Worldwide Clinical Trials

Leadership in Oncology: The Culture of Improving Patient Outcomes

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Introduction:

Success in the clinic today requires much more than medical knowledge and clinical acumen. Leading clinicians possess diverse skill sets that enable them to be effective communicators, inspiring managers who can facilitate effective healthcare delivery. Studies have shown that these characteristics are associated with more productive work environments, improved patient outcomes, and an increase in the safety and success of care. These leadership skills are not always innate, though, and must be developed, not just in physicians but in all members of a multidisciplinary care continuum. This paper examines the characteristics and qualities of today's leadership styles and multidisciplinary teams in the context of oncology clinical care and looks at the benefits associated with cultivating those characteristics.

A well-established body of evidence across therapeutic areas consistently demonstrates that physician leadership is vital to the successful practice of medicine. In daily routine, clinicians lead patients through treatment regimens that impact symptom management, disease progression, and associated quality of life issues. Clinicians, with the assistance of other healthcare providers, manage follow-up care and provide a major source of medical knowledge and emotional support for patients, families, and caregivers. Emphasizing the importance of care coordination is highlighted in training programs, as physicians also lead residents and medical students through the hurdles and complexities of mastering the art of medicine.[1]

Medical knowledge and clinical rigor alone are not sufficient to become a successful healthcare provider in a complex system of care. Clinicians now require diverse skill sets to be effective communicators and leaders versed in emotional intelligence, team building, interpersonal skills, change management, situational awareness, strategic planning ability, and an understanding of topics vital to medical management. Requisite skills include an understanding of the business of medicine, insurance reimbursement policies that ultimately dictate access to care, organizational culture, and office structure and dynamics. Physicians must be able to lead an integrated team towards a common goal and possess the ability to maintain efficient and consistent standards of quality of care.[1,2] The process is one of integrating and adjudicating patient, caregiver, and family expectations, tactfully handling egos and criticism, and navigating patients through potentially arduous, difficult, and ever-changing treatment regimens.

Training Programs Impact Quality Metrics

Excellent physician leadership has been shown to improve a diverse spectrum of healthcare metrics.[2] Healthcare facilities led by physicians show "Index of Hospital Quality" scores at least 25% higher compared to those without physician leadership.[3] Hospitals under the guidance of physician leaders tend to have reduced rates of infection and readmissions, enhanced patient satisfaction, better financial performance, and a higher likelihood of earning additional compensation from the Centers for Medicare and Medicaid Services.[4] Leadership by physicians can also result in more long-term operational effects, including positively impacting staff retention and reducing burnout rates.[5,6]

As in any organizational structure, though, not all physicians are innate leaders, and historically, physicians have often been insufficiently mentored in leadership during their extensive medical training.[7] Recently, leadership development programs have been instituted in an attempt to fill this gap. These programs strive to train physicians to become more effective leaders and thereby improve patient care.

For example, the LEADS framework, developed by Canadian healthcare professionals, consists of five domains (**L**ead self; **E**ngage others; **A**chieve results; **D**evelop coalitions; **S**ystem transformation) and 20 capabilities designed to foster good healthcare leadership practices.[2] Similarly, the UK's National Health Service (NHS) developed the Healthcare Leadership Model, with nine core dimensions to help healthcare practitioners become better leaders. These include leading with care, evaluating information, connecting services, engaging the team, inspiring shared purpose,

influencing for results, developing capability, and holding to account all healthcare professionals .[8] Another example can be found at the Vanderbilt School of Medicine. Its resident otolaryngology program includes public speaking training, a micro-MBA course, and a capstone leadership project, all designed to instill better leadership qualities in future physicians.[9]

Despite these excellent templates, there is currently no universal leadership training program for physicians. Yet, leadership training could have widespread benefits for improving healthcare operations if formally integrated into medical and residency training curricula. Formal training might include specialized lectures in medical school and residency, introductory workshops, and multi-year skill development programs with predefined proficiency benchmarks.[9] While this would increase the costs of medical training initially, it would overall be a cost-saving endeavor, enabling physicians to lead more efficient, effective, and streamlined practices — and, in the process, create a better working environment for support staff and deliver better patient experiences and outcomes. Such skills are particularly relevant in both integrated delivery networks (IDN) and accountable care organizations (ACOs), both of which emphasize program efficiency in the context of enhanced patient services.

Improving Quality of Care (Even More)

Quality of care is critical when pursuing high productivity levels within a healthcare organization. *Quality of care* here is defined as the extent to which the likelihood of reaching targeted health outcomes is increased and the extent to which it consistently reflects the professional knowledge and skills within health services.[10] Figure 1 illustrates the six characteristics that the Institute of Medicine describes as necessary for delivering high-quality care.[11]

Assessing quality of care requires measuring health outcomes, and assessment is ubiquitous across all therapeutic areas — particularly in oncology, given the extensive resources and expenses associated with these disorders. Researchers evaluating the effect of leadership on quality of care have found strong associations between effective leadership and productive work environments, positive patient outcomes, and increased safety and success of care provided. Sfantou et al. point out that effective leadership indirectly impacts reducing mortality rates by inspiring, retaining, and supporting an experienced staff.[10]

Although the data characterizing the most familiar leadership styles derives primarily from analyses of business and political structures, the descriptions are informative and may have implications for clinical care settings.[10] For example, certain familiar leadership styles may be more effective than others at strengthening the quality and integration of care:

- A *transformational* leadership style tends to nurture relationships and emphasize the motivation of staff members. Individuals exhibiting a transformational leadership style instill confidence, inspire staff respect, and engender loyalty by articulating a shared vision. As a result, staff productivity, morale, and job satisfaction increase.[10]
- A *relationship-oriented* leadership style also focuses on providing support, development opportunities, and recognition of achievements and a job well done.
- In contrast, leadership styles that are purely *transactional* or *task-oriented* may initially deliver measurable performance results but, in the context of total care when the services of other healthcare providers must be integrated, may subsequently fail to generate additional benefits. Additionally, there may be an adverse impact on the retention of experienced staff.

Figure 1: High-quality care is comprised of six key characteristics.

- Leadership styles that are primarily *laissez-faire* or *autocratic* may actively discourage staff members and cause well-qualified individuals to seek placements elsewhere, leading to poorer morale and clinical outcomes within the healthcare organization.

It is noted that the urgency of care and the acute interventional nature of care that might be mandated in certain environments frequently argue in support of a more directive and task-oriented style of leadership, though these environments may also function more effectively through time if the leader concurrently emphasizes the value of relationships, a shared vision, and the contributions of team members.

Oncology: Leading the Way

The field of cancer research has grown increasingly sophisticated, and today, it is at the forefront of rapidly introducing breakthrough technologies and innovation into clinical care. The implementation of novel targeted-therapy approaches, the development of sophisticated, biostatistically-based trial designs that can rapidly and efficiently determine benefit/risk, and the improvement of diagnostic and imaging approaches have led to significant improvements in patient outcomes and the ability to evaluate compounds with diverse pharmacological and biological properties. An important area of both patient and institutional success in this rapidly changing and dynamic environment has been the implementation of effective leadership within the clinic, supported by an organizational structure that facilitates efficiency across various services attendant to clinical care. This has gone beyond managerial responsibilities and towards a strategic long-term vision for creating a seamless multidisciplinary team (MDT) across oncologists, surgeons, radiation technologists, nurses, and allied health professionals for comprehensive patient management.

For decades, effective MDTs were hindered by a physician-dominant culture wherein the ideas and goals of the physicians (e.g., diagnoses and treatments) tended to take priority over supportive care provided by the non-physician members of the team. While physician-led tasks remain critical to patient success, it has become increasingly clear that collaborative multidisciplinary care is most beneficial for cancer patients. Non-physicians with healthcare or administrative services acumen have been shown to enhance quality of life, reduce hospital admissions, and improve overall patient satisfaction.[12-14] Effective leaders are able to facilitate better interprofessional collaboration and foster a more productive workplace focused on communication, respect, and teamwork.

Improving the lives of patients by lowering error rates

Carey et al. report that 1 in 8 (12.5%) patients receiving care for cancer believe that at least one error was made in their care process. Furthermore, more than half of those reporting an error indicated that they perceived the error to be either moderately or severely harmful. The researchers note that other studies have consistently shown that medical errors are usually associated with low levels of harm and raise questions about perspective. Alternatively, it is plausible that health professionals downplay the physical, emotional, and inconvenience factors that patients view as more significant.[16]

Challenges & Opportunities Faced by Oncology Leaders

The Healthineers division of Siemens[15] notes that most of the challenges faced by oncology leaders fall into three categories:

- *Cancer care silos and fragmentation*—lack of integration, coordination, and proper teamwork can deny patients access to the best possible care.
- *Limited team diversity, limited health equity*—a person's race, gender, socioeconomic status, or geography too often determine their chances of surviving cancer.
- *The sheer volume of cancer care information*—which presents both obstacles and opportunities.

Care providers and health systems must build on the best leadership styles to model effective approaches to overcoming these challenges in order to deliver the best care to as many patients as possible. How this might be done is explored below.

Equity, Diversity, and Inclusion in Cancer Care

The American Society of Clinical Oncology (ASCO) recently unveiled a 5-year plan to reduce the disparities seen in cancer care and outcomes. One point they raise is that cancer clinical trials do not accurately reflect the demographics of the United States. Only 4-6% of trial participants are African American and only 3-6% are Hispanic, though individuals of African American or Hispanic origin constitute, respectively, 15% and 13% of the U.S. population.[17] Similar concerns exist about the diversity of the healthcare workforce. African-American and Hispanic care providers represent only 3% and 5% of the workforce, respectively. Only 34.5% of all physicians in the US are female (and only 33% of all US oncologists).[18] Studies have shown that patients can have a better experience and improved outcomes when they can see something of themselves in their care providers.[19,20]

Cognizance of and respect for a patient's cultural and religious beliefs also plays an important role in connecting with patients and delivering better care. Physicians who understand the views of the patients they are seeing can deliver more equitable care. This approach fosters access to an increasingly diverse patient population and promotes the generation of more ideas by bringing forward different perspectives that might previously not have been considered. Studies have demonstrated that physicians from underrepresented minorities provide improved access to health care for underserved populations as well as improved accuracy in clinical decision-making, both of which lead to higher patient satisfaction and improved outcomes.[19,20] LaVeist cites studies connecting patient-physician race concordance with increased duration of patient office visits, a more satisfying experience in office visits, and an improvement in health outcomes.[20] Lastly, gains from diversity are often maximized when there is diversity at all levels of the institutional workforce, from high-level positions down to general support staff.

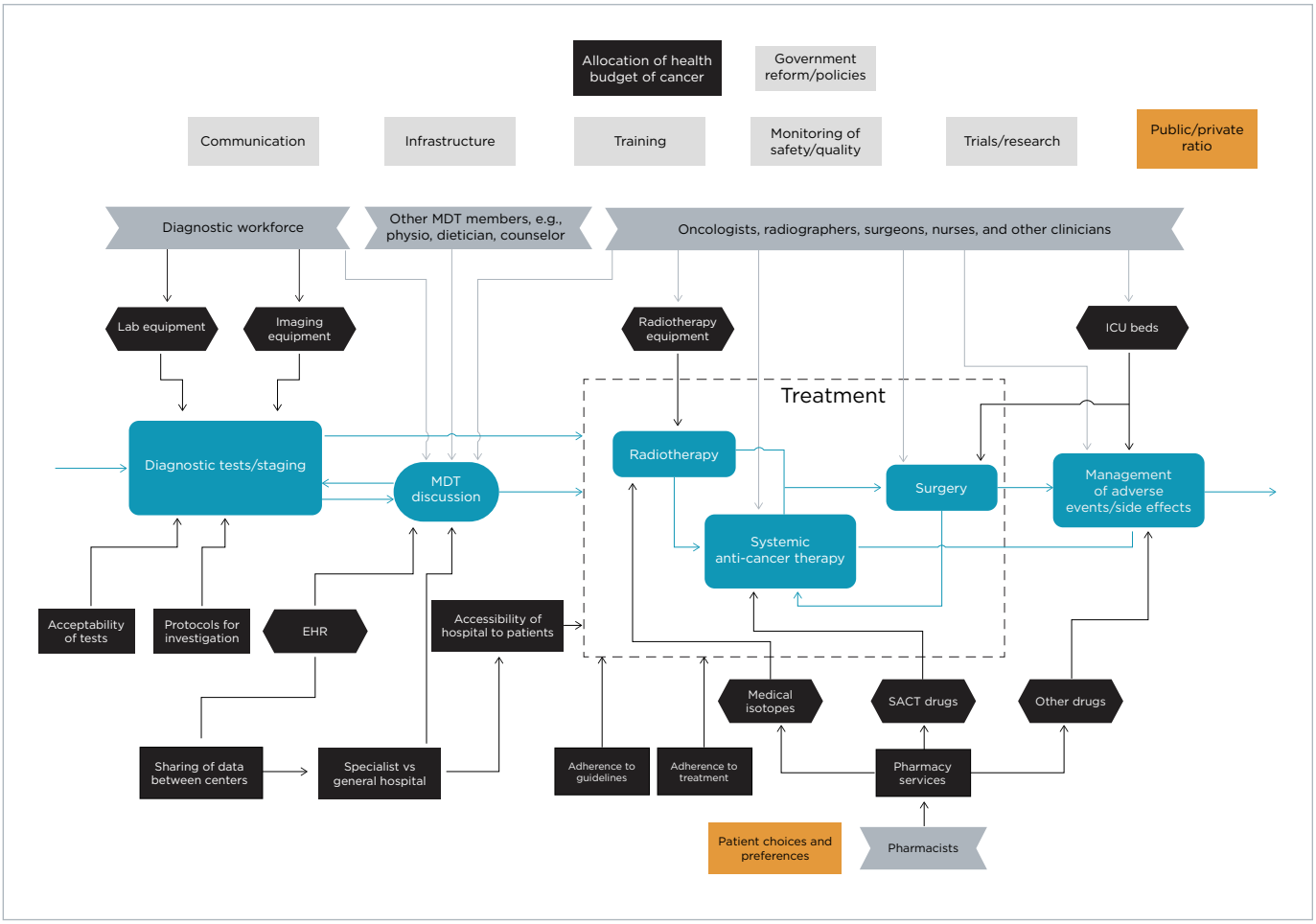

Figure 2: The Cancer Patient Journey (from Morris et al.).[21]

Care Coordination: Disentangling a Gordian Knot

Oncology care is often delivered by multiple providers representing a variety of disciplines and specialties. While this would seem appropriate, given, as Figure 2 outlines, the complexity of cancer care, the diversity of these efforts must be coordinated effectively.[22,23] There is always a risk that the efforts of individual specialists may become siloed, with critical insights, observations, and procedural records remaining inaccessible to others who are also trying to provide care. Such silos can lead to poorer outcomes and patient dissatisfaction.

Thus, providing better coordination through an MDT mediated by an oncology coordinator (see Figure 3) can limit the disconnection between providers and lead to more streamlined patient management. This requires multiple providers to work together closely, but the result can be the delivery of high-quality, highly coordinated care and improved outcomes.

As an example, one US study involving a cohort of 269 newly diagnosed urological cancer patients found that 65% of patients who had initially been diagnosed *outside* of a large health institution and were subsequently presented to an MDT had their diagnosis or treatment plans revised by the MDT.[25] Another study from the U.K. looking at patient outcomes both before and after the use of an MDT found a higher use of adjuvant chemotherapy and an increase in the 3-year survival of 8% for patients managed by an MDT.[26] In their analysis of clinical decision-making in multi-disciplinary cancer teams, Blazeby et al. noted that 41 of the 273 decisions made by the MDTs they reviewed were *not*

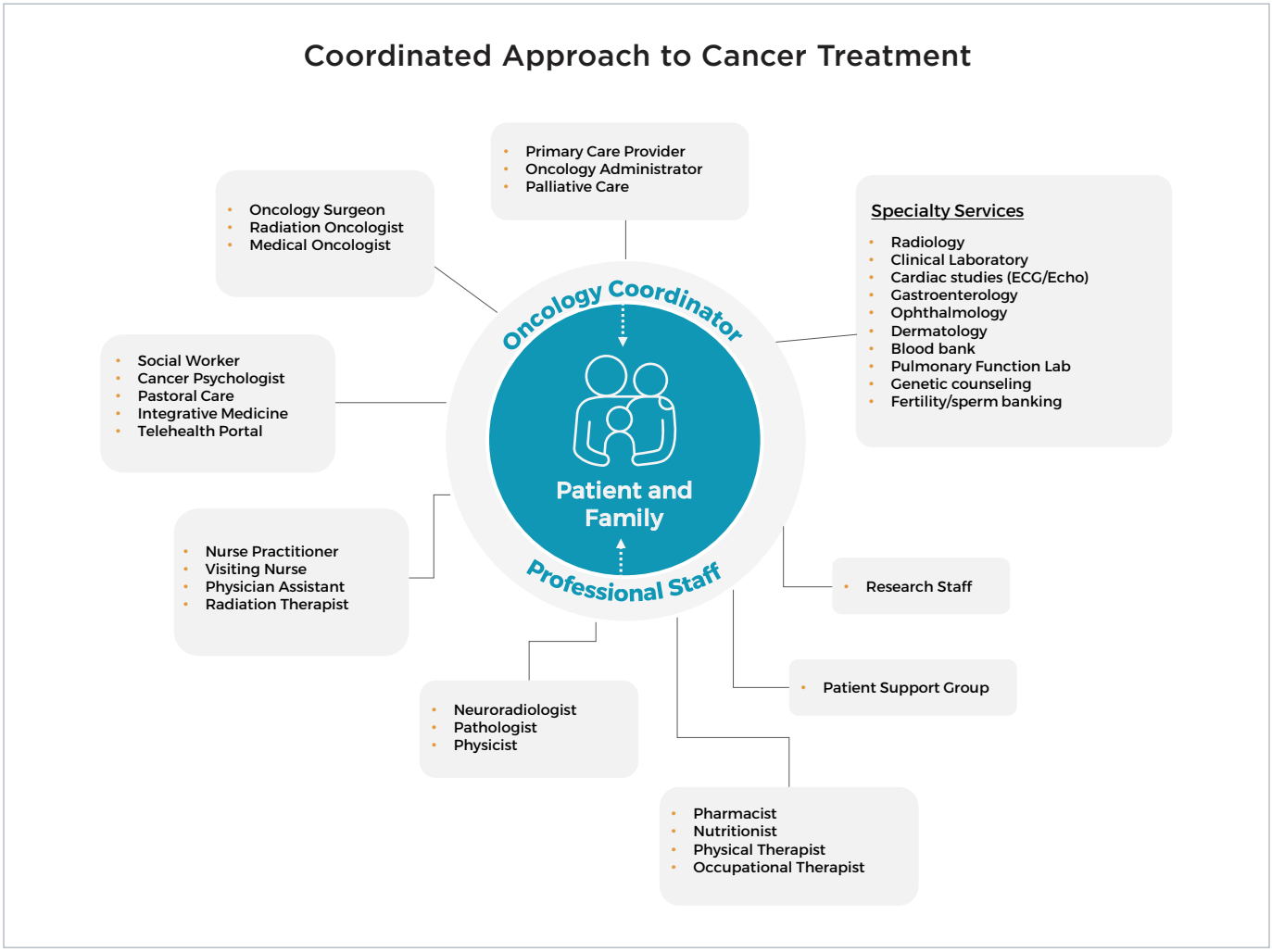

Figure 3: The patient and family are at the center of a coordinated approach to oncology care. Based on Weiderholt et al.[24]

implemented — primarily for reasons that appear to have arisen from insufficient coordination.[27] These decisions were most often not implemented because patients' co-morbid health status had been insufficiently considered when the decisions were made, because the patients' own wishes had not been taken into consideration in advance of the team's recommendation, or new information about patients' conditions came to light only after the decisions had been proposed.

Although MDT management of cancer patients generally improves patient outcomes, there are a number of barriers that prevent the full realization of these benefits. These barriers include insufficient facilities, time constraints, and systems that do not enhance interprofessional relationships. Without leadership actively supporting the individuals and the relationships comprising the MDT, the benefits of an MDT are likely to be limited. Having an MDT in small hospitals may also be particularly challenging, as all the required specialists necessary for an MDT may not be available in every treatment location, necessitating referral of patients to tertiary care or bespoke cancer care centers.

Conclusion

In today's complex environment, where cancer research and clinical care are deeply entangled, *who* treats you and *where* you are treated are prognostically important variables. Indeed, in the context of biostatistical analysis, which is attendant to research in oncology, the impact of location/staff is commonly taken into consideration to explain variance in outcome. Yet, the high costs of staff, technology, and treatments, not to mention the need for an organizational mandate, make coordination of cancer care difficult to manage. An experienced oncology leadership team must be at the forefront to implement changes based on a data-driven, evidence-based model, creating a culture that fosters cost-effective outcomes and enhanced quality care.

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