









Plastic Surgeons as Medical Directors: A Natural Transition into Medical Leadership

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Arch Plast Surg 2022;49:221-226.

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Abstract

Keywords

- plastic surgery
- physician executives
- ► leadership
- policy
- academic medical centers

With the growing complexity of the U.S. health care system, highly motivated medical directors with strong leadership skills are vital to the success of health care facilities. Presently, there are no articles assessing a plastic surgeon's qualifications for the role of medical director. In addition, there is a paucity of literature comparing the responsibilities of medical directors across various types of health care institutions. Herein, we outline why plastic surgeons have the unique skillset to succeed in this role and highlight the differences between medical director positions across the vast landscape of health care. While the intricacies of this position vary greatly across different landscapes of the health care industry, successful medical directors lead by following a set of universal principles predisposing them for success. Plastic surgeons innately exhibit a subset of particular traits deeming them suitable candidates for the medical director position. While transitioning from the role of a surgeon to that of a medical director does require some show of adaptation, plastic surgeons are ultimately highly likely to find intrinsic benefit from serving as a medical director.

With the growing complexity of the U.S. health care system, highly motivated medical directors with strong leadership skills are vital to the success of health care facilities.^{1,2} In addition to their duties as a health care provider, physicians serving as medical directors play an integral role in the management of day-to-day operations within their organization.³ A medical director should embody certain characteristics and traits to effectively carry out their duties as a

leader. Medical directors must have a visionary mindset without losing sight of the limitations of the present.⁴⁻⁷ Furthermore, they must exhibit patience and practice effective communication to facilitate teamwork among health care providers and staff. 5,6,8,9 Finally, critical-thinking and data-oriented decision-making are essential to a medical director's success as they are often tasked to produce results with limited resources.^{6,10}

DOI https://doi.org/ 10.1055/s-0042-1744421. ISSN 2234-6163.

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Table 1 Traits frequently exhibited by plastic surgeons and their value in medical leadership

Positive traits	Negative traits			
Flexible	Desire immediate results			
Proactive	Fear of failure			
Value driven	Unrealistic expectations			
Solution oriented	Difficulty in delegation			
Transparent communicators				
Innovative				
Hardworking				
Have a team-first mentality				
Critical thinkers				
Unmatched attention to detail				
Adept at cost-benefit analysis				

While medical leadership in plastic surgery has been described in the literature, there are no articles assessing a plastic surgeon's qualifications for the role of medical director. ^{11–13} In addition, there is a paucity of literature comparing the responsibilities of medical directors across various types of health care institutions. In this article, we outline why plastic surgeons have the unique skillset to succeed in this role and highlight the differences between medical director positions across the vast landscape of health care.

Plastic Surgeons as Medical Directors

The unique experiences acquired from practicing plastic surgery make plastic surgeons a natural fit for the role of medical director (>Table 1). One could argue that plastic surgery is a super-specialty, as opposed to the ill-defined term "subspecialty," attributable to the breadth of cases encountered by nature of their profession. Like medical directors, plastic surgeons rely heavily on transparent communication and a team-first mentality due to their frequent collaboration with other specialties. 13-15 Innovation, critical-thinking, problem-solving, adaptability, and unmatched attention to detail are all traits frequently exhibited by plastic surgeons both inside and outside of the operating room.¹³ In addition, plastic surgeons universally conduct cost-benefit analysis for operative and organizational management of their patients and practices, respectively. During this process, plastic surgeons take into account the patient's and practice's values to be successful. These traits synergistically overlap with the role of medical director and set up the plastic surgeon for success when taking on this challenging

While many of the traits exhibited by plastic surgeons make them innately good candidates for the role of medical director, there are several important differences between obtaining results in the operating room and at the leadership level. The instantaneous gratification experienced within the operating room is rarely seen when making changes as a

medical director. More commonly, changes implemented by medical directors require an extended amount of time to manifest and produce results. Because of this, medical directors must practice patience and abandon immediate decisive action often exhibited by surgeons. Furthermore, while surgeons are entitled to tremendous autonomy in the operating room, medical directors must learn to relinquish some of their control to be successful in their position.² Micromanaging has no place in the director role. Unrealistic expectations and fear of failure will not serve the director well as outcomes may fall short and frequently fail. One must remain patient and steadfast in their approach to serving as a medical director.

Duties of the Medical Director

Medical Administration

First and foremost, the director oversees that medicine is practiced in a professional manner with care that meets standard medical and regulatory guidelines. ^{8,16} While this may seem obvious, many health care facilities struggle to provide quality health care for their patients. A disorganized and poorly maintained treatment infrastructure and an apathetic attitude toward improving patient care are both factors detrimental to the practice of medicine within a health care facility. ¹⁷ Medical directors must remain vigilant to ensure patient care is conducted in exemplary fashion.

High-quality health care cannot be provided without a proper treatment infrastructure in place. Medical directors are ultimately responsible for ensuring that health care providers and staff have sufficient supplies and can practice medicine effectively and efficiently.¹⁸ Developing a treatment infrastructure in which medicine can be best practiced is challenging and highly variable across individual practices and health care institutions (>Table 2). The size of a health care facility has a profound impact on the development of a treatment infrastructure conducive to practicing medicine. 19 This is because the complexity of a health care facility's structure is directly correlated to its size.¹⁹ For example, disparities in clinic scheduling and operating room turnover between a private practice and a large-scale health care institution are attributed to the inefficiencies associated with larger-scale operations.²⁰

Additionally, a medical director's decision-making authority and autonomy over modifying the treatment infrastructure varies across medical landscapes depending on the type and size of the institution. In contrast to a small private practice, where the medical director can make most changes at will, directors serving within large-scale health care institutions must frequently seek approval from senior leadership to implement policy change. ^{21,22} The risk of undesirable and unintended consequences following the implementation of novel policy is high due to the complex nature of large health care systems. While medical directors serving in multisite hospital systems and academic medical institutions may become frustrated with the lack of their decision-making autonomy, they may take comfort in the fact that all policy changes have been extensively reviewed

Table 2	Duties of	the medical	director	across	varying	health	care facilities
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Duty	Private practice	Academic medical institution	Multisite hospital system	Industry				
Medical administration								
Ensure care meets standard medical guidelines	+++	++	++	-				
Oversee facility credentialing	+++	+	+	-				
Quality assurance and quality improvement	+++	++	++	-				
Employee engagement	+++	++	++	-				
Research and innovation	•	•	·	·				
Facilitate procurement of research funding	-	+++	+	+++				
Allocate research funding	-	+++	+	+++				
Maintain research infrastructure	-	+++	+	+++				
Financial	•	•	·	·				
Continuous assessment of market	+++	_	+	+++				
Develop strategies to increase valuation	+++	-	+	+++				
Acquire and divest assets	+++	_	+	+++				

⁺⁺⁺: significant role, ++: greater role, +: moderate role, -: negligible role.

and approved from above, minimizing the consequences of an undesirable outcome. Nonetheless, it is imperative that medical directors in this setting be wary of falling to the position of a "bystander director" unable to improve their organization's treatment infrastructure. 16

While the management of a health care facility's treatment infrastructure is a vital component of providing highquality care, quality assurance and quality improvement measures are equally as important.¹⁷ Medical directors must constantly collect and analyze data if they are to make real-time, strategic decisions regarding the provision of health care. 17,23 Feedback from patients, staff, and health care providers is a medical director's greatest tool for assessing the quality of health care that is practiced within their health care facility. 17,24 Additionally, metrics such as medical errors, citations of unprofessional behavior, and patient outcomes are all useful for quality assessment. 17,25,26 Data collection, while intended to improve patient care, must be conducted tactfully to avoid alienating providers and staff. If not, one may harbor a sense of distrust between the medical director and his constituents.¹⁷

Quality improvement is a highly contentious process given its potential to disrupt existing norms within an organization.^{17,27} Frequently, quality improvement is met with significant resistance due to the personal nature of health care provision and employees' previous experiences of failed quality improvement measures.²⁸ Practices such as employee engagement, active listening, and effective communication are all key for the implementation of quality improvement measures within a health care facility. 15,29,30

Finally, directors are responsible for ensuring that an organization's treatment infrastructure, providers, and staff are compliant to all rules and regulations in regard to facility credentialing. ^{6,8,31} This process poses numerous problems as

oftentimes there stands a significant disconnect between hospital administration and employees.^{17,31} To overcome these obstacles, directors must serve as a bridge between these two entities to optimize patient care. 17,28 In addition, the number of rules and regulations increases with the size of the health care facility. 19,28,31 Directors, particularly those practicing within large hospital systems and academic medical institutions, must be highly vigilant in understanding and enforcing regulations.31

A director must be equipped with the proper tools to find success in their administrative duties. Directors, particularly those new to medical leadership, may benefit from undergoing formal education and training. Acquiring advanced degrees, such as a Master of Healthcare Administration (MHA), will educate the director on the intricacies of health care administration and arm them with the necessary leadership skills to be successful.³² Directors seeking additional leadership training may enroll in courses provided by the American Association for Physician Leadership.

Research and Innovation

Medical advancements in the forms of research and technological innovation are the driving forces behind improving the way medicine is practiced throughout the world.³³ While many ideas with the potential to change medicine are generated by innovative minds, most remain a concept and never come to fruition. Many of these innovative thinkers lack the capital or infrastructure to conduct research or develop products.^{34,35} In fields with high barriers to entry, such as health care, strong leadership is needed to support the innovative minds of health care providers, scientists, and engineers.^{34,36} Medical directors are often responsible for developing the infrastructure in which innovative minds may advance the field of medicine through research and product development.^{23,37}

The procurement and allocation of funding is one manner in which medical directors can facilitate the processes of research and product development.³⁴ Funds can be utilized to conduct individual ventures or improve research and development. The process of securing funding varies greatly between large-scale health care institutions and industry. For example, medical directors serving within academic institutions primarily utilize institutional grants.³⁴ In this setting, the ability to network and articulate the importance of funding to fellow colleagues is essential to its procurement. 38,39 Conversely, medical directors serving in industry will frequently seek funding from private investors.⁴⁰ Seeking capital from investors in the private sector requires a different approach than seeking funding from institutional grants. Medical directors serving in industry are tasked with selling an idea's medical and financial potential to individuals who may be less savvy in the medical sciences. 40,41

Financial

The financial success of a health care facility is the primary determinant of how the facility is run. Many health care facilities face unyielding pressure from competitors necessitating that medical leaders have a thorough understanding of the fundamental principles of business. 42,43 Economic entities within the health care industry, such as competitors, suppliers, and consumers directly impact the profitability of an organization.⁴⁴ As such, medical directors must determine what role their organization plays within the theater of health care.²³ Additionally, medical directors must be able to objectively assess the strengths and weaknesses of their organization as well as those of their competitors. With this knowledge, medical directors can practice strategic decision-making and act proactively to thrive in the everevolving health care industry. 45 The acquisition and divestiture of a health care facility's assets is an essential part of increasing its profitability. Using strategic decision-making, a medical director can identify and acquire assets that provide synergy with their organization while liquidating assets that are detrimental to its valuation. 46-48 Ultimately, this process can increase the valuation of their organization and facilitate the procurement of funding from outside investors.47,48

One of the major limitations of medical education is its failure to teach physicians the intricacies of business within the health care industry. As such, physicians interested in serving as medical directors will greatly benefit from obtaining advanced degrees such as a Master of Business Administration (MBA). In addition to acquiring financial prowess, individuals with an MBA are trained how to effectively communicate, strategically manage employees, and tactfully market their organization. An Executive Master of Business Administration is an excellent option for physicians who wish to continue practicing while obtaining an advanced degree. These advanced training programs are

catered toward those who are unable to enroll in full-time courses.⁵⁴

Why Become a Medical Director?

The director position stipulates that physicians dedicate significant amounts of time and energy in addition to their clinical responsibilities. Directors across all landscapes in medicine take on the added responsibility because of their innate desire to improve the way health care is conducted within their health care facility.

In addition to the intrinsic gain associated with the position, directors are frequently rewarded for their service through unique opportunities and compensation. 55-57 Medical directorship provides individuals who undertake this position with an exclusive perspective into the field of medicine that most physicians and executives are not exposed to.^{2,3,47,51} In addition, directors are able to more effectively network than physicians not involved in medical leadership. These, along with the ever-increasing demand for physician leadership, make the director role a natural step toward attaining higher-level medical leadership positions.^{2,47} Financial compensation is frequently provided to directors for their service to their organization.^{55–57} Directors in all landscapes of medicine may be compensated with additional salary for their contributions. In industry, directors may alternatively be compensated with equity in the company in which they serve.⁴¹ While extrinsic motivators such as these may provide additional motivation for the director to perform, it is important that directors be mindful of any potential conflicts of interest to make decisions without bias.58

Conclusion

The medical director position provides unique opportunities to health care providers who desire to serve their organization through medical leadership. While the intricacies of this position vary greatly across different landscapes of the health care industry, successful medical directors lead by following a set of universal principles predisposing them for success. Plastic surgeons innately exhibit a subset of particular traits deeming them suitable candidates for the medical director position. While transitioning from the role of a surgeon to that of a medical director does require some show of adaptation, plastic surgeons are ultimately highly likely to find intrinsic benefit from serving as a medical director.pt

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Conflict of Interest None declared.

- 1 Weber DO. Physicians lead the way at America's top hospitals. Physician Exec 2001;27(03):24-29
- 2 Fielden J. A medical director's perspective on healthcare leadership. Future Hosp J 2015;2(03):190-193
- 3 Clay-Williams R, Ludlow K, Testa L, Li Z, Braithwaite J. Medical leadership, a systematic narrative review: do hospitals and healthcare organisations perform better when led by doctors? BMJ Open 2017;7(09):e014474
- 4 Weintraub P, McKee M. Leadership for innovation in healthcare: an exploration. Int J Health Policy Manag 2019;8(03):138-144
- 5 Belrhiti Z, Nebot Giralt A, Marchal B. Complex leadership in healthcare: a scoping review. Int J Health Policy Manag 2018;7 (12):1073-1084
- 6 Cutter TW. The role of the medical director. Ambul Surg 2005; 12:7-9
- 7 Taylor CA, Taylor JC, Stoller JK. Exploring leadership competencies in established and aspiring physician leaders: an interview-based study. J Gen Intern Med 2008;23(06):748-754
- 8 Johnston IH. What will the medical director do? BMJ 1991;302 (6771):280-281
- 9 Saha S, Wish JB. Leading the dialysis unit: role of the medical director. Adv Chronic Kidney Dis 2018;25(06):499-504
- 10 Eagle C. Physicians at the executive table. Healthc Manage Forum 2016;29(01):15-18
- 11 Verheyden CN, Levin LS. Plastic surgery leadership in an institution: a primer. Plast Reconstr Surg 2010;125(06):1819-1825
- 12 Addona T, Polcino M, Silver L, Taub PJ. Leadership trends in plastic surgery. Plast Reconstr Surg 2009;123(02):750-753
- 13 Neumeister MW. Can a plastic surgeon be a department chairman?...really? Handchir Mikrochir Plast Chir 2016;48(02):
- 14 Pu LL, Mirmanesh M. The role of plastic surgery at an academic medical center in the United States. Ann Plast Surg 2017;78(05):
- 15 Lowe G. How employee engagement matters for hospital performance. Healthc Q 2012;15(02):29-39
- 16 Kossaify A, Rasputin B, Lahoud JC. The function of a medical director in healthcare institutions: a master or a servant. Health Serv Insights 2013;6:105–110
- 17 Dixon-Woods M, McNicol S, Martin G. Ten challenges in improving quality in healthcare: lessons from the Health Foundation's programme evaluations and relevant literature. BMJ Qual Saf 2012:21(10):876-884
- 18 Merrill DG. Practice management/role of the medical director. Anesthesiol Clin 2014;32(02):529-540
- 19 Giancotti M, Guglielmo A, Mauro M. Efficiency and optimal size of hospitals: Results of a systematic search. PLoS One 2017;12(03): e0174533
- 20 Scuffham PA, Devlin NJ, Jaforullah M. The structure of costs and production in New Zealand public hospitals: an application of the transcendental logarithmic variable cost function. Appl Econ 1996;28:75-85
- 21 Vargas HD. Private practice for the colon and rectal surgeon. Clin Colon Rectal Surg 2006;19(03):119-128
- 22 Gabel S. The relationship between the medical director and the executive director: guidelines for success. Psychiatr Q 2011;82 (01):23-31
- 23 Pawlecki JB, Burton WN, Christensen C, et al; ACOEM Corporate Medical Directors Section Task Force. Role and value of the corporate medical director. J Occup Environ Med 2018;60(05): e215-e226
- 24 Baines R, Regan de Bere S, Stevens S, et al. The impact of patient feedback on the medical performance of qualified doctors: a systematic review. BMC Med Educ 2018;18(01):173
- 25 Sullivan C, Murano T, Comes J, Smith JL, Katz ED. Emergency medicine directors' perceptions on professionalism: a Council of

- Emergency Medicine Residency Directors survey. Acad Emerg Med 2011;18(Suppl 2):S97-S103
- 26 Medical errors: focusing more on what and why, less on who. J Oncol Pract 2007;3(02):66-70
- 27 Davies H, Powell A, Rushmer R. Why don't clinicians engage with quality improvement? J Health Serv Res Policy 2007;12(03): 129-130
- 28 Taitz JM, Lee TH, Sequist TD. A framework for engaging physicians in quality and safety. BMJ Qual Saf 2012;21(09):722-728
- 29 Jeve YB, Oppenheimer C, Konje J. Employee engagement within the NHS: a cross-sectional study. Int J Health Policy Manag 2015;4 (02):85-90
- Jahromi VK, Tabatabaee SS, Abdar ZE, Rajabi M. Active listening: The key of successful communication in hospital managers. Electron Physician 2016;8(03):2123-2128
- 31 Forster AJ, Turnbull J, McGuire S, Ho ML, Worthington JR. Improving patient safety and physician accountability using the hospital credentialing process. Open Med 2011;5(02):e79-e86
- 32 Shaikh A, AlTurabi L, West DJ Jr. Developing a successful master of health administration student mentor-mentee program. Health Care Manag (Frederick) 2016;35(01):47–57
- 33 Silva PJ, Ramos KS. Academic medical centers as innovation ecosystems: evolution of industry partnership models beyond the Bayh-Dole Act. Acad Med 2018;93(08):1135-1141
- 34 Gottlieb M, Lee S, Burkhardt J, et al. Show me the money: successfully obtaining grant funding in medical education. West J Emerg Med 2019;20(01):71-77
- 35 McKiernan EC, Bourne PE, Brown CT, et al. How open science helps researchers succeed. eLife 2016;5:e16800
- 36 Levinson MJ, Musher J. Current role of the medical director in community-based nursing facilities. Clin Geriatr Med 1995;11 (03):343-358
- 37 Stein D, Chen C, Ackerly DC. Disruptive innovation in academic medical centers: balancing accountable and academic care. Acad Med 2015;90(05):594-598
- 38 Ebadi A, Schiffauerova A. How to receive more funding for your research? Get connected to the right people!. PLoS One 2015;10 (07):e0133061
- 39 Monte AA, Libby AM. Introduction to the specific aims page of a grant proposal. Acad Emerg Med 2018;25(09):1042-1047
- 40 Lehoux P, Miller FA, Daudelin G. How does venture capital operate in medical innovation? BMJ Innov 2016;2(03):111-117
- 41 Leytes LJ. Raising venture capital in the biopharma industry. Drug Discov Today 2002;7(22):1125-1127
- Goddard M. Competition in healthcare: good, bad or ugly? Int J Health Policy Manag 2015;4(09):567-569
- 43 Collins-Nakai R. Leadership in medicine. McGill J Med 2006;9 (01):68-73
- 44 Porter ME. Industry structure and competitive strategy: keys to profitability. Financ Anal J 1980;36:30–41
- 45 Kettelhut MC. Strategic requirements for IS in the turbulent healthcare environment. J Syst Manag 1992;43:6-9
- 46 Lazarus A. The human factor in mergers and acquisitions: a personal story. Psychiatr Serv 2000;51(01):19-20
- 47 Harvin A, Griffith N, Weber RJ. Physicians as executives: opportunities and strategies for health-system pharmacy leaders. Hosp Pharm 2014;49(10):985-991
- 48 Gagnon MA, Volesky KD. Merger mania: mergers and acquisitions in the generic drug sector from 1995 to 2016. Global Health 2017; 13(01):62
- 49 Sawyer NT. In the U.S. "healthcare" is now strictly a business term. West J Emerg Med 2018;19(03):494-495
- 50 Parekh SG, Singh B. An MBA: the utility and effect on physicians' careers. J Bone Joint Surg Am 2007;89(02):442-447
- Turner AD, Stawicki SP, Guo WA. Competitive advantage of MBA for physician executives: a systematic literature review. World J Surg 2018;42(06):1655-1665

- 52 Harolds JA. Tips for leaders, part II: leading a private practice physician group. Clin Nucl Med 2011;36(09):786–787
- 53 Shah ED, Allen JI. How to become a physician executive: from fellowship to leadership. Gastroenterology 2018;154(04):784–787
- 54 Maykel JA. Leadership in surgery. Clin Colon Rectal Surg 2013;26 (04):254–258
- 55 Elon R. The nursing home medical director role in transition. J Am Geriatr Soc 1993;41(02):131–135
- 56 Katz P, Karuza J, Parker M. A national survey of nursing home medical directors. J Med Dir 1992;1:81–94
- 57 Jones ER, Goldman RS. Managing disruptive behavior by patients and physicians: a responsibility of the dialysis facility medical director. Clin J Am Soc Nephrol 2015;10(08):1470–1475
- 58 Anderson TS, Dave S, Good CB, Gellad WF. Academic medical center leadership on pharmaceutical company boards of directors. JAMA 2014;311(13):1353–1355