en/nurse-vaccination-boy-hospital-2915543/>

### Learning Objectives

- To be able to recognize the purpose of the nursing staff
- To recognize the importance of quality of care
- To recognize how nursing practice is regulated
- To be able to distinguish differences in the relationships between nurses and patients and nurses and administration

### Terms to know:

- **Front End/ Back End**
- **CNO (Chief Nursing Officer)**
- **Safe Staffing**

### Introduction to Nursing

The Department of Nursing is made up of numerous different areas that are essential in order to provide the best quality of care to patients. Nurses practice in numerous different healthcare systems across the nation, and provide a variety of services as well. There are three types of nurses, Registered Nurses (RNs), Advanced Practice Registered Nurses (APRNs), and Licensed Practical Nurses (LPNs), which all have varying job responsibilities, and will be explained in more detail later in the chapter. Although all categories of nurses provide a variety of services, one of the responsibilities of all nurses is patient experiences, and quality of care. Later in the chapter we will discuss how critical it is for nurses to provide exceptional service, because they are the main factor that affects patient satisfaction since they spend the most time with the them.

### The Roles of Nurses

The nursing staff is an indispensable asset to all who require medical assistance. They are the personnel that spend the most time with the patients, and make the lasting impressions that the patients will remember. In the **front end**, they are responsible for administering medications, educating families, and assisting the patient when it comes to walking or eating. From the **back end**, nurses are responsible for tailoring a medical plan for the patients, and monitoring and assessing when a change in treatment is necessary.

There are some services that can seem like front end services, that are back end as well. For example, a front end activity would be bathing a patient. The back end side of the activity is that the nurse is also looking at the patient's skin to assess their oxygen circulation, or they are engaging in conversation in order to analyze mental status (Page, 2004). These are important jobs of the nursing staff, because physicians do not have the time to do so. Nurses are also required to do more clerical tasks like changing bed linens or medical equipment, transporting blood or lab results, and transcribing physician orders. Unfortunately, due to time spent on these activities, less of their time can be spent on the patient's care. Other rewarding activities that the nursing staff are responsible for include monitoring patient status, physiologic therapy, helping patients compensate for loss of functioning, providing emotional support, and documentation (Page, 2004).

Although the nursing staff is essential as we have previously mentioned, the staff is difficult to recruit and retain. "Since 1973, there has been an approximately 40 percent drop in the percentage of college freshman who indicate that nursing is among their top career choices," (Page, 2004). This statistic shows how there is a shortage in the nursing staff, and that the employment rates will be decreasing if there is a lack of interest since the older nurses will soon be retiring as well. This study explains that a dissatisfaction in their work environment is one of the main reasons for leaving the nursing workforce, which is a problem. Since nurses are the ones leaving lasting impressions to the patients, it is essential for them to have employee satisfaction as well.

## The Different Types of Nurses

As the American Nurses Association states, Registered Nurses primarily work in healthcare settings like hospitals, nursing homes, schools, medical centers, and much more. Their responsibilities include, but are not limited to, performing physical examinations, administering medications and vaccines, wound care, and providing counseling. They also have the responsibility of supervising the care that is delivered by other personnel including LPNs and nurse aides ("What Nurses Do, 2017). RN's have the opportunity to conduct research in the efforts to improve practice and patient outcomes, which goes hand and hand with patient quality of care.

Advanced Practice Registered Nurses (APRNs) provide the same services that RNs do, but are also certified to provide other services as well. APRN's are registered nurses that have

gotten at least a Master's degree that goes beyond that of the basics that nurses have. Since APRN's have more education, they are able to do things such as assess and diagnose, order tests, and prescribe medications (APRNs in the U.S., 2017). Examples of APRN careers can include Clinical Nurse Specialists, Certified Registered Nurse Anesthetist, and Certified Nurse Midwives. These services can be provided in numerous settings including hospitals, ambulatory care, clinics, home care, and more.

Licensed Practical Nurses (LPNs) are also important in the efforts to provide exceptional quality of care to patients. This is an entry level job for nursing professionals that want to get their foot in the door in an easier and quicker manner than becoming an RN or an APRN. LPN's are supervised by RN's and doctors, and provide basic level care to patients. Some of this care can include bathing, feeding, dressing, and walking patients, ("What is an LPN?", 2017) Getting LPN credentials usually consist of training that takes around nine months to a year.

### *Knowledge Check #1*

*What would you call those who have gotten at least a Master's degree that goes beyond that of the basics that nurses have?*

## **Nurse Staffing**

Nurses are the largest clinical subgroup in hospitals, which makes them crucial to the operations of providing care to patients. Nurse staffing is divided into a variety of structural measures of care that are all equally important to keep track of. These measures include the number of nurses, the number of hours they work, the ratio of nurses to patients, the structure of the organizational, the workload of the nurses, and the qualification of each nurse (Needleman et al., 2002). These measures are critical to to analyze for the nurses and their patients, especially in large departments, in order to promote safety and satisfaction for both. For example, the proper ratio of nurses to patients is essential in order to allow managers to oversee how many nurses are taking care of a patient at once. Nurses often face difficulties with their managers who demand them to take care of an additional amount of patients, which is not safe (National Nurses United, 2017).

Republican Jan Schakowsky was able to set in motion the Nurse Staffing Standards for Hospital Patient Safety and Quality of Care Act in Congress. This act allows for the quality of care for patients to be improved by structural measures, and it sets required nurse-to-patient ratios that put patient safety first (National Nurses United, 2017). These measures allow for the nurses to perform their high quality of care by make sure they are not taking care of more patients than is safe to. This standard is important to create safe staffing measures.

**“Safe staffing”** is a term widely used in context with nurse staffing. The term means that when nurse staffing levels are not at a safe level, it can result with inadequate care. An example

that has been correlated to this situation includes an increase rate of patient falls, infections, medication errors, and even death (Carlson, 2017). Some reasons safe staffing has been an increasing problem is due to the fact that nurses have had to face budget reductions, the never ending challenge of a nursing shortage, and low retention rates. The nursing shortage is when there are fewer nurses on staff who are working longer hours, caring for even sicker patients while the nurse to patient ratio is often off. This means that nurses are often caring for too many patients than is a safe amount. This can occur when budgets in the nursing department have been cut, because the department can not afford to hire the appropriate number of nurses to take care of these patients ( Carlson, 2017 ). Overall, this situation is a struggle for nursing departments. It compromises the care to patients, and creates an unsafe environment by overworking nurses as well. Nurse staffing is a critical part of the nursing department that can directly relate to the quality of care patients receive.

## **Nurse Regulations**

Nursing regulations refers to the governmental oversight of nursing practice that is provided to every state, nationwide. Government regulations are necessary for nursing practices, because of the public risk if practiced by an incompetent individual. Through governmental regulation, only qualified and prepared nurses who meet predetermined qualifications are licensed to practice nursing (Nursing Regulations and State Boards of Nursing, 2012). States regulate nursing practice in order to protect their citizens from harm, through their police powers. All U.S. states have enacted a Nurse Practice Act through the state's legislature. The Nursing Practice Act is insufficient and often needs clarification and rules to make the law more specific. In order to do so, states delegate their enforcement activities in the form of Boards of Nursing (Nurse Practice Act, Rules & Regulations, n.d.).

The Nurse Practice Act (NPA) is a law that describes the following elements: qualifications for licensure; nursing titles that are allowed to be used; the scope of practice of a given nurse; and actions that a given nurse is subject to if he or she fails to adhere to the law (About U.S. Boards of Nursing, n.d.). The National Council of State Boards of Nursing (NCSBN) offers a Nurse Practice Act Toolkit on their website, because the nursing laws can only function if the nurses know about the laws and governance in their respective state. The toolkit allows for nurses to learn about the law that governs nursing practice, locate their state's NPA and regulations, and access additional education tools (Nurse Practice Act, Rules & Regulations, n.d.).

Boards of nursing (BONs) are governmental agencies in each of the 50 states, the District of Columbia, and an additional 4 U.S. territories that are responsible for regulating safe nursing practice, while complying with and enforcing the Nurse Practice Act (About U.S. Boards of Nursing, n.d.). BONs were established over 100 years ago, and have worked to achieve their mission of protecting public health and ensuring safe nursing practice through outlining the



standards for nursing care, issuing licenses, monitoring licensees' compliance with law, and taking action against those who are licensed but are failing to comply (About U.S. Boards of Nursing, n.d.).

Licensure of any profession is necessary when the regulated activities require specialized knowledge and skill and a lack thereof puts the public at risk. Nursing licensure is the process in which BONs grant permission to an applicant to engage in nursing practice after the applicant has been determined competent to perform a unique scope of practice (Licensure, n.d.). Both verification of graduation or eligibility to graduate from an approved pre-licensure nursing education program and verification of successful completion of NCLEX-RN or NCLEX-PN examination are components of nursing licensure. In addition, some states require a criminal background check.

### *Knowledge Check #2*

*Why is nursing licensure and regulation necessary?*

## **Quality of Care**

Patient safety is the foundation to high quality care in healthcare. Nurses are critical to the surveillance and coordination, in order to ensure patient safety and reduce the negative outcomes (Mitchell, 2008). Good quality of care in health care starts with the nurses. Nurses are skilled and knowledgeable professionals who monitor and give personalized attention to each patient of theirs. To ensure good quality of care, nurses make sure that patients get the care needed, when they need it, and that they are safe by making sure that the care received will help, not harm (Mitchell, 2008). Even though nurses are critical to good quality of care, there are some cases of patients who do not receive good quality of care from nurses.

Nursing departments are facing a huge problem in recent days. The problem is a shortage of nurses nationwide, which has a direct impact on the quality of care that patients get and need (Schumacher Clinical, 2016). Nurses are becoming burnt out due to working longer than normal under tremendous amounts of stress. This can cause nurses to experience fatigue, injury, and job dissatisfaction. Nurses who undergo these symptoms are suffering. They often are seen to make mistakes which put patients in danger and the patients lives at risk. This shortage also means that nurses can be faced with the problem of taking care of too many patients at once which contributes to them not receiving good quality of care.

It is important for organizations to have high employee satisfaction in order to provide good customer satisfaction. Since the nursing staff are the ones spending the most time with the patients, it is crucial for them to be positive so that the patients can be positive as well.

## **Relationships Between Nursing Staff and Patients**

The relationships nurses create and maintain with each patient they treat is crucial to the nursing unit as a whole. Nurses must understand empathy and acceptance on top of all of the medical and technical steps they take every day in the workplace. In an interview with Sheila Woolley, CNO at Wentworth Douglass Hospital, she said that all nurses should have the qualities of being genuine, authentic and personable. Woolley said, “You have to treat people with respect, value them as individuals, and value their other lives.” These “other lives” refer to their lives outside of the hospital. Nurses must understand that everyone has something else going on besides what they see up close and personal in the hospital beds. In these instances it is important for all nurses to stay empathetic and respectful toward patients. Every day is a bad day for someone who is visiting a hospital, so it is important to keep that in mind while dealing with upset patients.

The amount of time nurses spend with their patients is also extremely crucial to nurse/patient relationships. Time spent with patients is associated with improved patient outcomes, reduced errors, and patient and nurse satisfaction, which are all important when it comes to the overall operations of each hospital. It is important for nurses to distribute their time across their patients and individual tasks effectively, having little to no patient neglect. In a study that involved nurses and measuring how they manage their time, they found that nurses spent 37% of their time with patients in person. However, the rest of the time was spent on direct care, indirect care, medication tasks and professional communication, which together consumed 76.4% of nurses time in one year (Westbrook et al., 2011). This means that nurses completed 72.3 tasks per hour everyday. Spending time with a patient can mean everything to them, so nurses who understand this will succeed in their practice.

Great patient relationships are the reason patients keep coming back to the same hospitals. If patients do not trust and respect their nurses, they will not come back to that facility and morale will drop. Nurses are the backbone of patient morale and need to keep these relationships on track and keep the patients satisfied and please with the care they have received.

## **Relationships Between Nursing Staff and Administration**

Nursing staff and administration must hold a strong relationship in order for operations to run smoothly throughout the facility. It is important that nurses have great administrative staff that are there to help them whenever they need it. These two departments rely on each other for balance and if one falls, the other goes with it. It is important for the administration to provide the nurses the tools and respect they need to complete their jobs thoroughly and with success. CNO of Wentworth Douglass Hospital, Sheila Woolley, said how she feels an administrator should lead their nurses. She said that they should always remember to be genuine and personable. “Here we all value family life, it is very important to us. We make sure that is instilled in our leaders.” Said Woolley, “It is important to be reflective and listen. Be warm and genuine and say hi walking down the hall to all nurses and physicians.” Administration needs to

show to their nurses the exact same personability and compassion that the nurses show to their patients.

It is also important for the administration to support their nurses and also stand up for them. Sheila Woolley said that in one circumstance, “this nurse stayed with a patient for four extra hours because her husband died and now I am four hours over on my budget but this meant the world to her because it made impact to that women's life.” This shows that even though they went over budget, which would not hold up well in the finance department of the hospital, the administration would still stand up for her and backup the nurses by saying what they did was justified. It all has to do with what is best for the patient, and nurses and administrators alike understand this.

### *Knowledge Check #3*

*How much on average do nurses spend directly with their patients?*

## **Answers to Knowledge Check:**

1. Advanced Practice Registered Nurses (APRNs)
2. Because of the public risk nursing poses if practiced by an incompetent individual
3. 37% of their time

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# Operating Room Management

## Chapter 9

Piotr Bodzek, MD (2005, October).

Retrieved from [https://commons.wikimedia.org/wiki/File:Operating\\_theatre.jpg](https://commons.wikimedia.org/wiki/File:Operating_theatre.jpg)

### Learning Objectives

- What are the different types of operating rooms?
- Who is on a surgical team?
- What is the process of surgery?
- What are some challenges operating rooms face?

### Terms to know:

- Emergent/Urgent Surgeries
- Elective Surgeries
- Perfusionist
- Arthroscopic procedures
- Laminar flow

### Introduction to Operating Room Management

Operating room management coordinates surgical activities, regulates safety measures, and maximizes efficiency in the operating room. The surgical department produces substantial revenue for any hospital, therefore, these aspects of an operating room are important in order to form a successful surgical team and environment. In this chapter, we will discuss types of operating rooms, who is on the surgical team, the process of surgery, and the challenges faced in the operating room.

### Types of Operating Rooms

There are four types of specialty operating rooms: neurology/spinal, pediatrics, cardiothoracic, and orthology. Each operating room is different in size, temperature, orientation, types of medical gasses, the amount and dispersion of electrical outlets, and access or location to

other rooms. The differences in operating room depend on the number of clinicians necessary, amount or type of equipment needed, and the type of surgery. In this section, we will discuss the importance of each type of operating room.

### Neurology/Spinal

In a neurology/spinal operating room, many different surgeries can take place including intracranial, spinal, stereotactic, peripheral nerve, shunting procedures, and many others (Rixford, 1924). The orientation of the room must be so the operating table can be moved easily, as there are many different positions a patient can be in. Some of these positions are supine, prone, lateral, park bench, and sitting. Equipment and machinery used during the surgery is located at the feet end of the bed which is typically the side closer to the entrance. On the opposing side is all sterile equipment and tools, further from the entrance to prevent hazardous situations from contamination (Blazier, 1998).

There typically is at least one storage closet for necessities, including positioning equipment, linens, IV fluids, blood refrigerator, etc. Some types of equipment used in neuro/spinal surgery are electrophysiological monitoring machines and cauterization units (Blazier, 1998). This equipment is essential to have on-hand when dealing with neurosurgery as precision and timing is extremely important. Therefore, surgeons must work quickly and have necessary equipment available at all times.

Temperature monitoring is exceptionally important when organs are exposed. Generally, it is safer to keep a room warmer than colder to avoid hypothermia or hyperthermia. Therefore, a room temperature set around 70 degrees is sufficient. In the United States, it is recommended that operating rooms be kept at 70-75 degrees, but in the United Kingdom they recommend ORs to be 65-70 degrees (Ellis, 1963). Humidity also needs to be controlled, being kept at 50 percent in the U.S. The neuro/spinal operating room should be located nearby to the post-anesthesia care unit, neurointensive care unit, or radiology department. Intensive care units near the operating room makes transportation easy (Shine et al., 2012).

### Pediatric

Pediatric operating rooms take on almost every type of surgery that a child could need. The reason pediatric operating rooms exist is to accommodate children as their needs are different than adults. Pediatric operating rooms are usually larger than other operating rooms in order to fit all equipment necessary. They should be around 600 square feet at the minimum (Shine et al., 2012). Many facilities update to surgical booms, which provide light or electricity from fixtures mounted to the ceiling or wall of an operating room. There are storage areas in a pediatric operating rooms in order to accommodate the large amount of equipment needed. Some examples of equipment in pediatric surgery are positive-pressure ventilation systems, ventilation masks, endotracheal tubes, laryngeal mask airways, oral and nasal airways, and pediatric blades. “The American Society of Anesthesiologists Closed Claim study has found a greater incidence of equipment-related problems in pediatric patients in comparison to adults, with almost 50% in children aged less than 2 years” (Shine et al., 2012). Being cautious of patient safety when

dealing with equipment is extremely important, especially with children involved. Having the necessary equipment available in the operating room make the difference in saving a life.

Anesthesia also must accommodate the needs of a child. These instruments and equipment are smaller than normal to accommodate a child's needs. These supplies are kept on a cart that can be moved around throughout a hospital. Pediatric operating rooms should be situated near intensive care units for neonatal and pediatrics. The OR also cannot be a walkway to enter another room in the facility. It is important to be particular when setting entrances as sterile material pathways cannot cross pathways of contaminated material.

Temperature in pediatrics are usually kept on the higher side, closer to 75 degrees, in order to accommodate infants/premature infants. In addition, many infants require warming lamps, circulating warm air devices, humidifiers, and fluid warmers (Shine et al., 2012). Infants, especially prematures, must receive the proper care upon delivery, which includes proper incubation.

#### Cardiothoracic

Cardiothoracic operating rooms are similar in size to pediatrics at around 600 square feet. Most specialty operating rooms must be larger than general surgery rooms because of the excess of equipment. Cardiothoracic ORs must fit monitors, video screens, heart-lung machines, intra-aortic pumps, ventricular-assist device, etc. In addition to the surgeon and his staff, there must be a **perfusionist** to assist with the heart-lung machine in this type of operating room (Shine et al., 2012).

There must be at least three vacuum outlets in the operating room for various machinery and anesthesia. The OR should be located close to the cardiac intensive care unit to make the trip to the recovery room short. It should also be near the transplant room in case of heart or lung transplants. The temperature in the cardiothoracic operating room should be about 70 degrees. Special care is taken to cardiothoracic patients in regard to body temperature as the chest cavity is open.

#### Orthopedic

Orthopedic surgery can be the most demanding operating room. The size of the room must be at the minimum 600 square feet to accommodate equipment and radiology imaging machines. The walls of the OR must have protectants against radiation that could escape the room and affect other areas of the hospital. There also must be storage for other radiology equipment, such as lead bibs, computer-assisted devices, robotic equipment and arthroscopic equipment. The operating table should have many different features in order to set the table up in specific ways, increasing patient safety during surgery.

When dealing the orthopedic procedures, electrical safety is the first priority. Water on the floor from **arthroscopic procedures** presents a physical and electrical hazard; specific electrical wiring is needed to provide safety to patients and clinicians. Line isolating monitors and alarms are crucial to prevent against micro and macro shock (Shine et al., 2012). There must be multiple drainage areas for safety during arthroscopic procedures. General and regional

anesthesia, can be necessary during orthopedic surgery, requiring the OR to have electrical resources to support the multiple electrical equipment. The temperature, humidity, and air quality of the OR is important especially for joint replacement, set at 70-75 degrees and humidity at 50 percent. **Laminar flow** is also used in order to minimize the spread of bacteria from throughout the hospital (Shine et al., 2012).

*Knowledge Check #1*  
*What are the four types of operating rooms?*

## **Employment Within the Operating room**

An important part of managing an operating room is having the right team to complete tasks. When running an operating room, adequate staffing is crucial. Aside from the administrators, a very crucial part of the operating room is the surgical team. Since the function of the operating room is to complete surgeries, this team is very important. To have a smoothly running operating room, these positions must be properly filled with qualified individuals. Without them, surgeries cannot be completed.

There is much more to the operating room than just the patient and the surgeon. The surgeon has a whole team of people to assist with surgeries and the everyday operations of the OR. There are five main roles that need to be filled on a surgeon's team. The five main roles are surgeon, surgeon's assistant, nurse, surgical technologist, and anesthesiologist (William & Williams). Some surgeries or facilities may require more people, but a surgical team must have this set of employees as a minimum during surgery. Some teams have more than one of each role. The descriptions for these five main roles are as follows:

**Surgeon:** The surgeon is the leader in the operating room who is responsible for performing the surgery. Surgeons are highly trained individuals. In order to become a surgeon, one must go through four years of undergraduate pre-med studies, an additional four years of medical school, and then approximately three to seven years completing a residency (American College of Surgeons, 2017). There are also many specialties within surgery. Surgeons can specialize in things such as obstetrics and gynecology, neurology, oral, and orthopedic, to name a few (American College of Surgeons, 2017). There are also general surgeons who are trained to manage conditions all over the body (American College of Surgeons, 2017).

**Surgeon's Assistant:** The surgeon's assistant is there to aid the surgeon in any way that they might need. For example, they are there for tasks such as handing them tools, holding an organ, or helping to close a wound (Williams & Williams, 2015). Surgeons assistants are trained in hemostasis, suturing, and treating wounds (Allied Health Schools, 2017). They are able to be hands on with the patient because they are also highly trained. In order to become a surgeon's assistant, they must be certified as a Certified First Assistant (CFA) or a Certified Surgical Assistant (CSA) (Allied Health Schools, 2017).



Nurse: A nurse has many jobs within the operating room. The nurse acts as a timekeeper and prepares the patient to get ready for the surgery. The nurse should always be there during surgery to help the team if they need something during the surgery, i.e. Calling in a technician or physician from another department (Williams & Williams 2015). Nurses are also in charge of documentation and caring for the patient's need pre and post-surgery.

Surgical Technologist: Some people use the terms surgeon's assistant and surgical technologist interchangeably but they are not the same thing. The main difference between them is the education and certification involved in acquiring these jobs. A degree is not required to be a surgical technologist. Surgical technologists are not as hands on as assistants are. Surgical technologists do things such as prepare the operating room for surgery, sterilize instruments, monitor equipment during surgery, and transport patients (Allied Health Schools, 2017).

Anesthesiologist: An anesthesiologist is a highly trained physician, they can be either an M.D. or a D.O. (American Society of Anesthesiologists, 2017). To become an anesthesiologist, one must obtain an undergraduate pre-med degree, go to 4 years of medical school, and complete a 4 year residency. The main role of an anesthesiologist is putting patients "in a state of controlled unconsciousness." (American Society of Anesthesiologists, 2017). They also can apply medicines regionally to numb certain areas without putting the patient completely under. They serve a very important role in the operating room because they control pain and they to monitor patient's "critical life functions" (American Society of Anesthesiologists, 2017)

### *Knowledge Check #2*

*What are the 5 positions on a surgical team?*

## **Classification of Operations**

As we know, an operating room is always moving and can be very hectic at times. Although there are scheduled surgeries, it is never known when an emergency case is going to come through the door and when everyone is are going to have to drop whatever they are doing and cater to that patient's needs immediately. Planned surgeries and emergency surgeries differ greatly, and adapting to both types is a very important skill you need to acquire when working in the operating room.

Planned surgeries, better known as elective surgeries, is a timely process that begins very early on before the patient actually steps foot into the operating room (Johns Hopkins Medicine Health Library, n.d.). They meet with their physician to discuss possible routes to take and sometimes, surgery is the only solution. Some patients may be getting surgery for a better quality of life, and that does not consist of a life-threatening condition. Whereas some other cases may be for a serious condition. For elective surgeries, they are all to be scheduled in advance. These patients know their diagnosis and exactly what is being done to them. This is why the pre-admission process might seem a little repetitive because the doctors and nurses want to make

sure you know exactly what is going on and what you are having done to you. Planned surgeries also give patients the benefit of being able to choose who they want to perform their surgery, which tends to relieve stress the patient may have. By meeting your surgeon prior, and becoming comfortable with them, having a procedure does not seem as scary. Other key aspects of a planned surgery are that the hospital specifically knows how the patient plans to pay for the procedure as well as past medical history of the patient. These are two points that are reassuring for the hospital and doctors to know.

As for emergency surgeries, there are a few different protocols the hospital follows when encountering a situation like these. For most hospitals, when an emergency case comes through the door, you drop what you are doing and help that patient because their life is on the line. In an interview with a local operating room manager, it was stated that their hospital has two classifications of emergency surgeries; urgent and emergent (Source). With **urgent surgeries**, the patient has up to four hours to receive surgery before their life is at stake, whereas with emergent, the next available operating room will be given to that patient in critical condition. If patients are in critical condition, hospitals do not have a chance to ask about their insurance and previous medical history, especially because they may not even know the patient's name yet. However, most insurance companies have clauses in their insurance policies for true emergency cases, stating that they will pay 100% of the expenses.

The crucial thing to understand regarding the differences between planned and emergency surgeries is that for planned surgeries a patient has to move around the schedule and its availability (Source). With an emergency surgery the schedule must move around the patient, giving them the next available operating room because they are in serious danger.

### *Knowledge Check #3*

*What are the two types of emergency surgery?*

## **The Process of Surgery**

In order for the operating room to function and remain safe on a day to day basis, there are clear guidelines for elective, urgent, and emergency surgeries that each organization must follow. When many think about the start of surgery, they think of the patient going into the operating room and the surgical procedure beginning, but this is not necessarily where the process starts. Since elective surgeries are planned, the process begins long before the patient even steps foot into the hospital. A source states that the process for an elective surgery can be quite lengthy, and truly begins when the patient and the physician agree upon an operative procedure and therefore start the pre-admission assessments. This piece can be by far the longest as sometimes, specific surgeries require the patient to stop smoking for example and therefore, smoking session initiatives must be taken in order for the patient to be medically cleared for the surgery. Once cleared, the patient is then able to set up a day and time for their surgery.

For an elective surgery, the patient will arrive the day of their surgery and after check in, will be brought back and prepped for surgery. This period is known as the pre-op period where the nurses and operating team prepare the patient for surgery. Before beginning, they will ask the patient for their information such as their name and date of birth. They then will check to make sure the patient has signed the consent forms giving them permission to perform the surgery and also signifying the patient understands the medical treatment they are about to receive (Harder, n.d.). If all is well within these areas, they will ask the patient to verify the procedure and site location where the surgery is to be performed. While these series of questions might be asked a number of times throughout the pre-op process, it is done for both safety and to ensure the patient understands the procedure they are about to undergo (Harder, n.d.). The patient's vitals are taken during this time as well to verify that there are no other subsequent health issues such as a fever, that might interfere with the success of the surgery and the patient's recovery. If the patient has any sort of issues, their surgery will be rescheduled. Once the patient has successfully identified themselves, their surgery, and has passed the pre-op nursing assessment (vitals, etc.) the site of surgery is again verified and physically marked. This is a crucial part of any surgery as it visually marks the site, making it so the wrong procedure is not performed. In the rare case that this mistake happens, it is referred to as a "never-event" as it is a 100% preventable and should have never happened in the first place (Stahel, 2009). After the surgical site is marked, the IV team and the anesthesiologist come in and meet with the patient. They set up the patient's IV, discuss the surgery, verify the site once more, and the patient is ready to head back to the operating room (OR).

When the patient finally arrives in the OR, this is known as the operating room stage of the surgery process (Harder, n.d.). During this time the patient actually undergoes surgery. The surgical team begins with a quick meeting, introducing themselves to one another, a short debriefing on the surgery, and finally introducing themselves to the patient. Before the surgery can begin, a team member calls a surgical "time out" in which the patient's identification (appearing on their bracelet) and their documents are checked, along with the site to ensure the right patient receives the right procedure (Stahel, 2009). The OR team must follow this crucial "time out" step in order to ensure that the correct procedure is performed on their patient. Once the team has covered all the necessary steps and precautions, it is time for the surgery to begin. The anesthesiologist administers the sedative and once the patient is under, the surgical procedure is performed.

The final stage of surgery is the post-op stage. In this stage the patient is taken out of the OR to recover in the post-anesthesia care unit (PACU). There, the patient will remain until the sedative effects of the anesthesia has worn off (Source). Depending on the type of surgery, a patient will either go on to one more phase of recovery and then be discharged that day, or they will be admitted to an inpatient room. If the patient is moving on to phase two recovery, the staff will ensure that the patient does not feel nauseous and that their pain is properly managed. They will give them their discharge instructions and send them home. The following day, the patient

will receive a follow up phone call to see how they are faring after surgery and to discuss a follow up visit. If the patient is admitted, they receive their post-op care from the skilled nursing staff at the hospital and once ready, they too are given directions for their post-op care and discharged from the facility.

While elective surgeries are ideal, each year, more than three million patients in the U.S. are admitted to the hospital for emergency surgeries (Welch, 2016). With the frequency of emergent surgeries, the OR team needs to constantly remain on their toes, ready to act when the next case comes through the doors. While urgent and emergent surgeries are not planned in advance as **elective surgeries** are, they still follow a very similar process when it comes to the actual surgery. The patient identification information is still verified, consent is given by either the patient (if applicable) or by next of kin, the site is still marked, and the OR team still takes a medical “time-out” before beginning surgery (Source). Even though the process is much quicker in urgent and emergency surgeries, they don't lack the precautionary actions taken in elective surgeries, the process is simply sped up. As a member of the OR team, whether a manager or in a clinical position, it's important to remain calm and prepared for the expected and the unexpected surgery cases that will present themselves each day (Source). No one day is like any other, but if the team is able to carefully follow the process of surgery in all cases, working as a unified team to complete each procedure, patient outcomes and satisfaction will remain positive and the OR will remain safe and successful.

#### *Knowledge Check #4*

*What are the three stages of surgery?*

## **Challenges of the Operating Room**

The operating room is a key department within any hospital. However, it can be one of the hardest to manage. Management of operating rooms require coordination of resources so that surgery can be performed efficiently, cost effective, and safely (Plasters, 2003). However, this is a lot easier said than done. There are many factors that go into successfully managing an operating room, and they must all act cohesively because if not, that is when challenges and complications occur. There are a number of problems we commonly see within operating rooms due to the high stress people acquire when dealing with someone's life on the line. As a manager, it is important to figure out and resolve these problems because the operating room is crucial for any hospital. Some of these problems we frequently see consist of; surgery delays, dispute between managers and physicians, and also credibility/ reputation issues and concerns (Calmes, 1992).

The operating room, like many departments, runs on a schedule. Whether it be a staffing schedule or a patient surgery schedule, things would not run effectively without a schedule or plan of some sort. Within the operating room, emergencies occur, resulting in a change in agenda

(Source). When there are emergent cases brought to the O.R, all other operations are put on hold and the patient who is in danger will get the next available operating room. This delays other patient's surgeries who are not considered as emergent as others because their life is not on the line. If equipment is inefficiently stored and sterilized, this may result in a delay of surgery because it is not safe enough to open the patient up. Prolonged anesthesia is also a very common way to slow down operations within the O.R. If prior patients are having a hard time recovering from the anesthesia, the anesthesiologists may not be able to get to the next case if a recovery room nurse cannot handle the patient encountering prolonged anesthesia. Lastly, if there are not enough beds to send the patient to after surgery, this results in surgery back up and delays (Calmes, 1992).

We always here about common arguments between the management team and the clinician team. The management side tends to have more of a business outlook on the organization, whereas the clinicians just care about delivering the best quality of care in the most effective manner. Many managers within hospitals do not have a medical background, therefore do not see where the clinicians are coming from, and vice versa. This is where we tend to see a lot of disagreement. There is a certain limit a business must set so that they do not encounter problems such as debt and bankruptcy, and the clinicians do not have this mindset. However, if we do not have either sides, managers and clinicians, we would not be able to have an effective operating room. Stated by a local operating room manager, "I'm a clinician and I'm an administrator, so I see both sides. It is easier to communicate with both types of people because I have background knowledge in both fields, so I feel that I get respect from everyone and at this hospital, we are all able to work together" (Source) It is hard to bridge that gap between administrators and physicians, however if you can find an effective way to satisfy both parties, there will be less complications within the department.

The operating room is filled with many specialists, such as surgeons, anesthesiologists, and nurses. All professions are viewed very highly within our society and all exercise great power within the healthcare industry. All of these professionals that are working to achieve one common goal, all have their own separate reputations to uphold. Therefore, when something goes wrong in the operating room, many people do not want to take responsibility for it and tend to point fingers at their colleagues. At the end of the day, these patients' lives are in the hands of these professionals, which tends to add stress and pressure on the operators. This creates a tough environment to work in, which can be difficult to handle as a manager. As a manager, keeping things under control and keeping your employees composed can be tough when there are such high stakes at risk. Once the specialists leading the surgery in the operating room express worry and stress, this tends to create a domino effect on the rest of the staff.

#### *Knowledge Check #5*

*What are two common problems the emergency room often faces?*

## Answers to Knowledge Check:

1. Neurology/spinal, Cardiothoracic, Pediatric, Orthology
2. Surgeon, Surgeon's Assistant, Nurse, Surgical Technologist, and Anesthesiologist
3. Urgent and Emergent
4. Pre-Op, Operating Room, Post-Op
5. Surgery delays, credibility

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# Pharmacy

## Chapter 10

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### Learning Objectives

- Develop a general knowledge base to pharmacy
- Gain a better understanding of the functions of pharmacy
- Understand the varying complexity of the organizational structures of pharmacy
- Increase knowledge of future medicine
- Become aware of current problems within pharmacy

### Terms to know:

- **Pharmacist**
- **Inpatient/Outpatient**
- **Prescription**
- **Telemedicine**

### Introduction to Pharmacy

A hospital exists to essentially provide diagnostic and curative services to patients. Pharmaceuticals are an integral part of that patient care. The use of pharmaceuticals and pharmacy takes a lot of coordination and efforts on all parts of the facility. In order to get a better understanding of how pharmacy integrates itself into patient care, one must have a basic knowledge of a hospital and how coordination and effort of other departments come together through the pharmacy. In this chapter we shall review and discuss the following:

- Definition of a Hospital Pharmacy
- Functions of Hospital Pharmacy

*Prepare, receive and dispense, and monitoring and counseling*



- Functions of each Component within the Hospital Pharmacy  
*Pharmacy technicians, Pharmacists, Pharmacist-in-Charge, and Director of Pharmacy. This is a basic structure set up commonly found in most hospitals but can vary depending on the facility size and location.*
- Explore the specific example of Seabrook
- The future of pharmacy and pharmaceutical technologies  
*Technological advances and Telemedicine*
- Discuss the challenges that exist within pharmacy

To be able to learn about each of these areas, one must know exactly what a Hospital Pharmacy is. Hospital Pharmacy, as defined by K. Shailaja is “the practice of pharmacy within the hospital under the supervision of a professional pharmacist” (2016). This definition may seem pretty simple and straightforward; however, as we explore the functions behind the scenes of a Hospital Pharmacy, it will soon become apparent the immense level of coordination and effort it takes to be able to practice pharmacy within a hospital setting.

*Knowledge Check #1*  
*What is the definition of Hospital Pharmacy?*

## Functions of Pharmacy

It is important to know here that not all hospital pharmacies are going to function the exact same. Each pharmacy’s individual functions really depends on the size, location and overall demand for that particular hospital (Rich, 2004). However we will review the essential functions which all pharmacies meet, which are as follows:

Prepare - preparing the pharmacy is important to ensure that everything is up and running and ready to serve patients and healthcare professionals of the hospital. There is many things that go into preparation of a hospital pharmacy, one of those being forecast of demand which includes having adequate registered and licensed pharmacists, supporting staff, as well as the organization and storage of medications and ensuring reliable stream of pharmaceutical supplies.

Receive and Dispense - Once a prescription is written by a physician or any other authorized healthcare provider, it can be received electronically or as a hard-copy prescription. It is then the responsibility of a pharmacy technician or a **pharmacist** to submit the prescription into their system and type the medication(s) and directions of which the provider instructed. Once reviewed and approved, a technician, pharmacist or even a machine will locate the medication dispense the quantity indicated on the prescription, properly label and hand off to the pharmacist for final review. Once the final medication is prepared, reviewed, and approved, it is usually handed off to a nurse or other supporting healthcare professional to actually administer the medication to the patient (Shailaja, 2016).

*Monitoring and Counseling* - *Monitoring* is the process of reviewing safety protocols, analyzing and drug use reviews or potential interactions for patients. The pharmacist is will have access to a patient's record to be able to see any allergies or health conditions which may considerably interact with the medications prescribed. *Patient Counseling*, would include answering patient questions, discussing symptoms, side effects, and monitoring the patient's health record. The hospital pharmacist should be an expert on medicines who advises on prescribing, administering and monitoring (Rich, 2004).

#### *Knowledge Check #2*

*Who is usually responsible for administering the medications?*

## **Functions of the Components of a Pharmacy**

The organizational structures of pharmacies are generally similar and consistent throughout the healthcare industry. Pharmacies normally have the same structure as any typical business entity except each component has a different title and serves a different function. York Hospital in York, ME is a good starting point to explain the organization of a pharmacy because it has a very generic and basic organizational structure for its Department of Pharmacy (Source, 2017).

The department is headed by the Director of Pharmacy who reports directly to the hospital's Chief Operating Officer (COO) and **Chief Nursing Operator (CNO)**. The role of a Director of Pharmacy is to ensure that the policies and vision of the Department of Pharmacy align with the policies and vision of the hospital (SHRM, 2017). The Director of Pharmacy also has everyday duties such as "establishing satisfactory methods of drug distribution and control, seeking compliance with outside agencies relevant to pharmacy services, and ensuring quality specifications for all drugs and chemicals used at the hospital" (SHRM, 2017). The Director of Pharmacy at York Hospital oversees three different pharmacy sites (Site A, Site B, and Site C) and each site serves a different geographical location. Each site is managed by a Pharmacist-in-Charge or "PIC Coordinator". The role of a PIC Coordinator is "to ensure licensure of the facilities and employees, establish operational systems, and provide an ongoing audit of drugs and medical errors" (Erickson, 2012). The PIC Coordinator also directly manages the pharmacy technicians at each site and reports to the Director of Pharmacy. The pharmacy technicians "measure amounts of medication for prescriptions, organize inventory and alert pharmacists of medication shortages, and enter patient information into a computer system" (BLS, 2017). The Director of Pharmacy also oversees the inpatient pharmacy service which is located within the hospital. The **inpatient** pharmacy service is comprised of hospital clinician pharmacists and hospital pharmacy technicians. The hospital clinician pharmacists "fill prescriptions based on the amounts that physicians recommend, check if prescriptions negatively interact with other drugs, and instruct patients on how and when to take prescribed medicine"

(BLS, 2017). The hospital pharmacy technicians perform the same relative duties as the site pharmacy technicians.

The organization of a pharmacy will vary in complexity and structure when considering large hospital networks such as Brigham and Women's Hospital in Boston, MA or retail (community) pharmacies such as Walgreens which has locations across the country.

Brigham and Women's Hospital has its Department of Pharmacy broken up into four different divisions with a director heading each division. There is also a Chief of Pharmacy and an Executive Director who oversee the entire department. The four different divisions are a business division, a regulatory division, an inpatient division, and an ambulatory division (Source 1). The business division handles with projects related to billing and auditing, financial reporting and forecasting, purchasing, and budget allocation. The business division ensures that there is a sufficient amount of resources and money so the pharmacy can operate. The regulatory division deals with compliance and licensure. It deals directly with government affairs and ensures that the prescriptions they provide are in accordance with safety standards. The inpatient and ambulatory divisions are where the prescriptions and medications are distributed and where pharmacists practice their profession.

Walgreens has its pharmacies set up very similar to one of the pharmacy cites that operates at York Hospital (Tucker-McLaughlin, 2017). At each in-store pharmacy there is a Pharmacist-in-Charge who is responsible for all hires in the pharmacy department. The Pharmacist-in-Charge will hire pharmacy technicians or can hire pharmaceutical interns that are interested in a career in pharmaceuticals. They will also report to the variety of management positions at the local store level who then report to the corporate headquarters. The Pharmacist-in-Charge, pharmacy technicians, and interns will perform all the same relative duties as the people who hold these positions at York Hospital.

## **Sebasticook Valley Health**

Sebasticook Valley Health serves the communities in and around Pittsfield, ME. Sebasticook is comprised of a 25-bed critical access hospital, multiple outpatient services, and three primary care offices. Being critical access hospital in a rural area, its departments are not very large and do not have the complexity of larger hospitals. An anonymous source employed by Sebasticook Valley Health provided insight on the inner-workings of the Department of Pharmacy (Source, 2017). The Department of Pharmacy at Sebasticook only has a Director of Pharmacy and a staff pharmacist. The staff pharmacist will handle the clinical work such as medication dispensing and patient consults as well as reporting daily to the Director. The Director will focus on budget, planning, strategy, and improvement on the methods of delivery and compliance with regulations. Being a small hospital, employees are on site Monday through Friday from 7am to 9pm daily. When the pharmacists are not on-site, the drugs and medications are cleared through the larger tertiary sites that Sebasticook has. Nurses are then able to access

the medication from automated dispensers and off-site pharmacists can provide information about the process. Sebasticook also has pharmacy services embedded within their primary care offices which are comprised of pharmacy technicians and managers. The Department of Pharmacy focuses on people, quality, service, growth, finance, and community to provide excellent care. Sebasticook uses a scorecard to track their performance against industry benchmarks. The scorecard is a point system which is tracked quarterly. By doing this, Sebasticook can see what it does well and what it can improve upon. The Department of Pharmacy also provides infusion services. Infusion services are the administration of medicine through a needle or catheter. Pharmacists are on-site to address concerns and nurses help in managing the medicine. Sebasticook Valley Health also provides pharmaceuticals consultation, safety information sessions, and medication reconciliation.

### *Knowledge Check #3*

*What are two the things the Department of Pharmacy focuses on besides distribution of medicine?*

## **Future of Pharmacy**

As the modern world advances with better technology and innovative medical procedures the elements that surround healthcare are finding their own ways to improve. **Telemedicine** is the evolution and use of technologies, in a healthcare setting, to deliver the medical services. (American Telemedicine Association, N.D.). We have seen more and more organizations, including pharmacy, use computers, telephones, electronic medical records and other things have advanced functions and created a better flow in the workplace.

### **Telemedicine Benefits:**

1. Patient access improvement
2. Expanded healthcare services
3. Decrease in costs
4. Increased coverage
5. Higher patient and consumer satisfaction

(American Telemedicine Association, N.D.)

As new trends of medical technology emerge the future of pharmacy is also moving forward. Pharmacy and the pharmacists rely on fast and innovative technology to further advance their work and make the pharmacy a more efficient place.

Pharmacies have been a part of American healthcare since the first one was founded in Philadelphia in 1729. The first in-hospital pharmacy came not too long after in 1752 (Educo, 2016). Modernization has happened in the industry since it began. In this section, we will review how telemedicine has changed the simplicity of pharmacy in the 21<sup>st</sup> century and beyond.

Written prescriptions have always been a part of pharmacy, it dates back to 3000 B.C. when the Sumerians from the Babylonian kingdom developed a writing system (Sonnedecker, 1963). When you are sick or need medical help, you visit your doctor. The doctor then assesses you, diagnoses you, and if need writes a prescription. You then take that prescription to the pharmacy and in return receive the necessary medication. In the 21<sup>st</sup> century, written prescriptions are rare. With the use of electronic systems doctors now send their prescriptions to pharmacies via computers. *Electronic Prescriptions* are a way for healthcare providers to send a patient's order in to the pharmacy electronically (Electronic Prescribing, N.D). There are benefits for both the prescriber, pharmacist, and the patient. For the prescriber, it is quick and secure, they can control it remotely from there computer. The physician can also check immediately to see they costs of prescriptions and what the patients provider covers. This minimizes confusion and saves consumers money. For the pharmacy, electronic prescriptions clear most confusion that a doctor's handwriting may cause. They can clearly see the accurate name of the prescription and dose. Electronic prescriptions, as well as other telemedicine components, keep an electronic history. This history is easy to access and help prescribers make better decisions on the patients past to improve their future (Electronic Prescribing, N.D).

While looking into the future we see even more advances of hospital pharmacies. While they are still working on these, the idea of pharmacy robots is not too far away. Using robotics and algorithms we may see hospitals using robots sooner than we think. The University of Rochester's robotic department highlighted some of the robots that are being used in the United States. The McKesson ROBOT-RxTM, used at the University of Rochester Medical Center, is programmed to dispense the correct medicine for the patient in the hospital. The prescription ordered by the doctor is reviewed by the pharmacist and then typed into the system. The ROBOT-RxTM then identifies, counts, and packages single-doses for inpatient consumers (Robotics, Safety, Pharmacy - University of Rochester Medical Center, 2017). This robot has helped the staff of the hospital and pharmacy play a more critical, hand on role, in a patient's care plan. By taking care of the minuet and tedious tasks, ROBOT-RxTM, frees up time and costs that would have been spent doing that.

Some companies may worry about relying too heavily on technology and machines. Most protocol calls for the pharmacist to confirm that the robot has performed accurately. The ROBOT-RxTM is used in more than 130 healthcare facilities and has dispensed greater than 45 million doses with no errors (Robotics, Safety, Pharmacy - University of Rochester Medical Center, 2017).

*Knowledge Check #4*  
*What is one benefit of Telemedicine?*

## Challenges Within Pharmacy

Pharmacy faces many problems ranging from how to optimize patient care to managing the use of opioids. Pharmacists are required to counsel patients about their medication when necessary. Pharmacists can struggle performing this duty because “pharmacists are filling 300 to 400 prescriptions per day...and conduct perspective drug reviews on each prescription” (Baker, 2017). It is not realistic to assume that pharmacists will be able to conduct these reviews on each prescription because there is not enough time. Therefore, pharmacists may not be able to provide the most thorough counseling to their patients because they are not able to conduct in-depth reviews on all the medication they provide. Pharmacists must pick and choose which prescriptions they believe are valuable and worthy to review extensively. Building off that, pharmacists struggle with optimizing patient care. Pharmacists will need assistance from their technicians to gather medical information and patient records to decipher which patients need the most pharmaceutical service. One way to optimize patient care is to “review each case to see which diseases patients have, which drugs they are on, and take into consideration their physical characteristics and level of healthcare literacy” (Baker, 2017). If pharmacists could learn more about the people they are distributing prescriptions to, they will be able to optimize patient care and provide excellent counseling. Another way to provide excellent counseling and optimizing patient care is by monitoring medication compliance. This is an issue that my pharmacists struggle with. Pharmacists try to make sure that their patients are taking the medication to treat their condition. However, they do not always have consistent access to their patients so they are unable to be sure if their patients are complying with their prescriptions. Pharmacists can better manage compliance by “noticing how long medications last between refills” (Baker, 2017). If the time between refills is long, pharmacists will know that their patients are not properly taking their medicine and can counsel them on the importance of sticking to the regimen. If the time between refills is quick, it will raise suspicion of potential prescription abuse. Pharmacists can sometimes clash with physicians who prescribe the medication. One issue is that, “pharmacists notice that physicians prescribe medication that are contradicting in patients” (Baker, 2017). Pharmacists may know that the prescription could counteract with other drugs or not be the best form of treatment. This controversy is up to discretion sometimes. Pharmacists do have the right to reject a prescription if they are certain it will pose a risk to the patient. However, occasionally pharmacists will have to fill prescriptions that they do not agree with. These are just a few of the many issues and challenges pharmacists face.

## Chapter Concepts

This chapter has covered the importance of in-hospital pharmacies and the functions related to it. The following list details the major concepts to take away from this chapter:

- *Hospital Pharmacies* are pharmacies that service inpatient hospital patients. They have three essential functions.
  - Prepare
  - Receive and Dispense
  - Monitor and Control
- The Director of Pharmacy has to maintain order of the everyday actions in the pharmacy. They also are in charge of maintaining policies that are inline with the hospitals over all policies and missiosions.
- The Directory of Pharmacy reports to the Chief Operating Officer (COO) or the Chief Nursing Officer (CNO).
- Complexities pertaining to structure and function within Departments of Pharmacy vary based on the size of the hospital or organization.
- The Department of Pharmacy, at Sebasticook Valley Health, focuses on people, quality, service, growth, finance, and community to provide excellent care.
- Telehealth includes major advancements in the modern health world. Decreased cost, more patient access, increased coverage, and better patient satisfaction rates.
- A prescriber is anyone who has the proper qualifications to recommend and submit prescriptions for patients. Prescribers are not limited to just physicians and hospital doctors.
- *Electronic Prescriptions*, a key part of new telepharmacy, are a way for healthcare providers to send a patient's order in to the pharmacy electronically. The pharmacist, prescriber, and patient uses these electronic prescriptions to improve efficiency of the prescription process.

## Answers to Knowledge Check:

1. The practice of pharmacy within the hospital under the supervision of a professional pharmacist.
2. A nurse, or any other qualified healthcare professional.
3. The Department of Pharmacy also focuses on people, quality, service, growth, finance, and community (name any two).
4. They should name one of these: Patient access improvement, expanded healthcare services, decrease in costs, increased coverage or higher patient and consumer satisfaction.

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# Hospital Laboratory

## Chapter 11

### Learning Objectives:

- Understand laboratory responsibilities, structure, and management
- Be able to identify the economic drivers of a hospital laboratory
- Understand the insurance and billing processes of hospital labs
- Recognize the reasons why a lab is both a cost and profit center
- Understand the future outlooks and risks associated with hospital laboratories and their external competition

### Terms to know:

- Clinical Laboratory
- Joint Commission
- Phlebotomist
- Blood Banking
- Laboratory Director
- Medical Director
- Clinical Laboratory Improvement Amendments of 1988 (CLIA)
- Centers for Medicare and Medicaid
- Cost Center
- Reimbursement
- Profit Center
- Cost
- Charge
- Revenue vs. Operating Revenue
- Beneficiary
- Risk

## Introduction to Hospital Laboratories

Hospital Laboratories are an important part of making proper diagnoses for the patients who are seen everyday. While hospitals typically have laboratories that run the standard tests needed most often, there is the possibility for external competitors with more specialized tests available. While these are expensive tests, laboratories are still seen as a profitable part of the hospital, and this has maintained the decision to keep laboratories in the hospital and not contract for all tests. However, there are various risks associated with laboratories in terms of reimbursement, technological advancements, and staffing.

## Hospital Laboratory Responsibilities

Did you know that around 70% of health diagnoses require lab testing? (Badrick, 2013). Because of this, it is fair to say hospital laboratories play a crucial role in the function of the hospital. Even though we may not see them working and doing their jobs, laboratories are constantly running tests and diagnosing patients. Pathologists benefit from this as patients do not usually sue them as they do not realize they ultimately diagnosed their illness (Bonica, 2017). However, without laboratories, hospitals would not be where they are today.

## Hospital Laboratory Duties

A hospital laboratory, or a **clinical laboratory**, is defined as “one for examination of materials derived from the human body (such as fluids, tissues, or cells) for the purpose of providing information on diagnosis, prognosis, prevention, or treatment of disease.” (Clinical Laboratory, 2017). Because the lab provides information on the diagnosis, prognosis and treatment of a disease, they hold many responsibilities. They could provide the initial diagnosis that saves an individual's life. All hospitals with an Emergency department must have a laboratory on premise and be open 24/7. They have three shifts throughout the day and during all shifts they must have a pathologist and lab technicians, however they tend to only do tests on emergency or ICU patients during the night shift (Bonica, 2017).

In order for a laboratory to carry out their duties they must first make sure they have adequate staffing. The staff consists of phlebotomists, medical laboratory technicians and pathologists. Before any tests are performed, the qualifications of each member must be checked. Professionals who work in the lab must have a bachelor's degree or higher, along with an overseeing pathologist who is an M.D. However, lab technicians have different requirements (Bonica, 2017). Supplies must be ordered as well as the necessary equipment and staff must make sure the laboratory is up to the standards of the **Joint Commission**, which is the organization that accredits and certifies hospitals and healthcare facilities.

The lab testing starts from the work of the **phlebotomist**. Their job is to take the blood of a patient and send it to the lab for testing. Blood is not the only thing that can be taken from the human body to be tested. It can be any fluid, tissue or cell, typically called a biopsy. Once the

specimen is taken, it is sent to the laboratory for testing. Lab orders that come from the Emergency Department have first priority for testing. Once a lab test is completed it must then be entered into the Laboratory Information System, which stores the data from the laboratories. If the results signal danger, the lab staff will directly contact the medical staff. In a normal case, after the sample is taken it then goes to the lab where the medical laboratory technician will analyze and run test on the sample. In some cases machines will process the results of the sample. Once the tests have been run, the results are given to the head of the laboratory, usually the pathologist, for review (Bonica, 2017).

## **Blood Banking**

Nearly 5 million people receive blood every year, making blood a necessary life-saving resource. **Blood Banking** is the “process of collecting, separating, and storing blood” (Blood Banking and Donation, 2017). Blood banks are responsible for collecting the blood and separating it according to patient’s needs. It is also the bank’s responsibility to test for any blood-borne diseases such as HIV and Hepatitis. While making sure no diseases are present in the donor blood, the medical staff is also responsible for ensuring the correct blood types, with O- (O negative) blood being the more resourceful as anyone can receive this blood without the fear of total rejection (Blood Safety and Matching, 2017).

Blood donations are essential for adequate care. It is needed for many medical treatments, surgeries, and major trauma. It is necessary to have an adequate amount of blood as well as the different blood types as every 2 seconds someone in the United States needs blood (Blood Fact and Statistics, 2017). The American Red Cross is large proponent of ensuring enough blood donations are received to keep up with the high demand.

### *Knowledge Check #1*

*Explain the the process of laboratory testing and why it is so important for treating patients?*

## **Hospital Laboratory Structure and Management**

Like most other components of the healthcare system, personnel and labor costs constitute the largest component of a laboratory’s budget (Garcia, 2014). Within this group of employees, there is a generally defined management structure.

**Laboratory directors** have primary responsibility for the administration and outcomes of a laboratory. **The Clinical Laboratory Improvement Amendments (CLIA) of 1988** defined the standards of laboratory proceedings, and the responsibilities of a laboratory director was one such standard that was clearly outlined. Their primary responsibility is for the success of “the overall operation and administration of the laboratory, including the employment of competent qualified personnel.” (Centers for Medicare and Medicaid, 2006) In addition to ensuring that the laboratory functions well, the laboratory director is also required to ensure that there is a system

in place that promotes quality results from the laboratory. They are responsible for hiring all employees in the laboratory and checking their credentials to see if they are qualified to complete the work. Communication is important to the success of this position, especially because the laboratory director shares some types of duties and responsibilities with the medical director of the laboratory.

The **medical director** of a laboratory is a pathologist hired by the laboratory for certain types of administrative activities within the lab. These activities are generally closer to the actual execution of laboratory procedures, and can include things like ensuring appropriate test method selection, carrying out quality assessment and control procedures, and checking test results before they are reported to patients. (Centers for Medicare and Medicaid, 2006) The medical director is involved with the day-to-day management of employees, and is the first person available to laboratory technicians if they have questions.

### *Knowledge Check #2*

*What are the responsibilities of a laboratory director? How are they different from the responsibilities of a medical director?*

Laboratory technicians make up the largest number of employees in a laboratory. They generally have a bachelor's degree in medical technology or related sciences, and may have previous work experience depending on the requirements of their position. (Garcia, 2014) CLIA 1988 defines the specific educational and experiential requirements needed for each class of laboratory test. Most technicians are now generalists in the types of tests they can perform. Improvements in laboratory technology and computerization have made it easier to learn multiple types of tests, so training a technician in different areas of the laboratory is a useful idea for a medical director (Garcia, 2014) However, the optimal mix of skills between technicians is specific to the needs of each laboratory, so medical directors should evaluate which areas are the most important for multiple employees to have knowledge of testing procedures.

An example of the interaction between laboratory staff, the medical director, and the laboratory director is as follows: a laboratory technician believes that the laboratory should be able to run a new type of test procedure. They send a request to the medical director for the laboratory to expand its capabilities in this area of testing. Because the medical director has more training and skills than the average technician, they will be able to analyze the need and benefit of being able to run the new test. If they believe that being able to run the test is a good idea, the medical director will go to the laboratory director to justify any budget changes that will need to be made. The laboratory director will evaluate the budget constraints of the laboratory, and compare the cost of running the test in-house to the cost of outsourcing the test. If the laboratory director believes that the test can be run in the laboratory with a positive financial structure, then the medical director can begin working to create new procedures and education modules for the execution of the new test. (Bonica, personal communication, 2017)

## Hospital Laboratory Finances

According to the **Centers for Medicare and Medicaid Services**, the United States spends nearly \$3.3 trillion dollars yearly on collective healthcare costs. In contrast to the amount of money spent on care, the United States ranks exponentially low in comparison to other developed nations in terms of health outcomes, placing 37th worldwide (CMS, 2017). From this outrageously large amount of money, an estimated 32.2% of health spending is used for hospital care. Hospital care encompasses a wide variety of services such as emergency, obstetrics, inpatient care, and many others. More specifically, hospital care includes both inpatient and outpatient laboratory services. As the United States works to shift towards a value-based health care system, it is important to assess the financial position of hospital laboratories. These professionals cannot be reimbursed based on value, because they do not get to see patients despite the fact that they are the one diagnosing them.

## Costs and Profits Associated with Lab Operations

Nearly half of all laboratory expenditures occur in hospital-based laboratories, utilizing both inpatient and outpatient methodologies of care (Robinson, 1994). Despite being a commonly used service line, the hospital laboratory has started to be viewed primarily as a **cost center**, due in large to the declining Medicare **reimbursement** rates that will be explained in detail further on in the chapter. Within a given organization, a cost center can be identified as a department that does not impact the overarching company's profitability directly, but does cost the company money to operate and maintain. Currently, hospital labs are finding themselves being referred to as cost centers due to an aging workforce and an increased demand for pathologists and lab technicians. However, there is a shortage in production of talent, technological advances, infrastructure, and the aforementioned reimbursement and payment difficulties to justify the demand for laboratory professionals (Lafferty, 2016).

Every department and service line within a hospital costs money in order to sustain operations. Laboratories use costs slightly different than typical service lines within hospitals, and this is partly due to the wide scope of patient-ground they cover for both inpatient and outpatient purposes. One area where costs are built up for hospital laboratories is in the area of staffing. Because of the ever-increasing demand for lab-qualified personnel, it is crucial that hospitals be pitching competitive wages and benefits as a means to acquire and retain employees (Chi Solutions, 2010). In many instances, members of the executive staff regard compensation as a driving force for the quality of work they are willing to provide, and this is driving up costs for hospitals across the nation. For many involved in the industry, the most expensive portion of the hospital lab can be attributed to staffing, and efforts to make up for these outrageous staffing costs can be found in other areas, such as costs to the patients (Bonica, 2017).

Technological advances and issues with infrastructure have also proved to be costly for laboratories within hospitals. Although technology has decreased the amount of necessary manual labor, it has jacked up costs on the premise of overutilization. Because technology makes testing quicker and easier, the number of unnecessary tests being conducted is increasing. This overutilization is subsequently leading to an increase in diagnostic costs of clinical care (Chi Solutions 2010). Infrastructure is a cost that people often overlook, as space being utilized is not typically put into question. The issue manifests itself when the space a hospital has invested in for laboratory purposes is worth more than can be supported by the volume of services being provided and revenues being accrued. From a different angle, infrastructure and resources will also hinder profitability if they are limited and not substantial in size.

Despite the growing belief that hospital laboratories are strictly cost centers, those who are working or who have worked in the industry have stated that labs are in fact areas of extremely high-profit (Bonica, 2017). As discussed before, the new technologies involved in lab work have increased costs for the industry, but have also worked to increase profits immensely. Technology has worked to decrease the demand for staffing and manual labor, which has saved money that would have otherwise been spent on retaining more staff members. Additionally, technology has increased testing efficiency, allowing for a decrease in patient wait time and an increase in volume, allowing for added revenues. For these two reasons, along with others as well, hospital laboratories are still capable of being recognized as **profit centers**. Profit centers are departments within the hospital that generate revenue and a profit, rather than just costing money to operate. Perhaps the most important profit-rendering aspect of laboratories would be testing.

### *Knowledge Check #3*

*In what ways do hospital laboratories embody the qualities of cost centers, and for which reasons can laboratories still be regarded as profit centers?*

## **Laboratory Testing**

Testing and blood transfusions make up the bulk of the work done within a laboratory. There are a wide variety of tests conducted in laboratories, ranging from screening and prevention to specialized, genetic purposes. At present, lab testing costs are continuing to grow at a rapid rate, with hospital-based labs conducting the most expensive tests due to the high associated operational costs (Robinson, 1995). Because testing can be done on both an inpatient and an outpatient basis, and testing is often covered by third-party payers, patients typically welcome tests being ordered, even if it is not entirely necessary.

Laboratory testing is among the most inexpensive of hospital procedures, but the associated costs and charges doled out to patients and third-party providers are extremely high. The most expensive part of actually conducting a test within a laboratory is the act of the

technician placing the blood in the piece of machinery, a task that takes merely seconds. Aside of this specific maneuver, testing is an extremely inexpensive process made quite easy by technology, and the source of the high charges are directly associated to up-pricing. In some instances, tests can cost as low as \$5 dollars, but the charge on the patient's bill will read to be \$60 (Bonica, 2017).

Even with world-class technology, laboratory testing and blood work is not free of error or risk. One of the greatest issues that lab testing poses is the occurrence of both overutilization and underutilization. Both issues have been associated with misdiagnoses and delay in diagnosis, caused by improper or unnecessary ordering of tests, using the wrong tests, or mislabeling of patient tests due to large volume, thus causing a delay in send-out (Sarkar et al., 2016). In some cases, the same tests have been unnecessarily repeated, causing duplicate labeling on the send out bottle or package. Because identification is imperative as to follow patient privacy laws (HIPPA), any error will cost the lab a great deal of money (Bonica, 2017). While overutilization has been a more widely known problem, underutilization is equally as bad because not having patient results or having incorrect results due to inadequate testing will lower patient satisfaction.

## **Billing and Insurance**

Billing for laboratory services conducted in a hospital are not done in the laboratory department. Instead, billing is typically a completely separate entity, taking place in the billing department with employees who are trained to deal with insurance and consumer issues (Bonica, 2017). Most often, the Medical Director receives all the laboratory costs relevant to costs and charges to the billing department, and bills are constructed and sent out accordingly.

Knowledge of laboratory structure, testing codes, and costs of services is essential for the billing department to be successful. If costs are overlooked do to lack of knowledge that they exist or are relevant to the bill, the laboratory is subject to losing a great deal of revenue. In one instance, a billing department overlooked a portion of technical services conducted in the lab, and this resulted in the loss of a lot of money (Bonica, 2017).

As with all other services offered in the hospital, insurance coverage for laboratory services varies plan by plan, patient by patient. Insurance coverage and the presence of third-party payers influences more than just the amount a patient pays, it also speaks to the profitability of the lab overall. As mentioned earlier on in the chapter, a major player in the profitability of an organization is the reimbursement rate. Reimbursement is how much an organization gets back from the paying entity for a service they have conducted. Under Medicare, a major government run health care coverage program in the United States, the reimbursement rate for laboratories in hospitals is consistently declining. Actively, Medicare reimbursement rates are 6% lower than private payers (Aston, 2014).

This decline in reimbursement is causing laboratories to restrict their budgets, which in some instances forces the organization to drive up costs of otherwise inexpensive tests to make



up for revenue lost (Aston, 2014). Medicare Part B covers laboratory visits to a certain extent, but even with this help, tests and services from labs prove to be fairly expensive for patients. An important aspect of billing and insurance to keep in mind would be the difference between the words “**cost**” and “**charge**”. While the cost of testing may be low, laboratory charges are more often than not very high because prices get hiked up as a means to triumph against low reimbursement rates.

#### *Knowledge Check #4*

*Why is it important to recognize a difference between the concepts of “cost” and “charge”?*

*What are the differences?*

## **Hospital Laboratory Outlook and Risks**

As we have discussed previously in this chapter, hospital laboratories are an essential part of the hospital. Whether a surgery is being performed or the emergency department is open, the laboratory needs to be running. Looking forward, what are the potential outlooks in the hospital laboratory field and potential risks?

## **Who are the Major Players in Laboratory Services?**

While any hospital containing an emergency department is required legally to have a 24/7-operating laboratory, some specialized tests can be outsourced if the laboratory does not have the means to perform these. Some factors playing into the balance of in-house testing vs. outsourcing has to do with the demand of that service in the area (Bonica, 2017). Outsourcing is the process of contracting services with an external company at some agreed costs. This decision comes down to if there is a high demand in the area for more specialized laboratory tests and how would the facility benefit from the service being provided in-house?

Major external players in laboratory services are Quest Diagnostics Inc. and the Laboratory Corporation of America Holdings. Quest is the largest provider of laboratory services with a market share of 14.3% and the Laboratory Corporation of America Holdings (LabCorp) is not far behind in second with a market share of 13.3%. However, Quest is working on expanding its services to international markets in countries such as India or the U.K.. Despite their desire to expand, Quest has faced a more competitive market in the years leading to 2017, primarily due to more in-house tests done at hospitals or physician offices. They have maintained a strong operating profit margin since 2012, but have restructured their workforce for cost-saving (Curran, 2017). **Operating revenues** represents the total revenue for an organization after the operating expenses have been deducted, while **revenue** accounts for all cash flow into the organization.

LabCorp is the second largest provider of laboratory services. It has had a long-time contract with United Healthcare which was recently extended to continue through the end of

2018. This has proven to be a beneficial partnership as United Healthcare makes up 9.0% of LabCorp's revenue. LabCorp has been able to maintain a strong operating revenue due to their anticipated 4.2% annual growth rate. Between 2012 and 2017, it was anticipated that LabCorp's revenue would increase from \$5.6 million to \$7 million (Curran, 2017).

All other laboratory services account for the other 74% of the market share, but each individual organization tends to hold between >1.0% to 3% of the market. Quest and LabCorp are expected to maintain strong operating revenues, with LabCorp having an expected increase in overall revenue (Curran, 2017). Both of these companies are strong competitors in the market, but more in-house testing is occurring presently causing a concern for these companies. However, these large corporations will maintain a significant portion of the specialized services that hospitals do not refer patients for frequently enough to justify purchasing the necessary technology to perform themselves (Bonica, 2017).

#### *Knowledge Check #5*

*Would it be a logical choice for a community hospital in rural, upstate New Hampshire to purchase a new DNA screening machine for the Huntington's gene? Huntington's disease is a rare, genetic disorder similar to ALS that currently has no cure. There are fewer than 200,00 cases per year of this disease (Google, 2017).*

## **Industry Outlook**

Laboratories are an extremely technological-based area that are constantly changing with new research and discoveries. While many tests are performed without the need for much manpower, there is the need for technicians and physicians to interpret the results and pass them onto the referring physician (Bonica, 2017). Because there is still a need for human resource in this industry, this is a growing field with opportunities for career advancement.

With the increasing numbers of insured patients due to current healthcare reform, the business is expected to benefit from an increased demand in laboratory services. However, in 2015 the Centers for Medicare and Medicaid proposed cutting their laboratory fees by ~\$50 billion causing a lower reimbursement rate for seeing Medicare or Medicaid patients. Medicare and Medicaid account for 20.3% of total laboratory revenue. Prior to the anticipated laboratory fees reduction, an act passed in 2014, the Protecting Access to Medicare Act, states that laboratories must provide access to their private insurance payments and the volumes at which they conduct private insurance services. With the need to release this information, it allows the Centers for Medicare and Medicaid access to how often Medicare and Medicaid covered patients are provided services despite lower reimbursement rates, as well as the private insurance reimbursement rates. The hope in this act is for the Centers for Medicare and Medicaid to have fairer reimbursement rates for laboratory services to ensure their beneficiaries are given access to these services (Curran, 2017). **Beneficiaries** are consumers of Medicare and Medicaid coverage.

Despite the potential drop in reimbursement rates, this is a growing industry. Due to the shortage in laboratory workers, there is expected to be a competitive increase in employee wages to recruit and retain employees. We are expected to see a 2.6% annualized growth rate to \$20.6 billion in wages. Along these lines is the idea of consolidation. Laboratory consolidation occurs to create large enterprises for providing services, such as Quest and LabCorp. By growing larger enterprises, there is an increase in larger test volumes as well as contracts with hospitals (Curran, 2017). In theory, this should increase laboratory revenue, because of the concise means for performing tests in terms of human resource available and the capacity of their technology to provide efficient test results.

#### *Knowledge Check #6*

*If you are the Chief Financial Officer of a local hospital, would you propose the expansion of your hospital's laboratory services? How would you see this expenditure benefiting the overall hospital?*

## **Laboratory Risk**

Risk is an inherent part of our everyday lives. For industries, **risk** is seen as anything that can potentially prevent the achievement of their set goals. Risk management is necessary to analyze loss exposures, typically in terms of finances. Based on the complexity of an industry, such as laboratory services where a patient's health is on the line, there may be larger financial risks associated (Marquette, 2017).

#### *Knowledge Check #7*

*If you were a risk management worker of a hospital, what would you expect to be large areas of risk in terms of the laboratory?*

With an overall risk score of 4.50, on a scale of 1- 9 with 1 being the lowest risk, laboratories are expected to have a medium-low risk through 2018. However, the overall risk in 2018 is expected to be slightly higher than 2017 due to an unfavorable trend in federal funding for Medicare and Medicaid. The overall risk score can be further divided into different categories- *structural risk, growth risk, and sensitivity risk* (IBISWorld, Nov. 2017)..

Structural risk analyzes the common characteristics between all industries, such as barriers to entry and competition. There are seven components all together that are scored and averaged for the total structural risk score. For laboratories, they have a low structural risk with an overall score of 3.71 (IBISWorld, Nov. 2017).

Growth risk predicts the expected revenue growth passed on past performances and other industry growth risks. A high expected industry growth rate is associated with a low risk factor. For laboratories, the overall growth risk is considered medium at 4.74. This risk can be

associated with the earlier discussion about lower reimbursements rate, however, there is still a sufficient operating revenue in the industry maintaining the relatively low growth risk (IBISWorld, Nov. 2017; Curran, 2017).

The final category in an industry's overall risk is sensitivity risk. Sensitivity risk analyzes the external factors bearing on an industry. The overall sensitivity risk is considered medium at 4.77. For laboratories, a major factor is insurance coverage, especially private insurance. With the current trend in health care coverage, it is unsure how insurance coverage with cover causing an effect on laboratories' risk scores (IBISWorld, Nov. 2017).

In consideration of the overall risk for laboratory services, this is considered a growth industry. Despite the potential risks associated with insurance and reimbursement, there is a strong expected financial margins along with the anticipated increase in wages.

## **Answers to Knowledge Check:**

1. Laboratory testing starts from when either the blood is drawn or the blood is taken from the patient. It then goes down to the laboratory where the medical laboratory technician will analyze and run a test on the sample. Once the test has been run, the head of the laboratory looks over the results for review and the medical staff is notified the results. Laboratory testing is so important because more than half of diagnoses are through lab testings.
2. Laboratory Directors are responsible for the overall administration of a laboratory in addition to hiring qualified employees. Medical Directors are responsible for ensuring that laboratory tests are performed correctly, and is more involved with the daily operations of a laboratory.
3. Laboratories have been viewed more commonly as cost centers as of recently due to the increasing costs associated with staffing and staff retention, technological advances causing overutilization, and declining reimbursement rates.
4. There is an implied difference between the concepts "cost" and "charge" when talking about laboratory fees and patient billing. The difference between the two addresses the fact that costs of tests are fairly inexpensive, but the patient is charged a significantly larger amount for having the service done. The charges are much higher than the costs because of up-pricing, which most commonly is done to make up for the cost of staffing.
5. Since Huntington's Disease is extremely rare, and rural, upstate New Hampshire has a very low population, it would not make sense for a hospital in this area to invest in new testing technology for this disease. The chances of a hospital in this region seeing a patient with Huntington's is very slim, and if they see one, it is not of immediate concern to the health of a patient, and the test can be outsourced. Along with the low demand for this technology, most hospitals in this area are critical access hospitals and have low funding rates already.

6. As CFO, it would only make sense to expand laboratory services if there is a demand. If there is no demand, the underutilization of the technology would be more expensive, because there would be incoming revenue from the test.
7. External competition would be a major area of risk for hospital laboratories, because they may have cheaper rates and more specialized technology if they are large. Other risks would be prices, location, and location relevant to other hospitals where patients could receive cheaper testing.

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# Rehabilitation Facilities

## Chapter 12



Occupational Therapy May Help Decrease the Hospital Readmission Rate. (n.d.). Retrieved December 10, 2017, from <http://www.rehabpub.com/2016/09/occupational-therapy-may-help-decrease-hospital-readmission-rate/>

### Learning Objectives

- To learn the functions of Rehabilitation Facilities
- Know services that make up a Rehabilitation Facilities
- Understand the difference between Practices and Hospitals
- Differentiate specific Rehab services throughout other types of facilities

### Terms to know:

- Rehabilitation
- Medical necessities
- Managed care
- Referral
- Allowables
- Co payments
- Coinsurance
- Disability
- Impairment
- Rehabilitation Practice
- Rehabilitation Hospital
- Nursing Home Rehabilitation
- Drugs and Alcohol Rehabilitation
- Prospective payment model
- Physiotherapy
- State Funded Programs
- Private Funded Programs

## **Introduction to Rehabilitation Facilities**

A **Rehabilitation** Facility is a place where inpatients, as well as outpatients, go after their first-hand medical issues are treated. Rehabs also can be short term help as well in regards to addictions and smaller injuries. Patients come to these facilities in hope to work on getting the area in which was recently injured or disabled, stabilized, and back to normal. Different examples of rehab that is cared for at Rehabilitation Centers are neurological, musculoskeletal, orthopedic, drug and alcohol addictions, and many others. This chapter discusses different components of rehabilitation facilities, along with their functions and how they operate. Topics ranging from inpatient and outpatient practices all the way to drugs and alcohol rehabilitation centers are touched upon.

## **Inpatient Rehabilitation Facilities vs. Rehabilitation Practices**

Many people might think that Rehabilitation hospitals and Rehabilitation practices are the same thing. However, in an interview with Marsh Brook Rehabilitation Center's Clinical Director, there was evidence presented otherwise. Marsh Brook Rehab is located in Somersworth, NH. Established in 1989 as Marsh Brook Rehabilitation Services, Marsh Brook Rehab is a division of Strafford Health Alliance, a not-for-profit corporation owned and operated by Wentworth-Douglass Hospital and Frisbie Memorial Hospital. "Today, Marsh Brook Rehab is a regional leader in the delivery of outpatient rehabilitation services throughout the Seacoast of New Hampshire. Our team of experts specializes in comprehensive conservative and postoperative physical and occupational therapy. We work closely with the orthopedic surgeons at Seacoast Orthopedics and Sports Medicine, along with neighboring medical practices at the Marsh Brook Professional Center in Somersworth. Marsh Brook Rehab has grown from its original 2,000-square-foot PT clinic in 1989 to its current 20,000-square-foot home providing PT, OT, hand therapy, aquatic therapy, and sports performance, all under one roof! Combining evidence-based therapy protocols with sophisticated clinical outcomes data analysis, we've become an integral partner in maximizing the health and wellbeing of people of all ages throughout our community" (Marsh Brook Rehab Website). The interviewee was very adamant in explaining the distinct difference between both Inpatient Rehabilitation Facilities and Rehabilitation Practices.

An inpatient rehabilitation facility (IRF) is known as a "hospital-level, or acute, rehabilitation care", the level of care at a IRF is not available at other facilities such as skilled nursing home facilities or assisted living centers. Patients in these facilities are expected to undergo a minimum of three hours of intensive therapy a day. Common conditions and treatment seen at these facilities include burn rehabilitation, stroke, spinal cord injuries, brain injuries, amputee rehabilitation, Parkinson's disease, and many other conditions that require a sophisticated level of care (Inpatient Rehabilitation Facilities, 2017).



A Rehabilitation Practice, also called a Private Practice, Outpatient Clinic or Free Standing Facility, is where individuals go to receive care once they have already been released from the hospital and returned home. In this setting individuals live at home and go to this facility a few hours every week to receive care. This type of setting is for individuals that are either far along with their recovery or individuals who do not have extremely severe injuries and can live independently. This is very common for physical therapy rehabilitation and is typically set in an office, clinic or other healthcare facility (PT Settings, n.d.).

An example of a Rehabilitation Practice is Marsh Brook Rehab; at this facility they offer physical therapy, occupational therapy and athletic training. All patients at Marsh Brook Rehab live at home, making it an outpatient facility. As far as staffing goes, a Clinical Director plays one of the most important roles in the daily operations and maintenance of these facilities. A typical day for a Clinical Director varies. On a “normal” work day, a Clinical Director would have meetings with the staff/leadership team, meetings with program directors, in which ideas would be run by the director, and payroll & management of other buildings owned would also take place. However, one maintenance problem could completely change the direction of the day. The same thing goes for HR, financial analysis, and just maintaining the business as a whole. The director could come in with a set plan for the day, but this plan could rapidly change in an instance (Interviewee Clinical Director, 2017).

In terms of how facilities such as Marsh Brook are able to make profits is through a fee-for service model. A fee-for-service model is where providers are paid for the number of services administered to the patient. All of Marsh Brooks patients come from a referral basis either from a hospital discharging a patient from a surgery, a primary care provider, or a home care provider. Once a **referral** is established Marsh Brook will approve that individual for care by contacting their insurance provider then following up with contacting that them to schedule and come up with a plan of care ( Interviewee Clinical Director, 2017).

### *Knowledge Check #1*

*What are the specific tasks that a Clinical Director is responsible for in a rehabilitation facility?*

## **Physiotherapy**

Under the large umbrella of rehabilitation, there are many different sub sectors of different types of rehabilitation; one of them being physiotherapy. Another term for physiotherapy, more commonly used by patients and consumers, is physical therapy or PT. **Physiotherapy** is the treatment of injury, disease or disability by physical methods rather than by drugs or surgery. Physical methods can be things such as massage, heat treatment and exercise (London, n.d.). The purpose of this therapy is to restore movement and function to the part of the body that is injured, while helping patients manage pain.

Individuals can seek out physical therapy for a variety of reasons, however the top 5 most common injuries that physical therapists see are, sprains, fractures, torn ligaments and tendons, arthritis and dislocations (The Top 5 Most Common Injuries, n.d.). Physical therapy can also assist individuals in recovering from incidents such as strokes and sports injuries, as well as assist in managing conditions such as; diabetes, heart and lung disease, women's health, and age related issues (10 Reasons, 2015).

Physical Therapy includes many different types of treatment and the treatment type is chosen on a case by case basis. Some examples of treatment are exercise, ultrasound, electrical stimulation, traction, joint mobilization, massage, heat, ice, laser therapy and kinesiology taping (8 Common Ways, n.d.). These different treatments are chosen by the specific physical therapist based on the injury that the patient is assisting help with.

PT is utilized in many different types of settings including but not limited to; acute care hospitals, rehabilitation hospitals, skilled nursing facilities, private practices, schools, or at home health (PT Settings, n.d.). Many Americans utilize outpatient services for injuries that are not large enough for hospitalization but still impact their everyday lives. The average outpatient course of care is only 7-10 visits and in 2007 nearly 9 million adults utilized physical therapy outpatient services (8 Thought Provoking Facts, 2015). Inpatient facilities for physical therapy such as rehabilitation hospitals, acute care hospitals and skilled nursing facilities are typically utilized by individuals that were previously hospitalized and remain in the rehab facility because they cannot leave the facility before completing physical therapy. In these types of facilities individuals typically go through 3-4 hours of physical therapy a day until they are well enough to be able to return home (PT Settings, n.d.). A facility that is becoming more common for PT services but is not as known about its schools. Elementary, and secondary schools are offering physical therapy services to their students especially those athletes in order to assist in preventive care and manage sports injuries (PT Settings, n.d.).

## Occupational Therapy Rehabilitation

Occupational therapy (OT) is a broader type of rehabilitation service that can be helpful for people ranging from newborns to elderly adults. It aims to assist those who are in need of specialized care to lead a person to become independent, productive, and satisfied with their lives which may have been compromised from emotional, physical, developmental or social problems ("What is Occupational Therapy?"). With the help of occupational therapists, people are assisted in achieving everyday activities they may not have been able to do due to a **disability** or need to regain the ability of everyday functions individually. Some examples of interventions include helping children with disabilities to be able to participate in school and have social interactions with students. Others include helping recover from an injury and gaining back skills that may have been lost, or giving assistance to elderly who are struggling with cognitive, emotional, or physical changes in their life as they age ("About Occupational Therapy").

Occupational therapy sessions are custom to the individual and initially start with an evaluation when both the client (along with family when applicable) and therapist will determine the goals desired. The evaluation may contain information about the client's work and home environment that may further affect the individual. Following the evaluation is an intervention plan provided by the therapist that will enhance the client's capability of performing everyday activities and other goals they wish to acquire. Lastly, an outcomes evaluation will determine what the clients overall goals are and ensures those will be met by the customized plan (“About Occupational Therapy”).

Occupational therapies are found in many types of facilities including hospitals, rehabilitation centers, nursing facilities, home health, outpatient clinics, private practice, school systems, private organizations, industry, and community agencies. Marsh Brook Rehab, located in Somersworth, New Hampshire is an outpatient facility that has speciality programs for occupational therapy, physical therapy, and athletic training. The OT program offers a hand therapy clinic with specialized equipment to enhance hand and arm strength, flexibility and mobility (MarshBrook Rehab). At this specific clinic, the team is made up of three licensed occupational therapists and Certified Hand Therapists that work with orthopedic surgeons to help patients regain mobility in their hands or arms that are disabling them from performing daily activities and functions. Some examples of the many injuries the OT team help to repair include finger lacerations, carpal tunnel syndrome, joint replacement and elbow bursitis (Marshbrook Rehab).

### *Knowledge Check #2*

*What are the differences between physical therapy and occupational therapy?*

## **Skilled Nursing Home Rehabilitation**

Often times nursing home facilities are not thought of as a place where people go to receive rehabilitation and therapy. They are associated as places where people who have dementia or who are extremely old end up, but in fact skilled **nursing home facilities** (SNFs) are a place where many rehabilitation services are offered. The Association of Rehabilitation Nurses describes SNFs as a place where patients generally receive 30-60 minutes of therapy per day and therapy is 1-3 days per week. This care is generally a lot less intense than at an inpatient rehabilitation facility. In this clinical setting a RN is present 24 hours per day and the goal is to create a team approach with all therapists and other medical staff in getting the patient prepared to return home (Association of Rehabilitation Nurses, n.d). Since most of SNFs income stems from being reimbursed by Medicare and Medicaid, they are payments are based on a prospective payment system. **A prospective payment system model** covers “all operating and capital costs that efficient facilities would be expected to incur in furnishing most SNF services”. The daily

payments are generated by adjusting the base payment rates for certain geographical locations, labor costs, and resource utilization groups (RUGs). Each RUG has a weight related to care, such as nursing and therapy (medpac.gov, 2016).

To get a better look at a typical day in a Senior rehab facility Dr. Amy Osmond Cook describes her daily role in a Senior Rehab facility as the Executive Director of the Association of Skilled Nursing Providers in an article from *AgingCare*. First she describes what a Senior rehab facility is, and what a patient's stay consists of. The utilization of a skilled nursing home facilities (SNF) rehabilitation begins with the referral of a patient that has either recently been hospitalized or has a surgery planned. The referral will most likely be to an inpatient rehabilitation facility where the recommended stay could range from a few days to a few months depending on the needs of the individual. Therapy services ranging from physical therapy, speech therapy respiratory, occupational therapy, e.c.t are all personalized towards getting the patient back to being as independent as possible. What may differ a SNF from other inpatient rehabilitation facilities is that they are not just places strictly for therapy. They offer patients time for socialization through activities in effort to not just heal the body, but the mind as well in keeping them hopeful throughout their recovery. Each treatment plan is as personalized as possible and conducted in a home like environment. All of which lead to a patient that is better prepared for a safe return home (Dr. Cook,.n.d).

A typical day Dr. Cook describes is broken down into four parts, starting with what a morning looks like in a Senior rehab facility. Nurses will complete their rounds in visiting and assisting patients with personal care tasks. In creating a home-like atmosphere residents are allowed their own clothing and personal items in their single or shared rooms. Dr. Cook also states to enhance the home-like feel even more; residence do not have a waking schedule and mostly everything is on the patient's time with- in reason. Typically after breakfast each patient will head to the "gym" to be assisted by a therapist in working on things that will help regain their independence. Noon time for patients mainly consists of dining where they may relax from their morning therapy sessions and either eat in their rooms or socially in the dining area. The afternoon is primarily when the therapy sessions begin to start back up again, they may include working with a speech therapist on their swallowing and communication skills, or an occupational therapist for their everyday living skills. If a person is farther along with their rehabilitation them may be offered to participate in activities, or attend an outing such as shopping, church services, puzzles, coloring, and other sensory activities all of which when paired with therapy promote physical and mental well- being. The conclusion of a typical day in a senior rehab facility ends with dinnertime. This is a time a lot of family members visit, many facilities allow family members to visit throughout the day during therapy as a source of encouragement for patients. The evening hours do not hold therapy sessions as they are for recovering from what work was done during the day. (Dr. Cook,.n.d).

## Drugs and Alcohol Rehabilitation

On the flipside of sports rehabilitation and nursing home rehabilitation there is also drug and alcohol rehabilitation. These facilities are more focused on the mental rehab that needs to take place, alongside the physical rehab. They are a form of less physical-induced types of rehab. **Drug and Alcohol Rehab** facilities are meant to be a place to help addicts prepare to re-enter society. Addictions often change the way a person goes about their every-day lifestyles. It can affect their work, as well as their relationships. Although addiction is not the same as hurting your foot or your arm, it is also considered an injury because it is affecting the way you live your every-day life, just as much as a physical body injury does.

Depending upon where you live, there are many different kinds of drug and alcohol rehabs. Long-term rehabs, inpatient rehabs, AA meetings, and other substance abuse meetings are all types of rehabs talked about today. Every patient's case is different. Therefore, there are a vast amount of rehabs that handle each person's individual situation. In terms of long-term, inpatient rehabilitation, this might be a useful option for addicts who have tried almost every option for treatment, and have yet to see a positive outcome. In contrast, a short-term rehabilitation is usually a 28 or 29 day rehabilitation program. Although it is not as long as the long-term care option, a month program still helps the addict get out of their current, sickly state. For people who have a family that they want to be able to support while helping themselves, long-term rehabs might not be the best fit for them. For example, if a single mother is struggling with a cocaine addiction, and decides that she wants help, but does not have anywhere to leave her children, her best bet would be to start by attending meetings. She cannot leave her children unattended. She is going to need to work to pay the bills, and outpatient therapy may be the only option available for her even though it has a lessened success rate (Example taken from: New Beginnings-Drugs and Alcohol Rehabilitation). In the end, short-term programs are still effective because it is either them, or no help at all.

People might also be concerned with the funding of these programs. Normally, addicts are spending most of their money on drugs and alcohol, so money can be scarce. There are payment methods such as the state funded programs and private payers. **State Funded Programs** are funded by the state. This means that patients contribute nothing, or very little to the overall cost of the rehab. It often means that the latest innovations may not necessarily be available in these types of programs. Also, waiting periods before a patient is able to enter rehab may be longer as well, due to the state having to gather the funds together to allow the patient to stay at the rehab. However, **Private Funded Programs** are based on the patient's individual insurance. Most of the time, with private funded programs, the patient is paying for the rehab out of their own pockets, or from their insurance companies. Because they are more expensive than state funded programs, they have added benefits such as smaller waiting lists, as well as a better staff-to-patient ratio (New Beginnings-Drugs and Alcohol Rehabilitation). Overall, everybody's case is different. The state does try and help whenever they can, as well as each

individual's insurance companies. These are just some of the main funding options that patients use when joining a drugs and alcohol rehabilitation center.

Ultimately, the choice of what their rehab experience is like is up to the patient. If the patient is being admitted unwillingly, then it is up to the family. There are many different characteristics of facilities that come into play when choosing which rehab is the right for you or your loved one. The goal of many drug and alcohol rehabs is “total independence from substance abuse” (Summit Behavioral Health). Although this is more of a mental rehab, it does require physical rehabilitation at times as well because of the wear and tear drugs and alcohol put on a person. Everybody wants to see great outcomes arise through the good work that these programs provide. Addiction is something that affects so many people. If communities work together, addicts will realize that there are people there for them, wanting to help them get back to their healthy, every-day lifestyles.

### *Knowledge Check #3*

*What is the difference between a long-term rehabilitation and a short-term rehabilitation center?*

### **Answers to Knowledge Check:**

1. The specific tasks a Clinical Director is responsible for differs. However, in this specific facility, this director is responsible for all of the daily operations and maintenance of the facility. As a Clinical Director, you never know what kind of surprises you will encounter each day, so they have to be prepared to handle whatever task is thrown their way, while making sure their facility stays up and running smoothly.
2. The main difference between physical and occupational therapy is that occupational therapists work to improve a person's ability to perform everyday activities and functions. Physical therapists aim to focus directly on improving the patient's capability of movements of the body.
3. The difference between a long-term rehab and a short-term rehab is long-term rehabs are useful options for addicts who have tried almost every option for treatment, and have yet to see a positive outcome. Short-term rehabs are 28 or 29 day rehabilitation programs that help the addict get out of their current, sickly state, when they cannot commit to a long-term rehab center.

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# Skilled Nursing Facilities

## Chapter 13

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### Learning Objectives:

- Understand the history of a skilled nursing facility (SNF)
- Describe the residents and facility characteristics
- Describe the state and federal regulations of SNF's
- Discuss the ownership structure and revenue streams
- Describe the staffing of an SNF
- Describe the quality of care in a skilled nursing facility
- Discuss the 21st century SNF

### Terms to Know:

- **Skilled Nursing Facility:** a specific type of nursing home where residents are given care from a professional nurse or rehabilitative staff member around the clock

- **Prospective Payment System (PPS):** identifies the reimbursement rate before the services are used
- **Retrospective Payment System:** identifies the reimbursement rate for providers after the services were used
- **Omnibus Budget Reconciliation Act (OBRA):** The Federal Nursing Home Reform Act or OBRA '87 creates a set of national minimum set of standards of care and rights for people living in certified nursing facilities.

## Introduction to Skilled Nursing Facilities

Skilled nursing facilities (SNF) are a big part of the healthcare world. They tend to be undermined when they truly change the lives of many. SNF's have come a long way; They have transformed in size, their mission and operations have grown, their popularity has spread, and regulations and acts have been implemented to further establish a legitimate health care facility. This chapter will highlight all the key aspects of a skilled nursing facility. First the history of SNF's will be presented so an understanding of what a SNF is will be received, then characteristics, regulations, ownership structure, and staffing are shown, and concluding this chapter will be about the quality of care and the 21st century SNF. This chapter will show the transformation of SNFs while broadening one's typical understanding of a SNF.

## History of Skilled Nursing Facilities

The first form of modern-day long term care came in the forms of almshouses in America. These were often called poorhouses. They were ran charitably and usually funded locally. They were a place to live for the mentally ill, disabled, impoverished, and elderly population. As time went on, almshouses grew to house mostly older adults. About two thirds of almshouse residents were older adults by the early 20th century. Then, in 1903, the New York City Charity Board decided to change the name of their almshouse to the Home for the Aged (Haber, 1994). These almshouses were not by any means quality places to live. It would require legislation and a lot of hard work to develop into the modern day skilled nursing facility.

In 1935 the Social Security Act was passed. This created Old Age Assistance Grants to states funded by the federal government. These were not allowed to be payed to anyone who lived in an almshouse. It was not until 1950 that private vendors qualified to receive Old Age Assistance payments. Because private nursing homes qualified for these payments, almshouses were essentially run out of business by the end of the 1950s. Nursing homes began to take over the scene. This was partially spurred by a 1954 amendment to the Hill-Burton Act that allowed the nursing homes to be built with funding from the federal government (Flores, 2014). This was a change in culture for nursing homes, which were now considered medical facilities under the Hill-Burton Act.

The next major development in the history of skilled nursing facilities was the creation of Medicare and Medicaid in 1965. Between the years of 1960 and 1976 there was massive growth in the amount of nursing home beds. The amount grew 300% in those years. While the amount of beds grew, industry revenue was also seeing a large boost of 2000% (Haber, 1994). Unfortunately, the quality of care provided was not growing at the same pace. There were frequent reports of care that was below acceptable standards. The reports were so numerous and alarming that Congress decided to hold hearings and then pass legislation to improve conditions (Flores, 2014). One of the pieces of legislation passed is the Federal Nursing Home Reform Act in 1987. This was a part of a larger Act, the **Omnibus Budget Reconciliation Act (OBRA)**. This act set standards for nursing homes in order to maintain their federal funding. It referred to people that lived in nursing homes as residents and put the focus on their quality of life. The standards expected by OBRA are that organizations should work to “attain and maintain each resident’s highest practicable level of physical, mental, and psycho-social well-being” (Flores, 2014). This was a step in the right direction for the accountability of long term care.

Since the passing of OBRA, there have been innovations that have developed nursing homes continuously. One specific individual, Bill Thomas, has brought a unique approach to long term care. Thomas created the Eden Alternative which approaches nursing homes as places “where elders live [that] must be habitats for human beings, not sterile medical institutions” (Eden Alternative, 2011). Thomas wanted to change the status quo of nursing homes. He brought in children, animals, and plants for residents to care for. He wanted to bring meaning into the lives of his residents. He did this to fight off what he called “plagues” of nursing homes. These are loneliness, helplessness and boredom (Eden Alternative, 2011). Thomas is an innovator in the industry and brought new ideas that help to make nursing homes a more habitable place to live. Thomas also inspired others to follow suit in his work to change the culture of nursing homes. In 1997 the Pioneer Network formed to advocate for person-directed care for elders (Pioneer Network, 2011). These advocates work across 30 states to completely change the culture of organizations, even if that means overhauling organization structure or building layouts. They advocate for change in how residents and staffs interact with the goal of giving more autonomy and better quality of life for elders (Pioneer Network, 2011).

### *Knowledge Check #1*

*What is the Federal Nursing Home Reconciliation Act of 1987?*

## **Facility and Resident Characteristics**

Modern day Skilled Nursing Facilities (SNF) have come a long way from the almshouses mentioned earlier. A **skilled nursing facility** is a specific type of nursing home where residents are given care from a professional nurse or rehabilitative staff member around the clock. The residents of an SNF typically need care 24 hours a day or require specialized equipment for their

medical needs. A SNF will provide temporary care for someone recently discharged from a hospital in their transition period before going home. They also provide long term care for someone who cannot take care of themselves anymore (Cassidy, 2008). Many of these residents cannot perform activities of daily living (ADLs) which include tasks like eating, bathing, dressing or walking. Statistics report that “Nationally, 58% of nursing home residents are unable to perform three or more activities of daily living” (Flores, 2014). Most nursing home residents are older than 65 years, with the average age being 79. The average length of stay for a nursing home resident is 2.4 years. Just over 40% of residents have either moderate to severe cognitive impairment (Flores, 2014). As far as the facility itself goes, there are over 16,000 nursing homes in the United States that are home to about 1.6 million residents. Most of these homes are not part of a hospital, they are freestanding. With the growing popularity of assisted-living facilities, nursing homes are seeing less elders seeking their services (Flores, 2016). Nonetheless, SNF’s are a massive business and component to the healthcare landscape of America.

*Knowledge Check #2*  
*What is an ADL?*

## **Federal Regulations**

As mentioned above, the OBRA is a key piece of legislation regarding the regulation of SNFs. Because 99% of nursing homes have their certification to receive reimbursement from Medicare or Medicaid, the OBRA has great power in dictating nursing home operation and culture. To receive this certification state surveyors are trained and sent to SNFs across the country. The two major focuses of OBRA are quality of care and quality of life. To account for quality of care SNFs have to create care plans individualized to each resident. The plan should be based on a minimum data set assessment created at defined intervals for each unique resident. This data is then used by state and federal regulators to monitor data on many levels. The quality is measured at the micro (resident) level, the meso (facility) level, and the macro (aggregated facilities) level. To address for quality of life OBRA outlines resident rights that should not be violated. Examples include the right to access their medical records, maintain their own bank funds, form a resident council and be free from physical and chemical restraints (Flores, 2014).

## **State Regulations**

State regulations tend to follow the guidelines set up by the federal government. Many were written after the 1965 passage of the Medicare and Medicaid. Every state has slightly different variations passed by their legislation. Both state and federal governments reserve the right to issue fines for violations. States can issue fines, penalties or citations. The federal government gives out civil monetary violations. In the states Texas, Pennsylvania, Wisconsin and California, the fines reach as high as \$100,000 per violation (Flores, 2014). An example of a

unique state law is New York's ban on parent/subsidiary relationships. This prohibits chain nursing homes from being able to operate in New York. Another example is "California mandated direct care nursing staff levels of 3.2 hours per patient per day, enabling residents, advocates, and attorneys to allege understaffing against an objective standard" (Flores, 2014). States are also responsible for the licensing of administrators in nursing homes.

## Skilled Nursing Facilities Ownership Structure and Revenue

**Skilled Nursing Facilities (SNF)** can be owned in three different ways. They can be government owned, privately owned for-profit, or privately owned and not for profit. Statistics say, "Sixty-seven percent of companies that operate U.S. nursing homes are proprietary; that is, privately owned and operated for profit. Twenty-seven percent are nonprofit and the remaining 6% are government owned" (CMS, 2009). Breakdown of ownership varies state by state. There are some states are made up by almost all for profit SNF's, and some hardly have any for-profit nursing homes. The organizations that choose to be non-profit typically offer more beds, while for-profits offer less bed space (Baney & Solon, 1955).

The nursing home industry generates a significant amount of revenue. According to Dergarabedian, nursing homes generated ten times more than the Hollywood box office with \$144 billion in revenue in 2009 (Dergarabedian, 2011). Skilled Nursing Facilities contribute to a fairly large portion of the U.S.'s health care costs. Edwin Cabigao and Christopher Cherney say that, "Approximately two thirds of all U.S. nursing home revenues come from public sources. In many nursing homes, more than 90% of revenue flows from government funds, mainly Medicaid and Medicare" (Cabigao & Cherney, 2014). Since most of the funding comes from Medicare and Medicaid, there are reimbursements rates for states. According to Cabigao and Cherney, "Medicare reimburses SNFs for Medicare beneficiaries who are admitted to a nursing home after a minimum 3-night stay in an acute care hospital, and require "skilled" nursing care on a daily basis (Cabigao & Cherney, 2014). All valid Medicare claims will be reimbursed by the federal government, and depending on the state's wealth, Medicaid costs will be covered anywhere from 50% to 74% (Cabigao & Cherney, 2014). In 1998, Medicare created an SNF program called prospective payment system (PPS). A PPS identifies the reimbursement rate before the services are used. This program replaced the **retrospective payment program**, which identified the reimbursement rate for providers after the services were used (Cabigao & Cherney, 2014).

### *Knowledge Check #3*

*What are the three ways SNF's are owned?*

## Skilled Nursing Facility Staffing

Skilled Nursing Facilities employ many individuals in many different fields. Facilities are typically broken down into departments such as nursing, admissions and marketing, social

services, medical data services, rehabilitation services, physician services, maintenance, dietary, environmental services, human resources, and recreation. These departments are each run by directors who report directly to the administrator of the facility (M. Bonafe, Personal Communication, Dec. 1, 2017). Each of these departments has a very specific role and without any one of them, a SNF would fail. Westview Health Care Center in Dayville Connecticut is just one example of a successful Skilled Nursing Facility. Westview has been providing excellent nursing care for over sixty years, and current Administrator David Panteleakos reports that they have over 280 employees to ensure that his facility of 103 beds is operating smoothly (Personal Communication, Nov. 21, 2017).

The department that is directly responsible for the direct day-to-day care of the residents is the nursing department. The Nursing Department is run by the Director of Nursing who oversees all nursing staff, the hiring process, quality of care, and the compliance to state and federal regulations. This department also consists of nursing supervisors who are in charge when the director of nursing is not present and help to manage the day to day tasks. Charge Nurses are either Registered Nurses (RN's) or Licensed Practical Nurses (LPN's) and are responsible for the direct care of the residents including treatments and medication allotment. Nurse's aides, on average, spend the most amount of time with the residents and are responsible for aiding in the resident's activities of daily living such as bathing and eating (M. Bonafe, Personal Communication, Dec. 1, 2017). However, staffing levels are not entirely up to just the facility. In order to help fix what was determined to be inadequate staffing levels, Congress passed The Nursing Home Reform Act of 1987. This act states that all nursing homes who wish to remain certified to participate in Medicare and Medicaid must "attain or maintain his/her highest practicable level of physical, mental, and psychosocial functioning" for all residents (Mezey, Harrington, & Mueller, 2006). Due to the ambiguous language used in this Act many states decided to create their own mandatory staffing levels. Over thirty states have since created their own mandated staffing standards and are based on the amount of time that nurses and nurse's aides spend with their residents. These staffing standards are often measured in hours per resident per day and range anywhere from 1.76 HPRD to more than 3.6 HPRD. This calculation is configured by adding up the total number of hours worked in a single day by all nursing staff and then divided by the total number of residents at the facility (Mezey, Harrington, & Mueller, 2006). Since the 1987 Nursing Home Reform Act, large amounts of data have still been collected to look further into this issue of staffing levels. In 1998 the Health Care Financing Administration (HCFA) funded data collection of conditions within SNF's and found a very large range of staffing levels. This information was brought before the Senate Special Committee on Aging to discuss the potential for implementing more regulations (Kovner & Harrington, 2000).

David Panteleakos recognizes the importance of staffing levels and attributes much of Westview success and 5 star rating to "the fact that with a higher staffing pattern and a higher standard matched with great customer service that we would be able to attract the payers that

would yield the organization a stable financial foundation. We've really invested in our people, we have longevity here that does exceed our competitors. We have the highest staffing pattern pretty much in the state of Connecticut as it relates to staffing per patient per day" (Personal Communication, Nov. 21, 2017).

One could simply guess that having a higher level of staffing would create a higher quality, however there is now data to support that claim. A positive relationship has been found between these two with the data showing "Increased RN hours were associated with fewer pressure ulcers, lower rates of catheterization and urinary tract infection, and a probability of longer life" (Kovner & Harrington, 2000). Due to these findings, many recommendations have come forward suggesting that more RNs and LPNs should be hired rather than nurses' aides. Another recommendation has been to have a higher level of nursing staff during specific hours of the day such as meal time, or for groups of residents who have more nursing needs Kovner & Harrington, 2000).

*Knowledge Check #4*  
*How are staffing standards measured?*

## **Quality of Care in a Skilled Nursing Facility**

Skilled Nursing Facilities perform a vast amount of services that need to be executed with a high level of quality. Rehabilitation, Parkinson's care, stroke recovery, and terminal illness care are examples of services that one might find offered at a skilled nursing facility (What is skilled nursing facility, 2017). The care management of such services can truly determine the patient's dependency on others. If the care received is of high quality, they could recover quickly and return to performing their regular daily activities independently. Performing high quality care should be a priority for every SNF.

Every patient deserves to be treated greatly no matter what. In the past decade there have been many mandates to create this change. One of these is the IMPACT Act of 2014, Improving Medicare Post-Acute Care Transformation Act. This act makes it necessary for Skilled Nursing Facilities and other healthcare services to submit their standardized data. This data is focused on quality measures and resource use. It allows data to be analyzed and compared across facilities (Impact Act of 2014 & Cross Setting Measures, Oct. 28 2015). The IMPACT Act also ties into the idea of a patient centered environment by focusing on the aspects patients actually prefer and what their goals are. This Act requires Centers for Medicare & Medicaid Services to create and enforce quality measures from five domains (Impact Act of 2014 & Cross Setting Measures, Oct. 28 2015). By requiring so many assessments and implementations, providers will have a surplus amount of information on how to effectively provide high quality care management.

Another big turning point for improving quality care management is the Omnibus Budget Reconciliation Act (OBRA). As discussed earlier, OBRA has reset the quality of care in nursing

facilities by creating federal standards of how care should be provided (Research Triangle Institute, 1997). Some of the changes OBRA has made are, “Emphasis on a resident’s quality of life as well as the quality of care; New expectations that each resident’s ability to walk, bathe, and perform other activities of daily living will be maintained or improved absent medical reasons; A resident assessment process leading to development of an individualized care plan 75 hours of training and testing of paraprofessional staff; Rights to remain in the nursing home absent non-payment, dangerous resident behaviors, or significant changes in a resident’s medical condition; New opportunities for potential and current residents with mental retardation or mental illnesses for services inside and outside a nursing home (Esquire).” These are just a few of the numerous changes implemented. OBRA really created a turnaround in quality of care for skilled nursing facilities.

#### *Knowledge Check #5*

*What has been implemented to improve the quality of care in a SNF?*

## **Skilled Nursing Facilities in the 21st Century**

Today, U.S. adults are living longer, and have different needs than what adults needed years ago. There are some unique conditions that impact U.S. adults today that are gaining in prevalence.. These conditions include medically complex issues, severely demented, adults younger than 65 going into nursing homes, and obese patients being admitted into a skilled nursing facility.

For starters, complex patients are being seen more in SNF’s. These patients may have conditions that require them to receive chest tubes, costly medications, or having special nutritional needs that may require eating through a feeding tube (Cabigao & Cherney, 2014). Skilled nursing facilities are seeing more of these patients because hospitals are trying to reduce their costs by sending these patients over sooner as opposed to later.

Patients that have dementia are typically known to yell and scream, kick, scratch, and wander around without realizing that they are doing so. As a result of more patients having dementia, there are more facilities being created that are more dementia-friendly that include programs to help these patients cope to the best of their ability (Cabigao & Cherney, 2014). Some SNF’s are choosing to give these patients strong medications. However, the federal government is hesitant of these facilities that are choosing to use such strong medications (HHS, 2011).

There have been more frequent reports of adults younger than 65 being admitted into skilled nursing homes. These adults may have conditions such as diabetes, depression, a mental illness, or having been abusing substances. According to Sedensky, “Analysis of 2011 CMS data reveals that one in seven U.S. nursing home residents is now younger than 65 years, an increase



of 22% since 2003” (Sedensky, 2011). It is becoming more common for people with these various illnesses or conditions to be admitted into an SNF to receive the care that they need.

Lastly, there has also been an increase in adults with obesity being admitted into skilled nursing facilities. With this condition, it also brings along other conditions as a result of an adult being obese, such as high blood pressure (Cabigao & Cherney, 2014). The Center for Disease Control and Prevention says that, “In some states, like Mississippi and Alabama, one third of adults were obese in 2010 (Centers for Disease Control and Prevention, 2011). As this number increases, more skilled nursing facilities are seeing these residents and has to keep a close eye on them as obesity can bring on more complications.

#### *Knowledge Check #6*

*What are different types of adults that are becoming more common in Skilled Nursing facilities?*

### **Answers to Knowledge Check:**

1. A part of the Omnibus Budget Reconciliation Act that set standards for nursing homes in order for them to maintain their federal funding.
2. An ADL is an activity of daily living. Examples include walking, bathing, dressing and eating.
3. They can be owned privately (for-profit), owned publicly (non-profit), or by the government.
4. Staffing standards are measured in hours per resident per day (HPRD).
5. The Impact Act and the Omnibus Budget Reconciliation Act have been implemented to improve the quality of care in SNF’s.
6. The different types of patients that are more common in the 21st century SNF’s include medically complex patients, patients with severe dementia, obese patients, and adults younger than 65 being admitted into a skilled nursing facility.

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