# University of Arkansas, Fayetteville ScholarWorks@UARK

The Eleanor Mann School of Nursing Undergraduate Honors Theses

The Eleanor Mann School of Nursing

5-2020

# Exploring a Learning Experience through an Internship: Embold Health Inc.

**Edith Earnshaw** 

Follow this and additional works at: https://scholarworks.uark.edu/nursuht

#### Citation

Earnshaw, E. (2020). Exploring a Learning Experience through an Internship: Embold Health Inc.. *The Eleanor Mann School of Nursing Undergraduate Honors Theses* Retrieved from https://scholarworks.uark.edu/nursuht/108

This Thesis is brought to you for free and open access by the The Eleanor Mann School of Nursing at ScholarWorks@UARK. It has been accepted for inclusion in The Eleanor Mann School of Nursing Undergraduate Honors Theses by an authorized administrator of ScholarWorks@UARK. For more information, please contact ccmiddle@uark.edu.

Exploring a Learning Experience through an Internship: Embold Health Inc.

An honors internship submitted in partial fulfillment of the requirements of the degree of Bachelor in Science in Nursing

Edith E. Earnshaw

May 2020 University of Arkansas

#### Abstract

Embold Health Inc. is a start-up company created by leading physicians who saw a rising need in health care for accurate and comprehensive data regarding the quality, cost effectiveness, and appropriateness of care. Using one of the largest most comprehensive data sets in the United States and analytics lead by top scientist and physicians in the field, they are able to formulate a measurement of physician performance aimed at improving health care and outcomes for patients. Providing this data to employers, insurers and providers allows for a push to improve quality of non-recommended providers, reward for providers offering quality care and evaluates cost for the benefit of employers and payers. In the following subsections, I will discuss various areas that I devoted my learning to throughout this internship. The first area of focus was to develop a greater understanding of the United States Health Care System, employee-sponsored health insurance, and the rising health care costs affecting millions of Americans. Next gaining a comprehensive knowledge of the Embold Health methodology and how it is being used to further health care reform and quality improvement. Finally, a summary of my learning experience throughout my internship at Embold Health Inc.

#### **Embold Health Internship**

#### United States Health Care System and Employee Sponsored Health Insurance

The United States health care system faces many challenges. We have one of the lowest ranking health care systems for being a high income country and have more individuals dying from preventable diseases. Facing problems like rising health care costs, lack of access to care, and a discrepancy within primary care has put the quality of our health care system into question (Schneider, 2017). The United States Census Bureau has outlined some trends within our health care system for the year of 2018. The percentage of people uninsured rose from 7.9 percent in 2017 to 8.5 percent in 2018. There was a decrease in the percentage of people covered by public health insurance by 0.4%, specifically a decrease in Medicaid coverage. In addition to these things, there was an increase percentage of uninsured children below the age of 19 (United States Census Bureau [USCB], 2018). Individuals throughout the United States face the daily battle with health care, whether that be getting access, finding quality providers, or battling the rising costs with out-of-pocket payments and prescription medications.

The American health system is divided and not cohesive. It is financed by multiple different avenues including public, private and individual payers. Public payers includes the federal and state government in the form of Medicare and Medicaid. Private insurance includes employee sponsored and direct purchase programs. Some would devote a difficulty accessing care being due to this lack of a uniform nationwide health care system.

Public plans cover 34.4% of the population and includes Medicare, Medicaid, Veteran's Affairs and CHAMPVA (USCB, 2018). Medicare is a national health insurance program that provides coverage for the elderly 65 years of age or older and people with certain disabilities or

kidney failure (Lew, 1992). This program accounts for 17.8 percent of the population (USCB, 2018). Medicaid is jointly funded by both the state and federal governments, so eligibility is determined by the state that one lives in. Eligibility for Medicaid is determined by the federal poverty line and the individual must also be aged, blind, disabled, pregnant, or the parent of a dependent child. The states, however, define what the maximum income and asset levels can be to qualify (Lew, 1992). Following the Affordable Care Act, this eligibility has expanded for states that have expanded their Medicaid program and has allowed them to see reduction in the uninsured rates. On the other side, eligibility is limited for states that have not expanded Medicaid. There has been evidence that shows that following Medicaid expansion, there is better access to treatment, more financial security within individuals and families, and there is overall better health for those that are now receiving health insurance. The progress following the Affordable Care Act was outlined in an article written by Barak Obama titled United States Health Care Reform: Progress to date and next steps. Maternity care, mental health, and treatment for substance abuse disorders are services that are now included. Preventative services like contraceptive use, and domestic and interpersonal violence screening have been incorporated in this expansion as well. In addition, there have been protective factors put in place to minimize the risk of a costly health care visit by placing a cap on out-of-pocket spending (Obama, 2016).

Private health insurance covers a large portion of the population of the United States as 67.3 percent are covered through a private entity. This can include employment-based plans (55.1%), direct-purchase (10.8%) or TRICARE (2.6%) (USCB,2018). There are over one thousand private health insurance companies which all vary in their structures, policies, premiums, etc. They also vary in coverage. Hospital stays and home care following

hospitalization has the highest coverage and long term care or dental care are two services that have the least coverage (Congressional Research Service [CRS]).

As presented before, many American's are insured through private insurance companies, and most are employer sponsored. This is the primary insurance coverage that Embold Health focuses on. Blue Cross and Blue Shield plans emerged to protect the public from growing costs in health care in the 1930s. It was then determined that if the employers contributed to the health insurance of their employees through these employee-sponsored plans, these benefits would not be subject to taxes and were considered a part of their wages. This decision contributed to the growth of employee sponsored health insurance throughout the United States and in turn a correlation between the access of health care and overall performance of big businesses. In turn, these large businesses would play a major role in health care reform (Dlumenthal, 2006). Throughout the growth of employee sponsored health insurance, employers have been viewed as a "number one draft pick sitting on the bench," in the path to health care improvement. As this starts to change, Embold health gives an efficient pathway for employers to identify top performing providers in their region, so their employees can get quality care and experience better health outcomes.

#### **Rising Health Care Costs**

A growing concern in health care is rising costs. It has been determined that over a quarter of health care spending is on medical care that has little benefit to the patient's health and is unnecessary. These rising costs are affecting the individual, the employers, and the government. When compared to other high income countries, our per capita health care costs per year are significantly higher. An article written by Thomas Bodenheimer titled *High and Rising Health Care Costs. Part 1: Seeking and Explanation* identifies, "the health care sectors with the

most rapid growth in cost are prescription drugs and administrative costs of private health insurance, (Bodenheimer, 2005)" both of which are growing at a significantly higher rate than hospital and physician expenditures. Even though these costs are sky rocketing, the health of our population is only getting worse as evidenced by poor health outcomes (Bodenheimer, 2005). The United States population is suffering from more preventable diseases and as the baby boomer generation ages and life expectancy lengthens, the population with multiple comorbidities and chronic conditions grows. This creates a larger demand in health care to manage and improve the quality of life of the growing elderly population.

Before beginning this internship, I had little knowledge of the health care system, trends, and various factors that affect the accessibility of care. I found this an important topic that I wanted to focus on, as it impacted a large amount of discussions throughout this internship. Keeping up to date with the terminology and complexity of the health care system was key in order to understand the steps that Embold was taking to improve their data analytics and overall product for employers, payers, and physicians.

#### **Embold Health Methodology and Quality Improvement**

Quality care is a term used throughout health care and is rather difficult to define and there simply is not a singular way to measure it. Often times, these measurements only take into account appropriateness of care and are left at the educational level, not reaching the health care field where it can make the most impact. Embold Health utilizes data analytics to bridge the gap between the educational or research level with the health care field. Evaluating the quality of care of a physician allows them to offer recommended top providers in various areas across the country, provide that information to employers and insurers to ensure that employees are

receiving the highest quality of care, which in turn is more cost effective and more appealing to the payer.

Embold Health utilizes three aspects of care to perform their statistical analysis of providers. The first being appropriateness of care. They look at orders like x-rays, surgical referrals, readmission rates, knee replacements, and reoperation and determine whether these orders were appropriate for the patient. The team devoted to creating these measurements have extensive knowledge of best practices and expertise within the health care field. During initial research, they found a large difference among providers when it comes to performing these evidenced based interventions that were directly related to quality. They then look at the effectiveness and how the provider's actions and care benefit the patient's health and ultimately ended with good patient outcomes. Finally, they look at cost and the differences in cost of similar services between physicians, as well as the large differences due to high cost interventions. It is important to realize that the focus of the cost analysis is not to value the least expensive providers, but instead understand that the focus is on quality and reasonable costs. When a patient receives quality care that may be more expensive, the result is better patient outcomes. In turn, this is more cost effective as it decreases the need for care of complications that may arise (Embold WhitePaper Methodology).

The data analytics process is a highly complex and time consuming process. The in depth and specific background behind the data tools used was not a focus of my learning experience, however, I was able to gather a basic understanding. Using the Obstetric field as an example, they would analyze the percentage that a physician would perform a cesarean delivery on low risk pregnancies, which is not considered best practice. The physicians that would be on the higher end of the scale would be lower in quality and vice versa. Then looking at the rate of

complications following this intervention, again, the higher this rate the lower in quality the physician would be in Embold's statistical analysis.

I had the chance to experience the rigor of tedious data gathering and validating. Throughout my internship, I assisted with various projects including quality assurance and provider availability data gathering. Quality assurance includes having the right doctor, in the right city, at the right office and location, under the right physician group. This allows an assurance that the evaluation of clinical practices and providers is accurate to clinical scenario being analyzed.

Provider availability allows data analytics to look at top providers versus non recommended providers and evaluate whether there was a difference in the wait time for an appointment. This relates to the access of care in that someone who needs to see a cardiologist or obstetrician would select a provider based on the earliest time they could get an appointment. We wanted to evaluate whether that would compromise the quality of care that they were receiving. It also allowed for the analysis of providers and the correlation between quality and wait time. Throughout our research, we came to the conclusion that the recommended providers didn't have a longer wait time for their appointments and therefore did not affect the accessibility.

In addition to identifying quality, Embold Health also offers ways in which physicians can improve their quality by committing to being completely transparent. Quality Improvement is a large topic within health care and has a classic cycle labeled as PDCA and is outlined in an article titled *From Understanding Health Care Provider Behavior to Improving Health Care: The QUERI Framework for Quality Improvement:* 

"plan an improvement, carry it out on an experimental basis, check to see whether it

worked, or which aspects of it worked, and then act to integrate successful aspects of the improvement into ongoing policies, procedures, and resource allocation decisions." (Rubenstein, 2000)

This framework takes a look at provider behavior and various determinants of provider behavior including their unchangeable urban or rural environment, as well as structural and facility environments that could impact how they provide care. These factors can range from the external community around the health organization all the way to the individual patient and the interaction with that patient. In this article, they also discuss the measurements of process and outcomes of care. They have to compare provider performance to facility guidelines in place, various social factors, economic outcomes, and the functional status of an individual that with proper care should improve the quality of life. Once there has been a proposed quality improvement intervention, they have to evaluate that intervention, take into account what unchangeable factors that determine provider behavior, and look at how these interventions change the routine of provided care (Rubenstein, 2000). Quality improvement is essential in the growth of our health care system, as it allows for advancing change with a diverse social environment, patient population, and growing innovation and health care technologies.

The service that Embold provides is beginning to create a large impact within the health care system as it not only analyzes this data, but it also encourages the physicians that aren't providing quality care or have unnecessary costs to reevaluate how they provide care. It is almost becoming an incentive and providing a reward for physicians to prioritize quality care, as they will be covered by some of the largest health insurance carriers in some of the biggest companies throughout the United States. Embold is taking strides to expand their data set to multiple urban and suburban areas as their number of clients increase.

## **My Learning Experience**

As I continued throughout this internship over the past year, I got to see first hand the complexity and devotion that it takes to begin a startup company. When I first started, the company was almost 30 weeks out from their launch date and implementation with Walmart. With the launch of the company and growing media attention, updates were sent out and it was interesting to see the company grow further as they added more clients and we evaluated other cities and specialties. With this growth, I saw members of the team come and go for various reasons. I saw how the company addressed and focused on aspects within the office including the culture and environment. Encouraging messages were constantly sent to the team and wanted to ensure that everyone was doing well, even in times apart. With this growing pandemic, I certainly saw a change in communication as encouraging messages, media updates, and good facts were sent out to keep the team informed. I do believe it was difficult for me to stay involved and connected with the team being a remote intern and that is something I wish I could have changed to get more out of this internship.

It is important to consider, as a nursing student, how this learning experience has benefited my future practice as a nurse. It has allowed me to gain insight into aspects of health care that I had not dove into. The United States health care system, sources of insurance, accessibility and cost of care were all aspects that I could learn more about and gain a better knowledge of for my future career. I believe having this knowledge, will allow me to advocate more for my patients and be able to recognize areas or practices that may need to be re-evaluated to better serve the public we are caring for.

I had an idea of what quality meant to me, however, throughout my time learning at this internship and writing this reflection, I was able to hone in on my own definition of quality. That

being care that is specific to the patient, appropriate to better the health of the patient and achieve the best outcomes for their quality of life.

### Reference List

- Bodenheimer, T. (2005). High and rising health care costs. Part 1: Seeking an explanation. *Ann Intern Med*, *142*(10): 847=854
- Congressional Research Service. U.S. health care coverage and spending, (2018). Received on 4/3/2020 from https://fas.org/sgp/crs/misc/IF10830.pdf
- Dlumenthal, D. (2006). Employer-sponsored health insurance in the United States—Origins and implications. *New England Journal of Medicine*. *355*(1): 82-88.

Embold WhitePaper Methodology (2019). Embold Health. Retrieved on 12/20/2019.

Lew, N., Greenberg, G., Kinchen, K. (1992). A layman's guide to the U.S. health care system. *Health Care Financing Review*, 14(1): 151-169.

Obama, B. (2016). United States health care reform: Progress to date and next steps. Journal of

the American Medical Association. 315(5): 525-532: doi: 10.1001/jama.2016.9797

- Rubenstein, L.V., Mittman, B.S., Yano, E.M., Mulrow, C.D. (2000). From understanding health care provider behavior to improving health care: The framework for quality improvement. *Medical Care, 38*(6): 1129-1141
- Schneider, E., Squires, D. (2017). From last to first—Could the U.S. health care system become the best in the world? *New England Journal of Medicine*. 377: 901-903. DOI: 10.1056/NEJMp1708704
- United States Census Bureau. Health insurance coverage in the united states: 2018. (2018). Received on 4/3/2020 from <u>https://www.census.gov/library/publications/2019/demo/p60-</u>267.html