

Commentary

# Covid-19 has made clear why all physicians need to know about the business of healthcare

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#### **Abstract**

Amid longstanding recognition that healthcare challenges are often managerial, not just clinical, many have called for greater attention to developing physicians' business management abilities. However, the Covid-19 pandemic has amplified the urgency of building physicians' business knowledge and skills—from understanding health economics and finances to managing dynamics of collaborative leadership and change—in order to respond to pandemic-induced business challenges that threaten healthcare organizations. Unfortunately, existing efforts to develop these critical skills among physicians remain limited, focusing primarily on early-career physicians-in-training or later-career physicians in formal leadership positions. These efforts leave a wide swath of frontline physician leaders "in the middle" without systematic resources for developing their business management abilities. We advocate for several key changes to professional practices and policies to help bring business of health knowledge and skills to the foreground for all physicians, both in the pandemic and beyond.

#### **Keywords**

Business of healthcare, physician education, management, leadership

Whether chairing a department, managing a practice, or directing a team of other healthcare professionals, all physicians serve in formal or informal leadership capacities throughout their careers, influencing decision-making across a range of healthcare settings. Through their clinical knowledge and experience, physicians bring a unique frontline perspective to healthcare decision-making, reflecting the significant effort expended across their training, continuing education, and professional development to hone this clinical expertise. However, some of the most central and enduring challenges to delivering safe, reliable patient care—and to delivering safe care during the Covid-19 pandemic in particular—are more organizational than clinical.<sup>1,2</sup> requiring effective business management abilities ranging from understanding health economics, finances and medical supply chains to coordinating cross-functional teams and leading organizational change.

Yet, despite calls for greater attention to these business management and leadership abilities,<sup>3–9</sup> they are

unfortunately still often missing from physicians' training and educational experience. Prior efforts to address physicians' limited exposure to business topics have tended to focus narrowly on one particular group of physicians (often early-career trainees or later-career physicians in formal leadership positions), leaving the majority of physicians "in the middle" with limited opportunities for developing these abilities. Healthcare

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organizations and professional associations offer some sporadic, voluntary opportunities for building management competence, but the absence of required, profession-wide education betrays a view of these skills and knowledge as optional "nice-to-haves," rather than essential abilities.

The Covid-19 pandemic has upended this assumption, elevating the lack of widespread physician business knowledge and skills from a simmering concern to a looming threat. As the pandemic continues to require physicians and other healthcare professionals to expand the bounds of their clinical knowledge and abilities, it also presents a host of challenges to the functioning of healthcare organizations, requiring effective business and management acumen from physicians. These challenges include evolving operational needs (such as deploying personal protective equipment, expanding telemedicine, and shifting resources to a rapidly growing volume of Covid-19 patients), mounting financial strain (due to high fixed costs, low reserves, and collapsing patient volumes and revenue for many types of care not related to Covid-19), and increasingly complex staffing and care coordination demands (involving highly interdependent care teams and the re-deployment of care providers from various specialties into Covid-19 units). 2,10,11

Though it may be tempting to categorize these challenges as outside physicians' purview, they are fundamentally intertwined with the actions and decisions made by physicians every day in delivering patient care, regardless of their practice setting. Even in large hospitals and healthcare systems with full-time administrators (who may be fairly far-removed from day-today patient care), physicians serve as frontline leaders of clinical care-delivery microsystems and are uniquely situated to influence patient care outcomes through not only their medical expertise, but also their managerial abilities. 4 As a result, physicians' clinical knowledge is necessary, but insufficient, for delivering effective healthcare, especially in the peri- and post-Covid era. Now more than ever, physicians must be armed with essential business capabilities to ensure that decisions best serve the well-being of both their patients and organizations. The pandemic presents both an opportunity and an imperative for making meaningful changes to organizational practices and professional policies to prioritize systematic education in the business of healthcare for all physicians. Physicians will be at the center of efforts to manage the myriad changes and adaptations that will be required in their healthcare organizations in the wake of the pandemic, and expertise in the business of healthcare can help determine which organizations survive this pandemic, and which do not.

## Why physicians should know about the business of healthcare

Though many in healthcare equate "business" with "money," business knowledge and skills encompass more than just understanding health economics or finance—these domains are only one side of the proverbial "coin" of the business of healthcare. The other side of the coin includes knowledge of the organizational dynamics necessary to produce reliable patient care outcomes by coordinating actions, designing processes and practices, and motivating cross-functional teams-fundamental skills studied and taught for decades in business schools.8 Indeed, whether battling Covid-19 or engaging in "normal" patient care, most physicians work as part of an organization (from a small practice to a large healthcare system) and can benefit from enhanced skills in organizing and leading teams, particularly across professional boundaries. 12 These organizing abilities (or lack thereof) remain oft-cited as contributing factors in root-cause analyses and evaluations of adverse patient care events, while exceptional team leadership and collaborative management are often lauded for catching critical errors or rescuing patients from potential harm.

On the financial side of the "coin," building an understanding of how healthcare is structured and financed—and likely re-structured and re-financed in the aftermath of the pandemic<sup>11</sup>—can arm physicians with new tools to improve patients' well-being. Better managing the escalating costs of healthcare was already an area of emphasis for health systems worldwide before the pandemic, and physicians' efforts to evaluate clinical decisions in terms of their relative costbenefit impact can help ease patients' financial burden. The specifics of healthcare finance vary considerably across settings, and physicians are certainly not responsible for understanding the entire financial structure of healthcare (nor should finances always influence clinical decisions). However, just as internists need general knowledge of surgical management in order to help patients understand what to expect when referring them for surgical procedures, building an awareness of how financial considerations are intertwined in the delivery of care helps physicians pursue the aims of improved care, health, and cost.

Developing these organizational and financial abilities enables more effective management of healthcare organizations and directly influences patient care outcomes, with research from hospitals around the world repeatedly demonstrating strong associations between better management practices and clinical care quality. Arming physicians with both clinical skills and business knowledge can advance the quality and value of care delivery, as this combined expertise allows

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physician leaders to ensure that key clinical outcomes are not compromised when making difficult operational and managerial decisions, nor vice-versa. For example, the leaner staffing and low-inventory supply models deployed by many hospitals and health systems may have seemed valuable from a business-only perspective, but left clinicians under-resourced (in terms of staff and equipment) to handle the initial waves of patients in the Covid-19 pandemic. At the same time, ordering extraneous tests, prescriptions, or instruments "just in case" may seem reasonable for the clinical care of a particular patient, but have significant business ramifications (e.g., supply shortages, expense overruns, or resource coordination issues) that can impede the organizations' ability to care for other patients – a critical challenge that has been seen in many domains (e.g., ventilator allocation) during the pandemic.

# Current efforts and barriers for educating physicians in the business of healthcare

Though knowledge about the business of healthcare is needed by all physicians, opportunities and encouragement for gaining this knowledge remain limited. For instance, a large share of existing efforts to develop business knowledge and skills are aimed at medical students or senior physicians in formal leadership roles (see Box 1). These are well-intentioned steps in the right direction, but by focusing on early- and latecareer physicians, these initiatives leave a wide swath of physicians in the prime of their career lacking systematic opportunities to develop knowledge and skills in the business of healthcare. There has been encouraging growth in the number of management and leadership programs offered to a wider range of physicians, with many positive outcomes reported. 15 However, these programs are frequently characterized by a very narrow focus (i.e., within one particular institution or focused on one specific medical specialty), substantial

variation in design and instruction, and lack of grounding in consistent frameworks, models, or theories. <sup>15–17</sup> Borrowing more clinical language, these efforts thus seem to merely provide a haphazard set of tools for managing the symptoms of managerial challenges in healthcare, rather than generating systematic knowledge for treating their underlying causes.

These sorts of isolated and inconsistent approaches are emblematic of several key barriers to implementing systematic, evidence-based business education for physicians. For instance, many of these existing efforts are optional or voluntary (or tied to the transition from a clinical to administrative role), and because the evidence linking these business of healthcare skills to improved care outcomes is not widely disseminated among physicians, time spent on developing these skills may be viewed as detracting from opportunities to improve valuable clinical skills. These concerns rest on a broader barrier to adoption—a more deeply rooted cultural skepticism of business and management among some physicians, who view these practices as conflicting with their clinical responsibilities.<sup>3</sup> The medical profession's historical focus on autonomy, rigid hierarchy, and individual performance evaluation (vs. systemic change or collective improvement) can lead some physicians to view efforts to improve team collaboration, coordinate resource use, or streamline organizational processes as a threat to their identity or practice as physicians.<sup>3,18</sup> Moreover, many physicians may have been overtly or inadvertently encouraged during their training and practice to eschew business concepts, in order to avoid the risk of biasing or contaminating clinical decisions with business considerations.

## Expanding business of healthcare education in the wake of Covid-19

Despite these potential barriers, there is clearly substantial interest in, and mounting evidence for,

Box I. Limited efforts to develop business of healthcare knowledge and skills.

- Many have pointed to the growing availability of joint MD-MBA programs as a solution to the lack of business knowledge among physicians.<sup>8</sup> However, joint MD-MBA graduates represent a very small fraction of medical graduates (numbering far fewer than those graduating MD-PhD or MD-MPH programs),<sup>6</sup> and these programs can be perceived by students as more relevant for those pursuing careers outside of clinical practice (such as biotechnology, finance, or entrepreneurial careers). Moreover, the added time required to obtain this joint degree (relative to a standard MD curriculum) can be a deterrent to students facing an already-long education and training path. Very few medical schools or residency programs include management education directly in their required curricula for all physicians-in-training.<sup>3</sup>
- At the other end of the career spectrum, prior efforts have also focused on business training for senior physicians in formal leadership roles in large healthcare organizations (or those preparing to enter such roles). For instance, many institutions and professional associations have implemented leadership development programs for those entering unit- or department-level leadership positions, but these positions are small in number, and tend to come later in physicians' careers—after already developing management skills "on the job" through intuition or trial-and-error as informal leaders.

increasing physicians' knowledge and skills in the business of healthcare. As the healthcare landscape is being fundamentally reshaped by Covid-19, 11 the value of physicians possessing strong business capabilities has increased significantly, 2,10 while the cultural barriers to their adoption seem decreased. Indeed, the pandemic represents an inflection point for the healthcare industry, likely sparking greater tolerance for change and motivation to ensure issues related to the business of health don't catch physicians flat-footed in the future. These changes provide a critical opportunity to incorporate education about the business of healthcare more firmly into the practice of medicine as it is re-invented going forward.

Healthcare organizations can take a variety of actions to better incorporate physician education in the business of healthcare (see Box 2), including investing in opportunities for training and education on business topics, as well as aligning incentives and evaluation criteria to reward the attainment and application of business abilities such as operational efficiency or effective team leadership. In doing so, these organizations can combat the disorganized, disconnected nature of existing physician management and leadership training efforts by drawing on the expertise of faculty researching these topics in university business schools. Driven by the growing influence of healthcare on the global economy, business of healthcare courses

are becoming more common at many business schools, including both short executive courses and flexibleformat MBA programs for physicians. Yet, a review of physician leadership development programs at academic health centers reveal that they are more often taught by clinical medicine faculty and leadership consultants than by business school faculty. 17 Again borrowing clinical language, physicians and medical school faculty no doubt have experience living with the symptoms of business challenges in healthcare, but business school faculty (alongside scholars studying related topics in schools of medicine and public health) draw from decades of academic research conducted on management and leadership to help identify underlying diagnoses and treatments of these issues. This researchdriven approach allows physicians to learn from the evidence and insights of these outside business disciplines, rather than trying to "reinvent the wheel" through insular, medicine-specific interventions.<sup>19</sup>

Increasing these organization-level investments can not only help physicians develop the necessary business knowledge and skills to tackle the immediate challenges imposed by the pandemic, but also provide a necessary step towards integrating business concepts more centrally in the culture and practice of medicine. Yet these organizational efforts are unlikely to succeed in this integration without broader policy changes within the medical profession (see Box 2). Professional bodies can

**Box 2.** Changes to organizational practices and profession-wide policies to expand physician education in the business of healthcare.

- Individual healthcare organizations can help prepare themselves for the new post-pandemic reality by directly investing in business training for their physicians, putting these investments on par with their investment in physicians' clinical training. The evidence is clear that time and resources spent on developing these business skills generate a significant return for patient outcomes, provider well-being, and organizational operations. Healthcare organizations can also make changes to better signal that these skills are valued—such as selecting individuals for advancement and leadership openings on the basis of their business management abilities, rather than only their clinical or research skills, or assessing and rewarding skills such as team leadership or financial stewardship on annual performance evaluations. For instance, shifting evaluation criteria from typical individualistic models to ones based on team-level achievement of patient care or operational outcomes would incentivize physicians to pursue opportunities to improve their business abilities, adding to their skillset in ways that can improve patient care outcomes.
- Professional associations and accrediting bodies have placed greater emphasis on leadership and management capabilities in recent years as desired competencies for 21st century health professionals.<sup>21</sup> However, these broad espoused values do not always make their way into the core cultural beliefs and actions of physicians, because they are not reinforced to the same extent as clinical competencies (i.e., via measurement, assessment, and repeated communication from more senior physicians and professional leaders). The Covid-19 pandemic provides leaders of medical professional associations and accrediting bodies with an opportunity to re-evaluate physician appraisal and certification processes,<sup>20</sup> and in particular how business of healthcare competencies can be more thoroughly enacted among physicians (across all specialties and career stages). For instance, professional associations can publish specific guidelines and progressive benchmarks of business knowledge and capabilities that are expected at different stages of physicians' careers (and incorporate these progressive benchmarks into continuing medical education). Mirroring the attention given to clinical skill development and maintenance of certification throughout a physician's education and practice, these standards should be assessed in layered, multi-stage qualification processes—including preliminary demonstration of competence, opportunities for advanced, focused training, and ongoing education and recertification requirements.

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harness this pandemic-induced moment of reflection to introduce new standards and evaluation criteria, 20 incorporating skills and knowledge in the business of healthcare alongside clinical abilities in physician assessment and continuing education. In creating these assessments and standards, it will be necessary for associations and professional bodies to make sure they are applied for all physicians—not just those who are interested in formal leadership positions. Considering business training as necessary only for those pursuing an "alternate" career path as a physician leader/executive overlooks the reality that "to be a physician is to lead," and fails to provide necessary training for physicians serving in critical front-line (but informal) leadership roles.

#### **Conclusion**

Covid-19 has not only raised significant clinical challenges but has also confronted healthcare organizations and professionals with unprecedented financial, operational, and leadership challenges. Recovering from the effects of the pandemic will require physicians to wrestle with these dual clinical and managerial challenges, and increased knowledge of the business of healthcare will aid in responding to these challenges and charting a new course for reliable and resilient healthcare through the pandemic and beyond.

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All authors actively contributed to the conceptualization, writing, and revising of the article. CGM is the guarantor of the article.

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#### References

- Ramanujam R and Rousseau DM. The challenges are organizational not just clinical. J Organiz Behav 2006; 27: 811–827.
- Nembhard IM, Burns LR and Shortell SM. Responding to covid-19: lessons from management research. NEJM Catalyst 2020.

3. Blumenthal DM, Bernard K, Bohnen J, et al. Addressing the leadership gap in medicine. *Acad Med* 2012; 87: 513–522.

- Bohmer RMJ. Leading clinicians and clinicians leading. N Engl J Med 2013; 368: 1468–1470.
- Emanuel EJ. Enhancing professionalism through management. JAMA 2015; 313: 1799–1800.
- Myers CG and Pronovost PJ. Making management skills a core component of medical education. *Acad Med* 2017; 92: 582–584.
- Padula WV, McQueen RB and Pronovost PJ. Can economic model transparency improve provider interpretation of cost-effectiveness analysis? Evaluating tradeoffs presented by the second panel on cost-effectiveness in health and medicine. *Med Care* 2017; 55: 909–911.
- Pearl RM and Fogel Al. New physicians will need business school skills. NEJM Catalyst 2017.
- Rotenstein LS, Sadun R and Jena AB. Why doctors need leadership training. Harv Bus Rev 2018.
- Barnett ML, Mehrotra A and Landon BE. Covid-19 and the upcoming financial crisis in health care. NEJM Catalyst 2020.
- Cutler DM, Nikpay S and Huckman RS. The business of medicine in the era of covid-19. *JAMA* 2020; 323: 2003–2004.
- 12. Mayo AT. Teamwork in a pandemic: Insights from management research. BMJ *Leader* 2020; 4: 53–56.
- 13. Tsai TC, Jha AK, Gawande AA, et al. Hospital board and management practices are strongly related to hospital performance on clinical quality metrics. *Health Aff* (*Millwood*) 2015; 34: 1304–1311.
- Bloom N, Lemos R, Sadun R, et al. Healthy business? Managerial education and management in health care. *Rev Econ Stat* 2020; 102: 506–517.
- Frich JC, Brewster AL, Cherlin EJ, et al. Leadership development programs for physicians: a systematic review. J Gen Intern Med 2015; 30: 656–674.
- Hartley K. Untangling approaches to management and leadership across systems of medical education. BMC Health Serv Res 2016; 16: 180.
- Lucas R, Goldman EF, Scott AR, et al. Leadership development programs at academic health centers. *Acad Med* 2018; 93: 229–236.
- 18. Stoller JK. Developing physician-leaders: a call to action. *J Gen Intern Med* 2009; 24: 876–878.
- Myers CG, Sutcliffe KM and Ferrari BT. Treating the "not-invented-here syndrome" in medical leadership: Learning from the insights of outside disciplines. *Acad Med* 2019; 94: 1416–1418.
- Brown VT, McCartney M and Heneghan C. Appraisal and revalidation for UK doctors – time to assess the evidence. BMJ 2020; 370: m3415.
- 21. Frenk J, Chen L, Bhutta ZA, et al. Health professionals for a new century: transforming education to strengthen health systems in an interdependent world. *Lancet* 2010; 376: 1923–1958.