The Rise of the MD/MBA Dual Degree: Revitalizing Healthcare through Physician Leadership

By

Nicholas D'Souza

A thesis submitted in partial fulfillment of the requirements of the University Honors Program

University of South Florida St. Petersburg

December 13, 2019

Thesis Director: Richard Smith, Ph.D.

Associate Professor, Kate Tiedemann College of Business

University Honors Program University of South Florida St. Petersburg

CERTIFICATE OF APPROVAL
Honors Thesis
This is to certify that the Honors Thesis of
Nicholas D'Souza
has been approved by the Examining Committee on December 13, 2019
as satisfying the thesis requirement of the University Honors Program
Examining Committee:
Thesis Director: Richard Smith, Ph.D. Assistant Professor, Kate Tiedemann College of Business
Thesis Committee Member: Noel Takeuchi, Ph.D. Instructor, College of Arts & Sciences

Table of Contents

Thesis Abstract	3-4
The MD/MBA Dual Degree: Rise, Relevance and Revitalization	
Introduction	
Rise of the MD/MBA Dual Degree.	5-7
Relevance of the MD/MBA Dual Degree to Modern Healthcare	7-9
Revitalization of Healthcare through Physician Leadership	9-10
Discussion and Conclusion.	10-11
The People's Hospital, LLC: Three-Year Business	
Plan12-31	
Executive Summary	14-15
Services	15
Vision Statement	15-17
Business Structure	16-20
SWOT Analysis	20-22
Market Analysis	22-25
Sales and Marketing Strategy	25-30
Sustainability and Expansion Strategy	30-31
Closing Remarks	32
References	.33-37

Thesis Abstract

Shortcomings of healthcare are evident on multiple fronts: the monstrosity of costs for patients, the complex relationship between physician and patient, and the controlling atmosphere created by hospital administrators, to name a few. Often, doctors run into a myriad of problems while caring for patients and think, "Why does this system not work better? Why has it not been fixed yet? If I were in charge..." In recent years, more physicians are indulging in the mindset of leading by making decisions and appropriately assuming roles as hospital administrators and executives. Thanks to the growing number of medical schools offering the MD/MBA dual degree, new and young physicians will be motivated to tackle the setbacks that have existed in healthcare and initiate waves of change in hospital administration.

Hospitals that place an emphasis on physician-executives in their business models have been researched to outperform those that favor traditional hospital administrators with no medical backgrounds. Mandatory experience in practicing medicine and treating patients in order to provide the highest quality of hospital administration is a concept that is justified by the rising number of MD/MBA dual degree programs currently available to medical students. With more physicians entering leadership roles in the future, challenges to healthcare—patient expenses, physician-patient interactions, traditional hospital administrators—will be dealt with more effectively by hospital administration as a result of appropriate diagnoses made by those who are on the forefront.

Thorough research and analysis of today's hospital administration have been performed to determine the benefits of obtaining the MD/MBA dual degree. Disparities in healthcare that can be expected to be remedied by physician leaders have been outlined in a research paper.

Following a review of foundational research, this paper proposes a business plan for The People's Hospital, LLC, which represents a model of a medical facility that prides itself on physician executives leading hospital administration. Together, the research on the overall purpose of the MD/MBA dual degree and a business plan for a hospital directed by physician leaders provide a rationale and effective solution for some of the current ills of the United States healthcare system. As more physicians are seen entering executive roles in future hospital administration, it is predicted that common, daily obstacles will diminish and larger, big picture issues will vastly improve.

The MD/MBA Dual Degree: Rise, Relevance and Revitalization

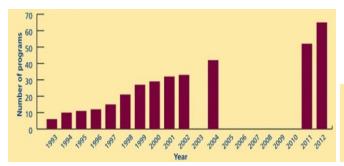
Introduction

The MD/MBA dual degree is a program implemented at many medical schools for students who plan on pursuing roles in healthcare management and finance, in addition to treating patients. The ultimate goal of the combined degree program is to train students that have the skills necessary to become proficient physician leaders. By studying and training in multiple areas of both medicine and business, graduates of MD/MBA dual degree programs are seen as influential in revitalizing healthcare for the betterment of society.

Some critics contend that medical students are turned off by combined training programs because adding another degree delays becoming a physician. However, that is not the case because the MD/MBA joint degree timeline varies depending on the school's program. Some programs permit students to graduate along with their regular MD cohort by conducting business classes over the summer, while other programs prolong graduation by requiring students to exclusively study business for one year. With passionate medical students creating more demand each year to be simultaneously taught business concepts and techniques, the dual degree has risen in prevalence among medical schools in the United States.

Rise of the MD/MBA Dual Degree

Recently graduated medical students entering healthcare as physician leaders offer a skillset that is not common among their peers or traditional healthcare professionals. Since the purpose of the MD/MBA dual degree is to prepare medical students with important knowledge of business such as finance, management, and marketing, their versatility has been noticed by hospital executives, which has driven the desire for more combined degree programs to be created. So as to pinpoint the rise and benefits of combined MD/MBA training, studies have been conducted by multiple researchers (see Figure 1 below).



- The number of MD/MBA programs in the United States has grown over the past 19 years and suggests an increased demand for dual-degree programs.
- Between 2011 and 2012 alone, the number of MD/MBA programs increased by 25%.

Figure 1. Growth of MD/MBA programs from 1993 to 2012 (Goyal et al., 2015).

A study conducted in 2003 measured the changes in quantity and quality of MD/MBA programs and predicted how popular the joint degree would become. Admission officers from 125 United States MD-granting medical schools were surveyed about program growth, curriculum and degree requirements, application and admission requirements, and program leadership and organization. Between the years of 1993 and 2001, the amount of MD/MBA programs grew by more than five times from 6 to 33, and a documented 17 more schools were in the talks of implementing the combined degree program. In 2001, 20 programs generated over 60 graduates and over 100 students were on track to graduate each year when all 33 established programs matured (Larson, Chandler & Forman, 2003). Nearly two decades have passed since the study was completed and the number of programs has doubled to approximately 65 medical schools. The rise in the amount of MD/MBA programs and graduates both highlight evident collaboration between universities' medical and business schools, along with the booming early interest in management roles by medical students.

Money becomes an interesting topic when medicine and business are combined because it is inescapable when discussing either field. Salary has been researched to be a part of the overall explanation for MD/MBA joint degree programs growing in number. A survey involving 55 graduates from MD/MBA programs between the years of 2003 and 2009 found that the starting salary of physician leaders to be \$292,500, on average (Goldman & Wallace, 2010). A smaller, yet similar, study of 22 MD/MBA graduates reported an average salary of \$325,000, with 4 respondents earning over \$600,000 per year by working in a non-clinical job (Sherrill, 2001).

Though the larger salary is attractive, it is not the norm because the vast majority of graduates are involved in patient care and therefore do not generally earn upwards of the reported averages. This is striking in that it substantiates most physician leaders consciously choosing to stay with their true passion, and counters the argument that doctors with business training will eventually leave medicine due to more lucrative business opportunities. It should be noted, however, while some physicians leave medicine entirely to pursue exclusive business roles, they definitely pay their dues to the Hippocratic Oath by treating patients before going after a higher salary in management and administration.

Moreover, despite not earning as much as they could, the majority of physician leaders are still starting at salaries significantly higher than their counterparts who solely hold a medical degree because of their specialized training. When it comes down to it, MD/MBA graduates earn more because their roles reflect a different mix of responsibilities than physicians who do not have any business training (Goldman & Wallace, 2010). For example, many MD/MBA graduates simultaneously practice medicine and hold roles like department head or business owner.

Though money is generally a driver for pursuing any career, the majority of survey respondents from both studies emphasized making a difference as their primary motivation for completing an MD/MBA program. Graduates execute their intentions by entering into managerial positions early on in their careers as physicians and hence take on more responsibility. The same graduates report higher levels of satisfaction (see Figure 2 below) and feel that their return on investment is significant (Goldman & Wallace, 2010). These findings therefore help explain the rise in the number of combined degree programs, because even recent graduates gain access to important leadership positions while at the same time are able to pursue their primary passion. Consequently, the impact these programs can, and are, having on the United States healthcare system is likely understated.

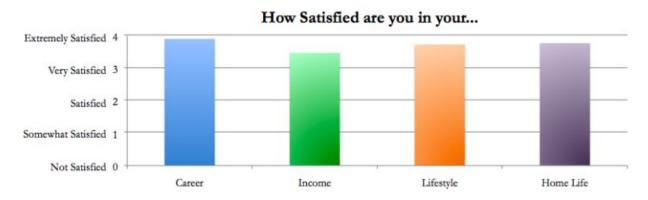


Figure 2. Return on investment for MD/MBA graduates (Goldman & Wallace, 2010).

Relevance of the MD/MBA Dual Degree to Modern Healthcare

Aside from leaving a mark on healthcare, medical students are thinking of other ways in which earning an MD/MBA dual degree will aid them. The combined training program instills knowledge in students not only exclusive to business, but also traits that will benefit them as a clinician. Research points to a physician's tolerance of ambiguity as a measure of success in the unpredictable landscape of medicine (Sherrill, 2001). Since doctors rely on evidence-based science to obtain results, they are generally not accustomed to finding comfort in the unknown. The ability to tolerate such ambiguity was measured using the scale in Table 1 below with certain questions that were specifically tailored to medicine. By training in an MD/MBA combined program, physicians will acquire the expertise required to adapt to constant developments in biotechnology, clinical techniques, and research breakthroughs, all of which have increased the number of managerial positions to oversee operations.

1	I am comfortable with ambiguity in job assignments.
2	I prefer clear, planned goals and objectives for my job.

3	I would like to be certain about how much authority I have.
4	I like to know exactly what my responsibilities are.
5	I am comfortable working with people without clinical training.
6	I am comfortable taking action without the knowledge/approval of my superiors.
7	I feel there is a right and a wrong way to do almost everything.
8	A problem has little attraction for me if I do not think it has a solution.
9	I like to consider new ideas even if they later turn out to be a waste of time.
10	I feel that the way to understand complex problems is to be concerned with their larger aspects instead of breaking them into small pieces.
11	I rather enjoy going against the rules and doing things I am not supposed to do.

Table 1. An 11-item tolerance of ambiguity scale to compare dual degree students and traditional medical students (Sherrill, 2001).

The difficulties that have plagued healthcare seem insurmountable at times—mergers, budgets, insurance and networks. Though specific changes brought by turbulence are revealed with time, it is certain the face of medicine appears different from how it did in the past. Physicians dealing with the modifications to their profession will now either sink or swim. To stay afloat, flexibility and executing decisions with an open mind are vital to their skillset (Moses & Lyness, 1990). Doctors who can tolerate ambiguity and learn how to find peace in uncertainty will thrive in both clinical and managerial positions. Medical students are encouraged to pursue combined training in medicine and business for this very reason (Sherrill, 2001). In doing so, they are likely to reassess their approach to ambiguous situations, feeling empowered and resourceful as opposed to anxious and unsure of how to seek solutions.

The advantages gained from an MD/MBA joint degree are important now more than ever. With patient demands and industrial changes perpetually fluctuating, tolerance of ambiguity will determine the physicians who will keep up and the ones who will fall behind. The talent of dealing with unforeseen complexities will make an accomplished physician, and entering into managerial roles to qualm such issues exemplify proficient physician leaders. Physicians with MD/MBA degree are taught to be versatile and are equipped to handle a broad array of problems that arise in two different settings. By having capabilities in accepting future uncertainty, a highly relevant attribute to modern healthcare, in addition to having a grasp on finance, marketing, and entrepreneurship, graduates from MD/MBA programs will have an advantage over traditional medical school graduates. Through this edge on the competition, by having equal

footing in medicine and business, physician leaders are in a unique position to revamp healthcare.

Revitalization of Healthcare through Physician Leadership

When there are individuals meeting unprecedented goals, there are usually naysayers around to diminish the significance of their achievements. Similarly, there are skeptics who doubt that physician leadership boosts hospital quality, operational efficiency, and financial performance. That is far from the truth, as physicians in charge know how to minimize the tradeoff between cost and quality.

As a matter of fact, physician leaders have deduced methods to provide an improved standard of medical care at the same cost as non-physician-led hospital systems, which suggests they may possess superior skills, knowledge, and approaches than the traditional hospital administrator with no medical background. According to research from the current year, hospital systems led by physicians performed better than those led by non-physicians. Though physician leadership was linked with higher ratings in quality across all specialties, no differences were reported in the total revenue or profit between the two types of hospitals. The findings of the study displayed in Figure 3 below propose physician leadership as having a positive effect on the delivery of healthcare (Tasi, Keswani & Bozic, 2019).

	Physician CEO (n = 34)	Manager CEO (n = 81)	
	Mean (SD)	Mean (SD)	p value
Quality			
Cancer	52.62 (17.65)	38.64 (12.97)	<.001
Cardiology and heart surgery	57.54 (17.95)	46.09 (11.82)	<.001
Diabetes and endocrinology	59.83 (14.68)	50.43 (10.01)	<.001
Ear, nose, and throat	68.92 (14.20)	57.18 (13.83)	<.001
Gastroenterology and GI surgery	56.79 (14.69)	48.86 (9.98)	.001
Geriatrics	57.54 (20.70)	44.99 (14.10)	<.001
Gynecology	67.59 (12.52)	58.62 (9.84)	<.001
Nephrology	65.63 (15.18)	53.95 (12.04)	<.001
Neurology and neurosurgery	61.66 (15.56)	50.51 (10.59)	<.001
Orthopedics	50.44 (13.13)	40.92 (10.63)	<.001
Pulmonology	60.64 (14.15)	50.62 (11.55)	<.001
Urology	63.49 (14.66)	52.25 (11.15)	<.001
Average	59.81 (14.58)	49.35 (10.74)	<.001
Volume			
Total staffed beds	910.6 (344.5)	924.3 (289.6)	.83
Inpatient days per year (thousands)	259.9 (119.1)	240.9 (87.66)	.34
Total revenue ^a	4,471 (2,828)	3,883 (2,254)	.24
Net income ^a	104.7 (152.2)	107.2 (103.3)	.92
Percent income (%)	2.265 (2.836)	2.820 (2.494)	.30
Inpatient days per bed	280.4 (40.28)	259.5 (42.23)	.02

Figure 3. Comparison of hospital quality, volume, and financial performance by CEO leadership (Tasi, Keswani & Bozic, 2019).

Following this thinking, hospitals managed by physicians could potentially be the wave of the future due to the weight of expensive medical care. Delivering a higher quality of health services at the same cost, among the other strides made by physician-led hospitals, is a positive development in healthcare as many have attempted to tackle the tradeoff between delivery of care versus financial costs. To overcome such an obstacle, MD/MBA joint degree programs are strongly encouraged for individuals who desire to care for patients not only in exam rooms, but also behind-the-scenes through superior organizational design and strategies (Lazarus, 2010).

Medical directors of hospitals are physicians in health systems with managerial responsibilities. The facets of leadership in medicine displayed by these physician leaders at top-performing physician-led hospital systems include fostering collaboration between healthcare workers, and providing effective communication. As "one of them," medical directors often mix well with fellow physicians not in management and are thus able to unify the medical staff. With the support of their physicians, medical directors create successful hospitals by reacting to changes in healthcare more quickly and easily than administrators who are not partnered with their doctors (Edwards, Silow-Carroll & Lashbrook, 2011). Furthermore, improvement due to evidence-based results is often the objective when working with doctors who are keen on measuring clinical quality, so the aforementioned medical directors are enabled to strive for the best outcomes. For example, top performing hospitals saw fewer mortalities, complications, and duration of patient stay from admission to discharge. It is most significant to note, however, that while delivering medical care, these institutions spent 20% less and secured nearly 7% more profits in comparison to health systems with a lack of physician leadership (Weber, 2001). Through these earnings, physician leaders attained more operative capital to address renovations, technology improvements, and more at almost 19% stronger than their competition.

Medical directors help their facilities because of the essence of their leadership. Hospitals that demonstrate a gap in teamwork between administrators and physicians with observed drops in quality can be ameliorated by implementing physician leadership training programs and encouraging medical students to simultaneously obtain a dual business degree. Both the Cleveland Clinic and the Mayo Clinic are models of medicine for health systems because they include physicians in the aspects of business. These two institutions develop their physicians for leadership roles by highlighting fundamentals of management and marketing. For instance, the Cleveland Clinic Foundation has established an MBA program for their doctors to adequately prepare them for management positions (Christensen & Stoller, 2016).

Discussion and Conclusion

Combining medical and business training has grown to be a common practice in a number of medical schools around the nation. The MD/MBA dual degree is an ideal option for medical

students who desire to go beyond practicing medicine by impacting healthcare via administrative and managerial roles. In doing so, the combined training prepares students to become excellent physician leaders who are well equipped to enhance healthcare and remedy any faults along the way.

Research has accentuated a quantitative rise in medical schools from 6 programs in 1993 to approximately 65 in 2019. More and more medical schools are offering the MD/MBA dual degree because of how well graduates of the combined degree program are suited for modern challenges in medicine. These new-age physicians with supplemental business education can answer the call from healthcare to accept the unknown that medicine brings by tolerating ambiguity. They will know how to be flexible and assume responsibility for a wide range of responsibilities based on their combined training. With these tools fostered by the MD/MBA dual degree, graduates are positioned at the forefront to tackle shortcomings of healthcare, from patient satisfaction to miscommunication between levels of business organizational structure to balancing quality of service with cost. In particular, research has tracked physician leaders to manage their hospitals better than non-physician led hospitals by providing a better quality of care across most specialties.

Interest in combined degree training to learn of both medicine and business is not tapering off any time soon. Physicians are leaders of their patients' health and their healthcare delivery teams, so it is only natural that they would take on some sort of leadership power in hospital management or administration sooner or later. The MD/MBA dual degree is beneficial to healthcare because the combined training will make all the difference to a physician's abilities, from communicating with administrators to making sound, executive decisions. Furthermore, the joint degree is a positive to healthcare because institutions of healing will improve in quality and efficiency under the supervision of physician executives more so than they would under the regular control of hospital administrators.



The People's Hospital, LLC "Promising Hope through Care"

Three-Year Business Plan

December 2019

This document includes confidential and proprietary information of and regarding The People's Hospital, LLC. This document is provided for informational purposes only. You may not use this document except for informational purposes, and you may not reproduce this document in whole or in part, or divulge any of its contents without the prior written consent of The People's Hospital, LLC. By accepting this document, you agree to be bound by these restrictions and limitations.

Table of Contents

The People's Hospital, LLC: Three-Year Business	
Plan12-31	
Executive Summary	14-15
Services	15
Vision Statement	15-17
Business Structure	16-20
SWOT Analysis	20-22
Market Analysis	22-25
Sales and Marketing Strategy	25-30
Sustainability and Expansion Strategy	30-31
Closing Remarks	32
References	33-37

Executive Summary

The People's Hospital, LLC, is an innovative hospital service provider that will be located in St. Petersburg, Pinellas County, Florida, the state's most densely populated county. We have decided to focus on the role of "physician executive" at The People's Hospital, LLC, meaning both clinical and business decisions will be made by the physicians who are on the forefront of treating patients and have aptly obtained degrees in both medicine and business administration. An appropriate facility will be acquired for the quality of services that we will deliver to the community, which are specific to the city of St. Petersburg and, by extension, Pinellas County.

As mentioned, physician executives will be emphasized as the leaders of The People's Hospital, LLC. Our guiding principle is that doctors are meant to be at the top of administration in the healthcare industry because they are the individuals who are bound by oath and legal obligation to provide patient care that is to the best of their abilities. By placing physicians in the position of determining financial decisions, the patient is expected to be cared for in the most reasonably clinical manner, as opposed to the most lucrative.

Physicians are expected to naturally succeed as hospital executives because they are trained to make tough decisions under pressure, practice perfection by improving patient outcomes, analyze various contributing factors to unique circumstances and learn new information and skills throughout their entire careers. With their diverse and special skill set, doctors amend issues in healthcare delivery at the top, which incites changes to trickle down and for patient care to flourish.

We are in the healthcare industry, specifically the business of hospital services, which for us means delivering the highest caliber of care for any patient for whom we have the honor of treating. Along with providing medical services such as inpatient and outpatient care, diagnostic testing, surgical procedures and others, The People's Hospital, LLC, aims at providing health services lacking in the community for heart disease, cancer (breast, lung and skin), mental health, substance abuse and HIV and to establish clinical programs that will enhance treatments superior to other medical centers.

We are committed to ensuring that we operate ethically, both clinically and administratively, and comply with the laws and health regulations set forth by the state of Florida and the United States of America. All of our employees are guaranteed to be well trained and educated to care for patients, and to assess a broad range of health concerns.

The People's Hospital, LLC, will operate around the clock, 24 hours seven days a week, with staff that will treat patients as if they were our own loved ones, instead of customers. Our

patients will be given first class treatment when they visit The People's Hospital, LLC, which will be bolstered by customer relationship management (CRM) software and accurate electronic health records (EHR).

Services

The People's Hospital, LLC, is entering the hospital business to ensure patients in the city of St. Petersburg and the community of Pinellas County are receiving the highest degree of medical care in the area. Services will be administered by professional doctors, surgeons, pharmacists, nurses and other health and non-health employees, who are all trained at a high level and take pleasure in providing care that is reflective of our highly esteemed patients' expenses.

The health services that will be offered by The People's Hospital, LLC, are:

- Inpatient care
- Outpatient care
- Pathology analysis
- Diagnostic imaging
- Clinical laboratory testing
- Surgeries
- Counseling for medication management, diet, lifestyle wellness, at-home care and personal injury
- Occupational, physical, speech and psychological therapy

Vision Statement

Our vision is to be the people's #1 choice for healthcare in not only the city of St. Petersburg, but also in the community of Pinellas County. Over the next three years, we envision The People's Hospital, LLC, as a top hospital service provider in the state of Florida. We expect long term results to yield national recognition as a powerhouse in healthcare revitalization through the accentuated role of physician executives who lead The People's Hospital, LLC, to success.

Mission Statement

The People's Hospital, LLC, will provide high quality health services to any individual in the community who is in need of treatment, thereby inspiring hope for a healthier future. We yearn to become one of the leaders in hospital care on both a state and national level, which will be manifested by physician leaders at the top of our hospital system.

Core Values

Each staff member of The People's Hospital, LLC, pledges their oath to act with integrity and deliver health services ethically at all times of operation. The mindset of the

physician executives who will run our hospital system is committed to practicing medicine and treating patients according to the following core values:

- Respect & Understanding
 - Treat patients from diverse backgrounds and circumstances in an inclusive environment without judgment
- Morals, Quality & Safety
 - Ensure patients that treatment will only be recommended based on clinical presentation and will be administered at the highest quality of care without consideration of financial objectives
- Innovation in Research through Collegiality
 - Inspire the medical field by practicing teamwork to generate new and invigorating ideas in research

Business Structure

While The People's Hospital, LLC, will operate as a business that will profit financially, our purpose is far more significant than monetary gain. Our foundation is built on solid legacies of physician experience. From the outset, The People's Hospital, LLC, will be overseen by physician leaders—individuals who manage the hospital in its financial and marketing decisions. In doing so, the hospital will be established as a limited liability corporation so as to be protected like a corporation, but taxed like a partnership. Our healthcare staff will be safeguarded against personal accountability in the case of improperly provided medical care.

Physicians in leadership positions will intentionally be conscious of their journeys in medicine when making business decisions, remaining constantly aware that the priorities and considerations of the patient are of the utmost importance, whereas financial profit is a bonus. The implementation of the physician executive as key to success is based on research that showcases top performing hospitals as those that are managed by executives and business administrators who have actually practiced medicine.

The staff at The People's Hospital, LLC, will be composed of highly qualified professionals. Physicians and surgeons will be board certified in their specialties and nurses, pharmacists, counselors and therapists will hold appropriate degrees and licensing. By selecting professionals who are devoted to patient care in all aspects of medicine (i.e. treatment, transparency, bedside manner and speaking with families), patient satisfaction is expected to be nothing short of excellent. As reward for their measured quality of labor based on quarterly performance reports, employees can qualify for profit-sharing arrangements, pay raises, bonuses and additional benefits.

We are up to date on all rules and regulations that govern state and national healthcare. We will leverage our new foothold, which will be distinguished by our medical professionalism, to raise The People's Hospital, LLC, to a status of a hotly desired independent hospital system that both in-state and out-of-state patients will travel to for treatment. By the same token, our professionalism will revamp the medical field in our contributions to diversity, ethics, leadership and research.

Roles and Responsibilities

Each member of the staff at The People's Hospital, LLC, will be responsible for embodying our mission and core values. Regardless of position level, employees will be recruited because they possess not only professional attributes, but also special personality characteristics that signify they will be assets to the hospital. Each member of our hospital team, whether it be a tenured CEO or a housekeeper on the first day of the job, will be held to the same standards when it comes to work ethic and patient care.

Chief Medical Director/Chief Executive Officer

- Responsible for spearheading the direction and "next steps" of The People's Hospital, LLC
- Responsible for creating, executing and enforcing our mission and core values
- Responsible for overseeing treatment when attending to high profile patients and severe medical cases
- Responsible for appearing and speaking at any media or legal event i.e. interviews, press conferences, court hearings
- Responsible for tailoring the budget according to any current financial standing
- Responsible for signing business deals
- Responsible for leading employee recruitment programs and agreeing to employee benefits programs
- Responsible for payment of salaries, signing checks and official documents on behalf of The People's Hospital, LLC
- Responsible for candidly evaluating and releasing the success of the hospital

Doctors

- Responsible for providing holistic health services to patients with quality bedside care
- Responsible for recommending consults with other specialists in all areas of medicine (e.g. therapy, counseling)

 Responsible for communicating success and failures to colleagues, department heads and medical administrators at meetings

Surgeons

- Responsible for leading the surgical team to the best planned outcome for the patient
- Responsible for managing crises, both expected and unexpected
- Responsible for conducting proper protocol in preoperative and postoperative assessments

Pharmacists

- Responsible for providing advice to customer inquiries about health issues, symptoms and medications
- Responsible for processing prescriptions and dispensing medications
- Responsible for ordering, selling and controlling inventory of each drug
- Responsible for meeting with pharmaceutical representatives and reporting any recorded issues with medications

Nurses and Nurse's Aides

- Responsible for managing patients per physician orders
- Responsible for handling patient and patient families requests with excellent bedside manner
- Responsible for being the patient's advocate
- Responsible for offering any management services i.e. personal injury, medication, diet, lifestyle wellness and at-home care

Scribes

- Responsible for capturing and charting patients' chief complaint characteristics, associated symptoms, past histories, physical exams, impressions and plans
- Responsible for participating in longitudinal charting as physician needs (e.g. importing labs and imaging, adding supplemental notes)
- Responsible for maintaining an accurate record of a patient's visit with ethical and legal considerations

Therapists (occupational, physical, speech, psychological)

• Responsible for aiding patients in overcoming both physical and mental disabilities by improving, regaining and developing skills

- Responsible for providing professional advice and solutions that will enable patients to continue and improve the quality of life
- Responsible for utilizing special equipment and technology therapeutically

Counselors (dietary, nutrition, medication management, at-home care)

- Responsible for aiding patients in personal matters and leading them in the right direction according to their requests
- Responsible for providing professional advice and solutions that will enable patients to continue and improve the quality of life

Sales and Marketing Manager

- Responsible for retaining and attracting customers by creating methods of marketing i.e. provider and emergent care referrals, advertising, community events
- Responsible for coordinating lists of providers who are in network and will provide referral-based patients
- Responsible for monitoring trends and rate of provider referrals i.e. inspecting transactional data, modeling demographic information
- Responsible for participating in project finance structuring and planning for project completion
- Responsible for designing attractive promotional material i.e. brochures, website, newsletters
- Responsible for motivating and delegating to the sales team to meet and exceed target goals

Information Technologists

- Responsible for installation and maintenance of the computer software and hardware at The People's Hospital, LLC
- Responsible for controlling logistics, CRM software, Web servers, e-commerce software, EHR programs and point of sales (POS) systems
- Responsible for updating the hospital's website as needed and preserving both a contemporary look and user-friendly experience
- Responsible for tending to and amending any technological and IT related duties on a daily basis

Accountants

• Responsible for preparing financial statements, budgets and other financial documents

- Responsible for performing financial analysis for budgets, reports and feasibility of proposed projects
- Responsible for reporting financial forecasts and risks
- Responsible for managing the hospital's cash flow and general ledger
- Responsible for initiating and adhering to financial systems and policies
- Responsible for managing and administering payroll
- Responsible for ensuring that The People's Hospital, LLC, is in compliance with tax legislation at all times
- Responsible for spearheading all financial transactions of the hospital
- Responsible for conducting internal audits and communicating with official tax agencies as needed

Client Service Executive

- Responsible for welcoming patients and their families when greeting in person or via phone call
- Responsible for answering and directing all patient inquiries to the best possible quality
- Responsible for preserving the hospital's patient database by ensuring all contacts have current information (name, gender, date of birth, phone number, address, email, insurance, and primary care physician)
- Responsible for conducting thorough interactions with patients and using every opportunity to build patient interest in services provided by The People's Hospital, LLC
- Responsible for completing duties assigned by directors and supervisors in an effective and timely manner
- Responsible for collecting any incoming information concerning patients, The People's Hospital, LLC, and the industry

Housekeeping

- Responsible for upholding The People's Hospital, LLC, in pristine, sanitary condition around the clock
- Responsible for guaranteeing that cleaning supplies and bathroom toiletries are kept in stock at all times
- Responsible for maintaining both the exterior and interior of the hospital
- Responsible for settling any expected or unexpected duty assigned by a supervisor

SWOT Analysis

The People's Hospital, LLC, is intent on rising up as one of the leading healthcare systems in the communities of St. Petersburg and Pinellas County, and subsequently, the state of Florida. In order to accomplish such an important goal, we are cognizant that our hospital must be built on a solid business foundation. The People's Hospital, LLC, is committed to following due process in setting up its business.

The unique strength of The People's Hospital, LLC, being headed by physician executives is that patient care and the business of healthcare will be intensely revamped. Nonetheless, despite their advanced experiences in health management services, medical practice and research, our physician leaders are ultimately limited in their knowledge of business administration specifics. As research shows, the most impactful changes in the industry occur within the top levels of hospital administration. Therefore, business specialists have been recruited to provide consultation on the organization of our hospital's business structure.

Consults with the business specialists included a detailed SWOT analysis and advice on which business structure will allow The People's Hospital, LLC, to soar in healthcare. After the consultations on our administration's structure, we are positive we will create a healthcare system that meets our core values and serves the current needs of American healthcare.

Below is a summary of the SWOT analysis that was conducted by industry experts for The People's Hospital, LLC:

Strength

Our strength lies in the experience of executives who double as physicians and have been on the front lines of medicine. Physician leaders at The People's Hospital, LLC, hold both degrees in medical and business administration. Therefore, they will be able to cater more to the desires and needs of patients when making business decisions in finance and marketing than conventional hospital administrators. Although profits are vital to the success and sustainability of a hospital's operations, our executives and administrators are not exclusively financially motivated—we at The People's Hospital, LLC, have great ambition to improve our patients' health.

Not only are our physician executives able to keep our patients in mind, but they have also faced the challenges of American healthcare firsthand. They are felicitously aware of the hurdles present in all aspects of medicine—insurance, patient expenses, patient-physician relationships, politics, access—and have the resumes to prove it. With each of their individual journeys in medicine, our executives are well rounded and well equipped to run a healthcare facility that will shine through in non-managerial physicians' treatments and patient outcomes.

Weakness

Our expected weakness is that The People's Hospital, LLC, is a brand new hospital entering an industry that is well established with many players. As a novice facility in healthcare, our team at The People's Hospital, LLC, will be constantly assessing needs and shortcomings in our first years of operation. Initially, our new medical center may not be able to put forth all of the required finance to sustain our hopes of revitalizing healthcare due to the fact that we are not a part of a larger, established institution i.e. Johns Hopkins, Mayo Clinic.

Another predicted weakness is sustaining our reputation as a new, independent hospital system in the industry. With healthcare reforms turning the industry upside down and practically forcing medical facilities to consolidate, The People's Hospital, LLC, is entering the battle between medicine and politics. Our physician executives hope to surmount consolidation driven by economics, which often raises the price of care and patient frustration, by staying true to our mission: providing refined health services at affordable prices for patients in the community and surrounding areas as a result of tailored hospital administration.

Opportunities

At The People's Hospital, LLC, we will be devoted to exploring any beneficial opportunity that becomes available. Opportunities, as far as we see it, are unlimited so long as they related to improving patient health and the standard of American healthcare. Since we are located in the city of St. Petersburg and will be available to the community of Pinellas County, we specifically plan to take advantage of the plentiful opportunities present such as running on green energy, appraising common health concerns and sourcing from local vendors.

Threat

Similar to other businesses in and outside of healthcare, The People's Hospital, LLC, inevitably faces the threat of economic struggles and unfavorable government policies (e.g. healthcare reform). With our physician executives on board, we expect that we will neutralize such threats as best as possible due to behind-the-scenes knowledge of potential solutions. After studying the ins and outs of medicine, treating patients, learning about business administration, and consulting evidence-based research, our physician leaders are confident that they will be able to help The People's Hospital, LLC, rise above adversity such as consolidation and financial burden. By unifying medical staff, the physician executives will have the camaraderie of fellow, traditional physicians and nurses to safeguard the institution against instability.

Market Analysis

The People's Hospital, LLC, is steadfast in its commitment to providing top-notch service to patients at competitively low prices. Extreme attention will be paid to past, present and future market trends to identify any changes that will alter our operation. Demands by our target market will be fulfilled to support patient gratification. Our competitive advantage of physician leaders will spark a positive cascading effect from enhanced business decisions, to better employee satisfaction and to unprecedented patient care.

Market analysis was executed by our physician executives coordinating with market specialists to formulate strategies that appeased both fields of medicine and business. At The People's Hospital, LLC, our patients can find solace in the fact that a thorough analysis of the healthcare market has been generated. Hence, individuals can trust our staff when we reiterate that before they are customers with money, The People's Hospital, LLC, values them as patients who need our aid.

Market Trends

With a growing population, there are more living individuals and subsequently, there has been an increase in the number of patients requiring treatments. Hospitals in the healthcare industry are able to treat patients more effectively than ever before due to the aid of technology and breakthroughs in research. As a matter of fact, there is a demand in communities nationwide for more hospitals because of overcrowding and, by extension, reduced access to healthcare. However, this demand is counteracted by healthcare reform that is streamlining hospital consolidations as an industry trend.

Despite the augmenting demand for health services across the nation in recent years, consolidation of medical centers has become increasingly common. Legislative changes and reforms to healthcare have indubitably impeded the entry of new hospitals in the healthcare industry. While research on consolidation highlights a continuum of healthcare services and an abundance of medical knowledge in one location, research also criticizes raised costs of general care and deteriorating patient satisfaction. In order to enter this multifaceted industry, The People's Hospital, LLC, will establish and upkeep a competitive position as an independent hospital, which will be led by physician executives.

Our physician leaders have listened to patient demands and patient needs for decades. An aging baby boomer generation, young adults with no means of obtaining health insurance to establish primary care, frequent nurse and physician shortages are all expected to stimulate a need for health services. Firsthand patient exposure, coupled with monitoring

of past, current and future market trends, is how our administrators will stay on top of industry changes.

Target Market

Generally speaking, every living person will visit a hospital for treatment at one point in their life. The People's Hospital, LLC, will be in business to treat individuals in St. Petersburg, FL and other cities in Pinellas County such as Pinellas Park, Clearwater, Largo, Palm Harbor, Dunedin, Seminole, Tarpon Springs, Safety Harbor, St. Pete Beach, Madeira Beach, Gulfport, Indian Rocks Beach etc. We promise to serve patients regardless of insurance coverage or ability to pay for health services.

In particular, we will target and market to patients in the area who are classified as those with conditions that are insufficiently addressed in community health service offerings (e.g. heart disease, cancers of the breast, lung and skin, HIV, mental health, substance abuse, and HIV). The People's Hospital, LLC, will treat patients who can be broadly categorized by the following:

- Pinellas County residents of any age who live within a reasonable radius of our hospital's location
- Expectant mothers
- Injured children and adults
- Arrestees in need of medical clearance
- High profile individuals
- Corporate employees from organizations such as banks, insurance companies, and manufacturers

Competitive Advantage

The People's Hospital, LLC, will enter the healthcare industry as a new facility that already has years of experience. Our hospital is well positioned as an independent medical center—in spite of consolidation becoming more regular—thanks to our physician leaders who will act as the main administrators. Hospitals that are operated by administrators with no medical background are more prevalent than not, which immediately raises multiple concerns in areas such as patient advocacy and financial motivation.

By implementing the physician executive as our key input when entering and remaining as a hospital competitor, The People's Hospital, LLC, has already nailed down patient treatment and relationships. Our executives know how to deliver consistent patient service that is of high quality and meets expectations because they have necessary prior history in treating patients. On the flip side, our doctors know how to make decisions

involving finances, marketing, public relations, and expansion because of their graduate education in business administration.

With physician executives at the top of our business model, any necessary changes will be able to trickle down and impact each tier of employment. Co-worker relationships will be strongly upheld because employees at The People's Hospital, LLC, at all levels will have a respectable, relatable and helpful team of physician leaders to emulate. Our improved working relationship will be a welcome relief for our employees, since most hospitals are managed exclusively by administrators. Hospital administrators with no experience in patient treatment tend to strain relationships between those who are signing business deals and those are who signing patient charts due to miscommunication and misunderstanding.

Another positive effect of physician executives owning and running The People's Hospital, LLC, is that our staff is guaranteed compensation and benefits as a result of their labor. Our administrators will make appropriate business decisions that involve employees because "it takes one to know one," as opposed to the more common hospital administrator mentality of "us versus them." Therefore, our staff satisfaction rates will be some of the highest: instead of quarrelling with physicians, surgeons, nurses, pharmacists and other employees, our executives will collaborate and understand more because they will be mindful that teamwork is the key to success of their physician-led organization.

Sales and Marketing Strategy

The People's Hospital, LLC, will exclusively source the best, the most skilled and the most professional healthcare workers who are committed to treating patients like their own family. That is why patients need not worry about any treatments motivated by profits: our patients are patients before they are our customers, meaning that their health is more significant to us than their money.

Individuals will want to seek treatment at The People's Hospital, LLC, because they know they can fully trust our health services team. Patients are made aware that, albeit necessary to sustainability, we are not in the industry for financial gain; rather, we are intent on influencing how healthcare is administered to the average American. At The People's Hospital, LLC, we cater to the fine line of offering the highest quality at the lowest price. Any loss in profits that is the result of reduced pricing of health services is predicted to be atoned by the sheer number of patients wanting to receive the quality treatment we offer at The People's Hospital, LLC.

Sources of Incomes

As previously stated, The People's Hospital, LLC, is set on sending waves throughout the healthcare industry in terms of hospital administration, which ultimately affects a multitude of variables in a medical facility's operations. Our team of physician executives do not have an interest in extracting excess profits from our patients. Nevertheless, The People's Hospital, LLC, is a business and will aptly maximize itself by generating income from every ethical and legal means possible within the industry. For example, we will educate patients on all of their treatment options, but will only enforce those that are mandatory. Staff will stray from suggesting any treatment plans to patients that are not pertinent to their health and will unnecessarily drive up their hospital bill.

Below are the sources of income from our health services that will generate income for The People's Hospital, LLC:

- Inpatient care
- Outpatient care
- Pathology analysis
- Diagnostic imaging
- Clinical laboratory testing
- Surgeries
- Counseling for medication management, diet, lifestyle wellness, at-home care and personal injury
- Occupational, physical, speech and psychological therapy

Sales Forecast

Using data collected from nine Pinellas County hospitals in 2015, a qualitative, three-year sales projection was generated. The average admissions, inpatient revenue, and outpatient revenue across the sampled health facilities were 13,618 patients, \$802,449,907, and \$476,114,111, respectively. In our first year, we forecast to hit around the above average numbers thanks to our promise of specialized care.

First Year

Financial consultants working with physician executives at The People's Hospital, LLC, have predicted that our health facility will meet the approximate averages listed above. Physician executives directing our organization have determined our goal to break even is a realistic expectation for an emerging hospital in the industry.

Second Year

In the second year of operation, we expect to see increases in referral business, repeat patients, and new patients seeking treatment at The People's Hospital,

LLC. Thus, we will experience rises in patient stays and revenue, all while consciously working to keep costs low and quality high. However, despite rises in profit, we will continue to break even due to our startup costs and generating average revenue.

Third Year

As an established Pinellas County Hospital by our third year, The People's Hospital, LLC, will be an emerging competitor in the area for treating illnesses plaguing members of the community, such as heart disease, mental health and substance abuse, sexually transmitted diseases, and cancers. Hospital review journals will begin to notice the difference in the care we provide, which stems from our physician-led administration.

After inevitable trial and error in our first and second years, our physician executives directing the hospital's administration will have worked out company-specific techniques to secure steadily increasing patient admissions and net profit. General numbers forecasted by financial consultants stand higher than the initially projected averages, meaning that The People's Hospital, LLC, will begin to generate moderate revenue by the end of its third year.

Pricing Strategy

Satisfying the balance of healthy profit margins and quality health outcomes strikes the need to connect pricing strategy at The People's Hospital, LLC, with daily operational concerns. Sustainable health systems involve teamwork between physicians and financial administrators so as to deliver the highest quality of healthcare available. However, health systems often fall short of fostering collaboration between the two different levels within hospitals, which creates a tradeoff between medical costs and quality of medical care.

Below are focal points The People's Hospital, LLC, will implement as pricing strategy that supports patient-centered service, as well as caters to business driven performance.

1. Estimates of care

The People's Hospital, LLC, will prioritize effective price modeling and cost analysis of care to meet our patients' needs, along with meaningful and useful estimates of medical treatments. It would be unfair to stick our patients with crushing medical debt, insured or not, because people truly want to pay off their balances, according to consumer feedback. However, reports from patients state

they are not properly educated or prepared to do so most of the time. By explaining charge-based estimates to patients at the beginning of care and throughout their stay with us, the services we are providing at The People's Hospital, LLC, will be clearly communicated.

2. Logical pricing structure

Our goal at The People's Hospital, LLC, is to lessen the struggles of maintaining quality care with financial costs. We want to offer the best care at a truly affordable cost. By understanding the relationship between charges and the costs of providing health services, our health system will monitor the impacts of pricing decisions, in addition to the market competitiveness of pricing. By doing so, our price structure will be logical to the bank accounts of our patients.

3. Transparent and comprehensible pricing

Similar to providing education of care estimates to our patients, The People's Hospital, LLC, will instruct our patients on their medical bills and the components of care it took to tend to their health. Our healthcare professionals will be prepared to talk at length about pricing and support our reasonings with information related to our specific goals, as well as market research. At The People's Hospital, LLC, we will take the time our patients and their families need to explain pricing to them so that both parties are satisfied in the end.

4. Operational costs

Thorough studies have been conducted to identify the costs obligatory to running a healthcare facility. Physician executives at The People's Hospital, LLC, are well aware that charges may not accurately portray payment, which generates a disparity when documenting care and financial compensation. For example, Medicare and other health plans pay fixed prices for services based on fee schedules. Healthcare providers are thus not paid to the amount of what was charged and are generally paid far less than expected. Understanding operational costs to establish pricing remains a confusing checkpoint in medical care for the above reasons, but The People's Hospital, LLC, remains attentive to key data and physician executives' input to improve performance in both quality care and pricing.

5. Maintaining profit margins

Pricing will be reviewed routinely at The People's Hospital, LLC, to ensure we are in line with market trends. Monitoring any potential margin issues on a scheduled basis to mitigate risk will be conducted to protect revenue and compliance. Margin and compliance risk officers will be employed at The People's Hospital, LLC, and they will focus on key service lines, as well as educating staff members on detecting issues to prevent charge violations. Our officers will stray from applying "across the board" price changes and promise optimal pricing via ongoing supervision of market averages. We believe in mindfulness of pricing strategy to nurture the challenge of medical costs because providing the best care will aid the community to prosper.

Payment Options

At The People's Hospital, LLC, we offer ways for patients to pay their bills conveniently. We are aware that each patient's finances are set up differently and are willing to work with them via the methods of payment listed below. Please note patients are encouraged to also make a payment at the time of receiving health services.

1. Online

Patients may pay their bill online using credit or debit cards (Visa, MasterCard, Discover, American Express).

2. By phone

Patients wishing to pay their bill over the phone with assistance should contact our Patient Financial Services team.

3. By mail

If patients are paying their bill using a check or money order, paying by mail is an ideal option. Patients should write their patient account number listed on their bill in the memo line and mail the payment to our Patient Financial Services team

4. In person

Patients may pay their bill in person using credit or debit cards (Visa, MasterCard, Discover, American Express), checks or cash at the office of our Patient Financial Services team.

Initial Budget and Startup Capital

An operating budget will be used as the initial budget to list anticipated income by source and anticipated expenses. Expenses include, but are not limited to, medical

supplies and equipment, technology and utilities, and salaries. Revenue will account for a larger composition of the budget than expenses so as to actually generate profit for the organization.

Funding and startup capital will be sourced from venture capital investors who are keenly tuned into the changes presently occurring in healthcare. Preferably, investors with special healthcare and medical backgrounds will be sought because they will naturally understand the purpose for physicians leading the way at The People's Hospital, LLC. Investors will see the vision of our emphasis on physician leadership and will want to support our physician executives breathing new life into healthcare delivery.

Sustainability and Expansion Strategy

At The People's Hospital, LLC, we believe complacency is key to an organization's downfall. Due to their training in medicine, our physician leaders are ingrained with the ideal that there is always room for improvement. Commitment to sustainable growth falls on the shoulders of hospital administrators and managers to ensure organizational advancements are not progressing too slowly or too quickly. Below are certain drivers of growth created by our physician executives, which are based on statistical parameters that ensure viable growth in the healthcare industry.

1. Building growth orientation among employees

Each staff member at The People's Hospital, LLC, contributes to its growth in one form or another. Fostering growth orientation among all employees is vital to the overall expansion of the organization. Therefore, our physician executives will review financial performance with key personnel to ascertain general employee thoughts and goals toward upholding the growth of the company.

2. Recruitment of top clinicians

The People's Hospital, LLC, will perform as good as its physicians will allow, and subsequently, will grow as much as its physicians nurture it. Sourcing doctors with specialized fellowship training, additional certifications on new treatments, techniques, and technologies, and an affinity for collaborating with physician leaders will be keys to our recruitment methods. Our team of physicians, regardless of department, will be committed to providing top-of-the-line service and care to our patients in an innovative way.

3. Starting new lines of service

As time goes on and our institution expands, the need for new lines of service at our health facility will be identified according to patients' demands. Generally

speaking, patients are frequently turned away from health organizations due to a lack in the clinical services requested. To avoid this disappointment and adequately treat our patients' health, physician executives at The People's Hospital, LLC, will implement new lines of services as the significant need for them arises.

4. Competitor analysis and pricing strategy

Pricing will be continuously adjusted and highly tailored to our performance, especially when we experience inevitable trial and error in our early years of operation. Prices at The People's Hospital, LLC, will reflect corresponding market trends with a competitive edge that lies in the caliber of quality patients will receive. As the organization acquires more revenue, our physician executives will strive to reduce prices while raising quality of care.

5. Viable marketing and branding initiatives

Reliance on primary care referral business will only perpetuate for so long. The People's Hospital, LLC, is open to trying methods of marketing throughout its early years to test factors that grow our organization and factors that hinder expansion. The marketing and branding teams at our organization plan on engaging in traditional forms such as commercials and billboards. However, hospital business is not like it used to be due to changing times, which will cause The People's Hospital, LLC, to explore avenues of social media and community outreach to expand our brand in the area.

To increase profitability, remain relevant in the industry, and expand our organization at a sustainable rate, The People's Hospital, LLC, will seek out services to deliver patient care with maximum quality and efficiency. Our physician executives are focused on constantly monitoring how our facility balances quality of service with cost of service to maintain our competitive advantage as a physician led hospital.

Closing Remarks

Physician leaders, physician executives, and physician led hospitals are all synonymous terms used to indicate the same principle: change. Medical students interested in pursuing a combined MD/MBA program are often thinking years ahead, in terms of ways they can influence the future of healthcare beyond the clinical setting. By integrating business education into medical training, graduates will be armed with the innovation required to revitalize healthcare. For instance, not only will they be physicians who read lab reports and imaging impressions, but they will also be doctors who can make sense of quarterly budget reports and cash flow statements.

After conducting extensive research, a clear emphasis is placed on physician leadership being measured to increase the quality of health services, cut expenses, raise patient satisfaction, and establish a positive, collaborative working environment more so than non-physician leaders. As the industry becomes more complex and specialized in the upcoming years, healthcare will require more industry-specific professionals in leadership positions. Thus, physicians with backgrounds in administration and management will be highly favored to lead their organizations to success and their patients to good health.

References

- Ackerly, D. C., Sangvai, D. G., Udayakumar, K., Shah, B. R., Kalman, N. S., Cho, A. H.,
 ... & Dzau, V. J. (2011). Training the Next Generation of Physician-Executives: An
 Innovative Residency Pathway in Management and Leadership. *Academic Medicine*,
 86(5), 575-579.
- 2. Bodenheimer, T., & Casalino, L. (1999). Executives with white coats—the work and world view of managed-care medical directors. *Health Policy Report*, *341*(25), 1945-1948.
- 3. Butcher, L. (2011). The Rapid Growth of MD/MBA Programs: Are They Worth It? *Physician Exec*, *37*(1), 22-26.
- 4. Carsen, S., & Xia, C. (2006). The physician as leader. *McGill Journal of Medicine: MJM*, 9(1), 1.
- 5. Chaudry, J., Jain, A., McKenzie, S., & Schwartz, R. W. (2008). Physician Leadership: The Competencies of Change. *Journal of Surgical Education*, *65*(3), 213-220.
- 6. Chen, S. H. (2006). The Merging of Medicine and Management-McGill University's MD-MBA Degree. *McGill Journal of Medicine: MJM*, *9*(1), 3-4.
- 7. Christensen, T., & Stoller, J. K. (2016). Physician leadership development at Cleveland Clinic: a brief review. *Australasian Psychiatry*, *24*(3), 235-239.

- 8. Clay-Williams, R., Ludlow, K., Testa, L., Li, Z., & Braithwaite, J. (2017). Medical leadership, a systematic narrative review: do hospitals and healthcare organisations perform better when led by doctors? *BMJ Open*, 7(9), e014474.
- 9. Colla, C. H., Lewis, V. A., Shortell, S. M., & Fisher, E. S. (2014). First national survey of ACOs finds that physicians are playing strong leadership and ownership roles. *Health Affairs*, *33*(6), 964-971.
- 10. Edwards, J. N., Silow-Carroll, S., & Lashbrook, A. (2011). Achieving efficiency: lessons from four top-performing hospitals. *Commonwealth Fund*, *1528*(15), 1-20.
- 11. Fairchild, D. G., Benjamin, E. M., Gifford, D. R., & Huot, S. J. (2004). Physician Leadership: Enhancing the Career Development of Academic Physician Administrators and Leaders. *Academic Medicine*, 79(3), 214-218.
- 12. Falcone, R. E., & Satiani, B. (2008). Physician as Hospital Chief Executive Officer. Vascular and Endovascular Surgery, 42(1), 88-94.
- 13. Goldman, J. T., Wallace, R. J. (2010, April 9). The MD/MBA Degree: Then What? The Franklin Society: The Business of Medicine. Retrieved from https://thefranklinsociety.wordpress.com/2010/04/09/the-mdmba-dual-degree-then-what
- 14. Goodall, A.H. (2011). Physician-leaders and hospital performance: Is there an association? *Social Science & Medicine*, 73(4), 535-539.
- 15. Goyal, R., Aung, K. K., Oh, B., Hwang, T. J., Besancon, E., & Jain, S. H. (2015). Survey of MD/MBA Programs: Opportunities for Physician Management Education. *Academic Medicine*, 90(1), 121.

- 16. Gunderman, R., & Kanter, S. L. (2009). Perspective: Educating Physicians to Lead Hospitals. *Academic Medicine*, 84(10), 1348-1351.
- 17. Guthrie, M. B. (1999). Challenges in developing physician leadership and management. *Frontiers of Health Services Management*, *15*(4), 3.
- 18. Haytaian, M. (2012). Physician leadership: a health-care system's investment in the future of quality care. *Connecticut Medicine*, *76*(7), 417-420.
- 19. Krupat, E., Dienstag, J. L., Kester, W. C., & Finkelstein, S. N. (2017). Medical Students Who Pursue a Joint MD/MBA Degree: Who Are They and Where Are They Heading? *Evaluation & the Health Professions*, 40(2), 203-218.
- 20. Kuo, J. S. (1997). Swimming with the sharks—the MD, MBA. *The Lancet*, *350*(9081), 828.
- 21. Larson, D. B., Chandler, M., & Forman, H. P. (2003). MD/MBA Programs in the United States: Evidence of a Change in Health Care Leadership. *Academic Medicine*, 78(3), 335-341.
- 22. Lazarus, A. (2010). Physicians with MBA Degrees: Change Agents for Healthcare Improvement. *The Journal of Medical Practice Management: MPM*, *26*(3), 188.
- 23. Lee, B.Y. (2017, February 26). Study Shows That Doctors Make Better Hospital Leaders. Forbes. Retrieved from https://www.forbes.com/sites/brucelee/2017/02/26/study-shows-that-doctors-make-better-hospital-leaders/#3eecdba93d1c
- 24. Moses, J. L., & Lyness, K. S. (1990). Leadership behavior in ambiguous environments. *Measures of Leadership*, 327-335.

- 25. Neeley, S. M., Clyne, B., & Resnick-Ault, D. (2017). The state of leadership education in US medical schools: results of a national survey. *Medical Education Online*, *22*(1), 1301697.
- 26. Patel, M. S., Arora, V., Patel, M. S., Kinney, J. M., Pauly, M. V., & Asch, D. A. (2014).
 The Role of MD and MBA Training in the Professional Development of a Physician: A
 Survey of 30 Years of Graduates From the Wharton Health Care Management Program.
 Academic Medicine, 89(9), 1282-1286.
- 27. Schwartz, R. W., & Pogge, C. (2000). Physician leadership: essential skills in a changing environment. *The American Journal of Surgery*, *180*(3), 187-192.
- 28. Sherrill, W. W. (2005). The traitor complex: MD/MBA students struggle with medicine vs. management dilemma. *Physician Exec*, *31*(1), 48-49.
- 29. Sherrill, W. W. (2001). Tolerance of ambiguity among MD/MBA students: implications for management potential. *Journal of Continuing Education in the Health Professions*, 21(2), 117-122.
- 30. Staff. (2018, May 5). 100 great leaders in healthcare | 2018. *Becker's Hospital Review*. Retrieved from
 - https://www.beckershospitalreview.com/lists/100-great-leaders-in-healthcare-2018.html
- 31. Steinert, Y., Naismith, L., & Mann, K. (2012). Faculty development initiatives designed to promote leadership in medical education. A BEME systematic review: BEME Guide No. 19. *Medical Teacher*, *34*(6), 483-503.

- 32. Stoller, J.K., Goodall, A., & Baker, A. (2016, December 27). Why the Best Hospitals Are Managed by Doctors. *Harvard Business Review*. Retrieved from https://hbr.org/2016/12/why-the-best-hospitals-are-managed-by-doctors
- 33. Tasi, M. C., Keswani, A., & Bozic, K. J. (2019). Does physician leadership affect hospital quality, operational efficiency, and financial performance? *Health Care Management Review*, 44(3), 256-262.
- 34. Weber, D. O. (2001). Physicians lead the way at America's top hospitals. *Physician Executive*, 27(3), 24-24.