

ASSOCIATION OF CANCER EXECUTIVES UPDATE

JANUARY 2023 | www.cancerexecutives.org | ANNUAL MEETING DOUBLE ISSUE

WHAT'S INSIDE

PAGE 2

ACE 2023 Board of Directors

PAGE 3

Leadership Diversity and
Development in the Nation's
Cancer Centers

PAGE 12

Three Approaches for
Cancer Centers to Drive Access
and Efficiency

PAGE 13

Analyzing the Pandemic's Impact on
Clinical Trials & Healthcare Law

PAGE 15

The State of Cancer Centers in
2022: 3 Key Findings From New
Operational Survey

HAVE SOME NEWS TO SHARE?

Please send to Brian Mandrier at
brian@mandriergroup.com



Upcoming Events

IOLC VIENNA 2023

Call for Session Proposals open through March 1st!
Click [here](#) to submit your session proposal.

ACE NASHVILLE 2024

Save the Date for the 30th ACE Annual Meeting to be held
at the Grand Hyatt Nashville from February 5-7, 2024!



Reminders

LOOKING FOR A NEW OPPORTUNITY?

Be sure to visit the [ACE Job Board](#).

SEE YOU NEXT IN...



association of
cancer
executives

Connecting All
Oncology Leaders

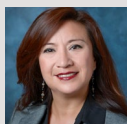
ANNOUNCING THE NEW 2023-2024 ACE BOARD OF DIRECTORS!



President

David M. Gosky, MA, MBA

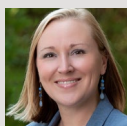
Executive Director - Administration
The Ohio State University
Comprehensive Cancer Center
Columbus, OH



President Elect

Cindy Chavira, MBA

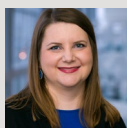
Executive Director
Samuel Oschin Comprehensive
Cancer Institute
Los Angeles, CA



Treasurer

Amber S. Campbell, MBA

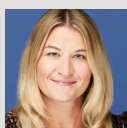
Chief Strategy Officer Sutter Health
Sacramento, CA



Secretary

Rebecca Stephens

Revenue Cycle Manager
UT Southwestern Medical Center
Dallas, TX



Immediate Past President

Mary-Kate Cellmer, MBA

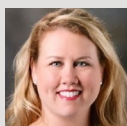
Administrator, Cancer Service Line
St. Luke's University Health Network
Easton, PA

Directors at Large



Melissa S. Childress, MBA

Chief Operating Officer
Seidman Cancer Center
University Hospitals Cleveland
Medical Center
Cleveland, OH



Ashley Kerr, MSN Associate

Director
MD Anderson Cancer Center
Houston, TX



Vanessa Bramble, MS, MBA, CRA, RT (R)(M), FACHE

Director, Network Development
Winship Cancer Institute
of Emory University
Atlanta, GA



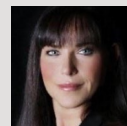
Kelley Simpson

Director/Leader
Chartis Oncology Solutions
Chicago, IL



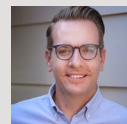
Mark Liu, MHA

Director, Strategic Initiatives
Mount Sinai Health System
New York, NY



Julia Williams

Regional Manager, Anatomic
Pathology & Community Outreach,
Ochsner LSU Health
Shreveport, LA



Brian J. Mandrier

Executive Director
Charleston, SC

Leadership Diversity and Development in the Nation's Cancer Centers

BY JEANNE KRAIMER, PRODUCT MARKETING MANAGER, MIDMARK RTLS

Looking to improve patient flow in your oncology center? Implementing [real-time locating system \(RTLS\) technology](#) can help streamline patient visits in the moment while also providing valuable data for process improvement. When both patients and staff wear locator badges that communicate with sensors installed in the environment, cancer centers can solve problems unique to oncology workflows. Here are a few of the benefits.

1) AUTOMATE PATIENT FLOW

RTLS allows you to view clinic operations in real time, so staff and providers no longer waste valuable time looking for patients and each other or checking for orders or meds. The software communicates key information such as patient location, room and chair availability, patient visit status and more. And it happens automatically. All patients and staff need to do is wear locator badges.

2) COMMUNICATE WITH PHARMACY IN A TIMELY MANNER

Medications are wasted if mixed before the patient is ready. Using RTLS software, a nurse can notify the pharmacy of a patient's readiness to undergo treatment with the push of a button. The pharmacy, in turn, can notify the nurse when the meds are prepared so no one needs to check again. Pharmacists and nurses can work together without interruptions and risk of waste because RTLS allows them to communicate more effectively.

3) FIND FAMILY WHEN YOU NEED THEM

It can be important for oncology care teams to know the patient's family and

where they are. This is crucial for pediatric oncologists. By assigning locator badges to families, providers can find them when needed so they can focus on the patient, saving everyone's time.

4) HELP CONTAIN THE SPREAD OF CONTAGIONS

Identifying everyone who may have been exposed to a contagion can be time-consuming and labor-intensive but is critical information for exposure containment. RTLS allows you to track interactions between badged patients, staff and equipment. Within minutes, contact tracing reports will reveal who (and what equipment) was exposed. 5.) Collect Data for Process Improvement At all times of the day, RTLS automatically conducts time studies by monitoring patient locations and interactions with staff. Patient care milestones, like wait times, "door-to-doctor" times, exam or treatment durations, overall length of stay, and more, are passively collected for analysis. In addition, RTLS monitors the utilization of rooms and chairs and can help identify where additional patients or providers can be scheduled.

A Midmark RTLS Success Coach will help interpret data and improve processes. Our coaches can identify the right metrics to improve the patient experience, enhance employee morale and influence best practices.

6) REDUCE WAIT TIME AND INCREASE PATIENT SATISFACTION

Understandably, cancer patients don't want to spend their time waiting. By passively and proactively monitoring patient wait times, RTLS cues staff to address problems as they arise, reducing

time spent in the waiting room or waiting for the next stage of care.

7) INCREASE STAFF SATISFACTION

Caregiver burnout is prevalent everywhere, but even more so in oncology. Staff not only deal with a large volume of patients but also with a wide range of patient and family emotions. There is no doubt that caregivers have a lot on their plate, but with the power of technology, it is possible to ease their burden.

With the seven benefits listed, RTLS allows staff to focus on practical activities rather than searching for colleagues, making phone calls and trying to track where patients or their families are located or where patients are in their treatment workflow. By automating tasks and improving communication, RTLS makes it easier to focus on what matters – patient care.

MORE TIME WITH PATIENTS, LESS ON LOGISTICS

Midmark RTLS has helped improve patient experience and caregiver workflow in numerous cancer centers by providing real-time data for enhanced in-the-moment operations. Our Customer Success team of clinicians and experienced healthcare administrators helps uncover the authentic patient experience – and unlike months-old patient satisfaction surveys, this data is available to help improve your workflow today.

Learn how Midmark RTLS can help your oncology center improve communication and patient flow by visiting booth 302 at the ACE Annual Meeting and midmark.com/oncology.

30TH ANNUAL ACE MEETING

NASHVILLE GRAND HYATT NASHVILLE

FEBRUARY 5-7, 2024 #ACE2024

WWW.CANCEREXECUTIVES.ORG

ace

Leadership Diversity and Development in the Nation's Cancer Centers

BY CARYN LERMAN, PHD,^{1*} CHANITA HUGHES-HALBERT, PHD,¹ MARY FALCONE, PHD,¹ DAVID M. GOSKY, MA, MBA,² ROY A. JENSEN, MD,³ KELVIN P. LEE, MD,⁴ EDITH MITCHELL, MD,⁵ KUNLE ODUNSI, MD, PHD,⁶ JENNIFER W. PEGHER, MA,⁷ ELISA RODRIGUEZ, PHD, MS,⁸ YOLANDA SANCHEZ, PHD,⁹ REUBEN SHAW, PHD,¹⁰ GEORGE WEINER, MD,¹¹ AND CHERYL L. WILLMAN, MD¹²

¹University of Southern California Norris Comprehensive Cancer Center, Keck School of Medicine, University of Southern California, Los Angeles, CA, USA; ²The Ohio State University Comprehensive Cancer Center, Ohio State University, Columbus, OH, USA; ³University of Kansas Cancer Center, University of Kansas, Kansas City, KS, USA; ⁴Indiana University Melvin and Bren Simon Comprehensive Cancer Center, Indiana University, Indianapolis, IN, USA; ⁵Thomas Jefferson University Kimmel Cancer Center, Philadelphia, PA, USA; ⁶University of Chicago Medicine Comprehensive Cancer Center, University of Chicago Medicine, Chicago, IL, USA; ⁷Association of American Cancer Institutes, Pittsburgh, PA, USA; ⁸Roswell Park Comprehensive Cancer Center, Buffalo, NY, USA; ⁹Norris Cotton Cancer Center, Dartmouth Geisel School of Medicine, Hanover, NH, USA; ¹⁰Salk Institute for Biological Studies, La Jolla, CA, USA; ¹¹Holden Comprehensive Cancer Center, University of Iowa, Iowa City, IA, USA; and ¹²Mayo Clinic Comprehensive Cancer Center, Mayo Clinic, Rochester, MN, USA
*Correspondence to: Caryn Lerman, PhD Director, USC Norris Comprehensive Cancer Center, Keck School of Medicine, University of Southern California, Ezzalrow Tower, 1441 Eastlake Ave, Suite 8302L, Los Angeles, CA 99003, USA (e-mail: clerman@usc.edu).

ABSTRACT

The capacity and diversity of the oncology leadership workforce has not kept pace with the emerging needs of our increasingly complex cancer centers and the spectrum of challenges our institutions face in reducing the cancer burden in diverse catchment areas. Recognizing the importance of a diverse workforce to reduce cancer inequities, the Association of American Cancer Institutes conducted a survey of its 103 cancer centers to examine diversity in leadership roles from research program leaders to cancer center directors. A total of 82 (80%) centers responded, including 64 National Cancer Institute–designated and 18 emerging centers. Among these 82 respondents, non-Hispanic White individuals comprised 79% of center directors, 82% of deputy directors, 72% of associate directors, and 72% of program leaders. Women are underrepresented in all leadership roles (ranging from 16% for center directors to 45% for associate directors). Although the limited gender, ethnic, and racial diversity of center directors and perhaps deputy directors is less surprising, the demographics of current research program leaders and associate directors exposes a substantial lack of diversity in the traditional cancer center senior leadership pipeline. Sole reliance on the cohort of current center leaders and leadership pipeline is unlikely to produce the diversity in cancer center leadership needed to facilitate the ability of those centers to address the needs of the diverse populations they serve. Informed by these data, this commentary describes some best practices to build a pipeline of emerging leaders who are representative of the diverse populations served by these institutions and who are well positioned to succeed.

The capacity and diversity of the oncology leadership workforce has not kept pace with the emerging needs of our increasingly complex cancer centers and the spectrum of challenges these institutions face in terms of addressing the burden of disease across diverse catchment areas, conducting community-based participatory research with the diverse communities we serve, and assuring that we deliver culturally appropriate and competent cancer care to all of our patients. In recognition of the importance of a diverse workforce to reduce cancer inequities, National Cancer Institute (NCI)–designated cancer centers are now required to develop, implement, and evaluate plans to ensure workforce diversity, equity, and inclusion (DEI). This report provides a description of emerging challenges and opportunities to enhance the diversity of senior leaders at NCI-designated cancer centers with recommendations to build a pipeline of emerging leaders who are reflective of the diverse groups served by these institutions and are well positioned to succeed.

THE RAPID EVOLUTION IN ONCOLOGY RESEARCH AND CARE BRINGS NEW CHALLENGES

With the rapid evolution and increasing complexity of oncology research and practice, the need for capable and diverse leaders of NCI-designated cancer centers has never been greater. The past decade has witnessed paradigm shifting advances, from novel healthcare technologies and artificial intelligence–enabled precision oncology care to the delivery of increasingly complex cellular and gene therapies (1-4). The breadth and

depth of population-based research has also grown as studies seek to understand how cancer risk behaviors and survivorship are influenced by biological factors, social mechanisms, the complexities of healthcare delivery, and other multilevel determinants (5). At the same time, there is dramatic expansion of regional and national networks within NCI-designated centers, requiring a higher level of coordination and expanded oversight to ensure the quality and equity of oncology care delivery and access to clinical trials. As the scope of cancer center leadership responsibilities expands to include cancer service lines so too does the need for center directors to manage budgets the size of small corporations and to assure that culturally competent operations and systems are in place to support the diverse patients we serve on their cancer journey.

This expanding scale and complexity of oncology research and practice brings great optimism for reducing the nation's cancer burden and also presents challenges for mission alignment, quality improvement, and system-level culture (6). As one example, the deployment of electronic health records in academic medical centers puts into sharp focus the importance of managing provider burnout (7-9). The need to confront provider burnout and decreased morale has intensified greatly with the emergence of the COVID-19 pandemic (10,11). In the context of the so-called great resignation among individuals seeking to work remotely and those opting for retirement, today's cancer center leaders now face an even greater challenge to retain key faculty and staff in laboratories, clinics, clinical trials offices, and community settings (12,13). These challenges are emerging during an era of decreasing NCI paylines and shrinking hospital margins (14-18).

THE LEADERSHIP WORKFORCE DOES NOT REFLECT THE INCREASING DIVERSITY OF THE POPULATION

As we consider developing the next generation of leaders to address these challenges and advance the nation's cancer program, so too must we place a high value on ensuring DEI. As the nation's demographics become

increasingly diverse, there is a growing disparity in the representation of women, gender minorities, and underrepresented racial and ethnic minorities in the cancer center workforce (19) as in the healthcare workforce (20). Indeed, a recent survey of 63 NCI-designated cancer centers revealed a striking underrepresentation of women as well as African American, Asian American, and Hispanic leaders within cancer center leadership teams; however, this study did not characterize diversity according to specific leadership roles within NCI-designated centers (eg, deputy directors, associate directors, program leaders) and included only NCI-designated centers (21).

To update and extend available data, the Association of American Cancer Institutes (AACI) conducted a survey of its 103 cancer centers. A total of 82 (80%) centers responded, including 64 NCI-designated and 18 emerging (nondesignated) centers. Across all centers, there were 82 center directors, 62 deputy directors, 639 associate directors, and 795 research program leaders. Aligning with previous surveys, a majority of center directors self-reported their race and ethnicity as non-Hispanic White (79.3%). None self-reported as American Indian or Alaskan Native, 9.8% identified as Asian or Pacific Islander, 2.4% identified as Black, 7.3% as Hispanic, and 1.2% as other or mixed race and ethnicity. This distribution did not differ based on NCI designation or center type (basic, comprehensive, other). Further, 82.3% of deputy directors, 72.3% of associate directors, and 72.1% of program leaders in the centers responding also identify as non-Hispanic White (Figure 1). Women are also dramatically underrepresented in all leadership roles (ranging from 15.9% for directors to 44.6% for associate directors), and no respondents reported gender minorities (nonbinary or other genders) among their leadership (Figure 2). The limited gender, ethnic, and racial diversity of center directors and perhaps deputy directors is not surprising, however, the demographics of current research program leaders and associate directors expose a substantial lack of diversity in the traditional cancer senior leadership pipeline. As such, sole reliance on the cohort of current center leaders and leadership pipeline is unlikely

to produce the diversity in cancer center leadership needed to facilitate the ability of those centers to address the needs of the diverse populations they serve.

Although the underrepresentation of women and members of underrepresented groups in cancer center leadership is likely multifactorial, bias may play a key role (22). For example, an analysis of speaker introductions at American Society of Clinical Oncology conferences revealed that women are less likely to be introduced by professional titles at a rate of 62% (vs 81% of men), controlling for degree, rank, and geography (23). Women are also less likely to lead national medical societies (24) and are more likely to win service-oriented awards that are less prestigious (25). Similarly, women and individuals from underrepresented minority groups tend to hold roles such as directors of community outreach and engagement that may be perceived as less competitive within the traditional pathway to becoming a cancer center director.

The lack of diversity in the leadership pipeline for cancer centers may also reflect the underrepresentation of racial and ethnic minorities, women, and gender minorities in the healthcare and biomedical workforce. Previous research has shown that only 3.1% of the scientific research faculty in the United States are of African American race and 4.8% are of Hispanic ethnicity (26). Although racial and ethnic minorities are expected to be in the majority by the year 2050, the representation of these individuals in faculty positions has remained static during the past 10 years (27). The underrepresentation of racially and ethnically diverse biomedical research and clinical faculty is attributable to disparities in the application, matriculation, and completion of professional and graduate school among these individuals. In 2011, African American and Hispanic individuals made up 7.3% and 7.9%, respectively, of applicants to medical school while approximately 50% were White individuals (28). These disparities in medical school applications continue with matriculation: during 2010-2011, African American and Hispanic individuals made up only 15% of matriculants, whereas White individuals made up more than 50% of matriculants (28). These disparities have barely shifted

in the intervening decade. In 2021, applicants included 9.9% African American individuals, 6.5% Hispanic individuals, and 41.1% White individuals; matriculants included 9.4% African American individuals, 6.9% Hispanic individuals, and 42.3% White individuals

Figure 1. Race and ethnicity of cancer center leaders. Cancer center directors who completed the survey reported their own race and ethnicity and the races and ethnicities of the leaders within their cancer centers.

*20 cancer centers reported having no deputy director. A/PI ¼ Asian or Pacific Islander; AI/AN ¼ American Indian or Alaskan Native; NH ¼ non-Hispanic; Other/Mixed ¼ Other, mixed, or unknown race.

(29). Similar trends exist for racial and ethnic minority matriculation into graduate training. Trends for gender minorities are more difficult to track; a recent survey of transgender and nonbinary residents and medical school students found that more than half did

not disclose their gender identity to their program for fear of discrimination, and two-thirds witnessed derogatory comments toward gender minority patients during their training (30).

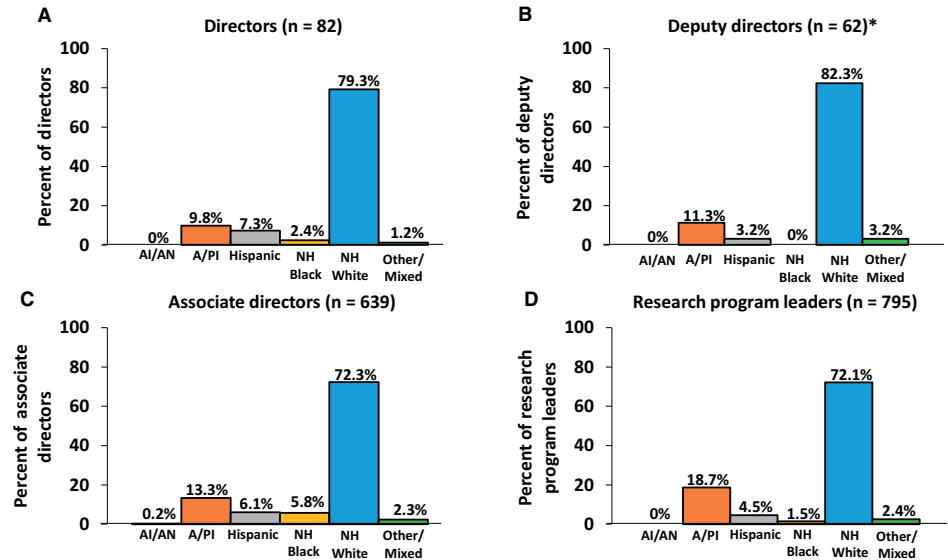
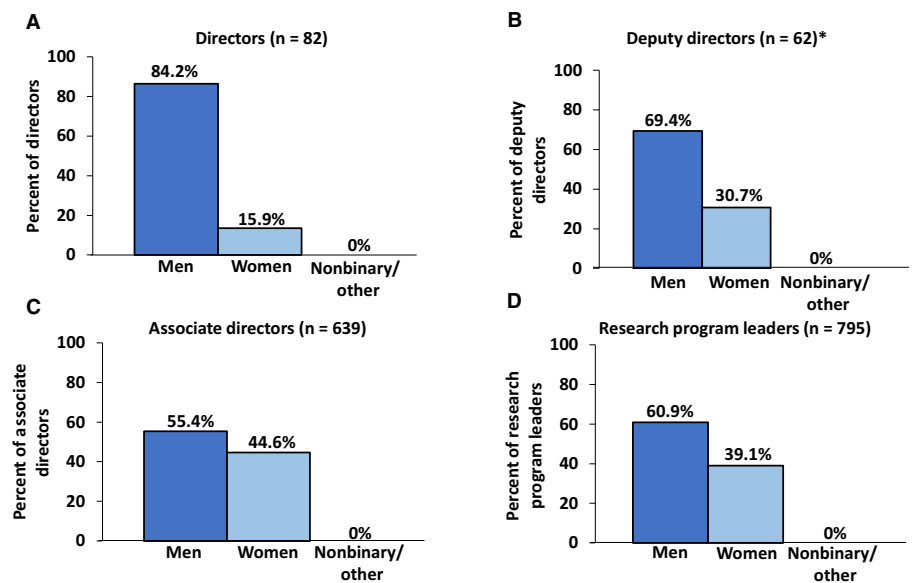


Figure 2. Gender of cancer center leaders. Cancer center directors who completed the survey reported their own gender and the genders of the leaders within their cancer centers.

*20 cancer centers reported having no deputy director.



THE NEXT GENERATION OF CANCER CENTER LEADERS

Requires New Skill Sets and Attributes
 NCI-designated cancer centers all share a mission to reduce cancer burdens, however, one major distinction among centers is whether they are “free-standing” or “matrix” centers.

Freestanding cancer centers are independent organizations, and therefore, may offer the highest level of leadership autonomy and authority. However, the vast majority of NCI-designated cancer centers are matrixed centers situated within university settings and rely more heavily on collaborative leadership in strategy and execution.

The success of cancer center leaders within matrixed centers depends in large part on the leaders’ abilities to work within large, and sometimes opaque, institutional organizational structures to effect change. These directors must collaborate with department chairs and institutional leadership to recruit and retain faculty, typically without direct

authority over faculty appointments and promotions. This collaborative model of leadership extends to cross-departmental cancer service lines created to foster the delivery of multidisciplinary and crossdepartmental oncology care. Matrix centers also rely on ongoing financial support from universities and health systems, and their leaders must negotiate financial commitments and funds flow from clinical revenues with health system leaders. Given these intricacies, the ability to inspire and influence, rather than control, is essential to grow the enterprise and improve patient outcomes through high-impact research and innovative patient care.

Regardless of the center’s structure, the success of senior leaders in NCI-designated cancer centers requires the development and skillful deployment of collaborative leadership competencies that may not have been taught in scientific or medical training. Indeed, it has long been recognized that leaders in cancer centers, and in health care more generally, tend to be selected based on vision, scientific eminence, ability to grow clinical volumes, and other areas of technical expertise. As increased efforts are being made to enhance workforce diversity at cancer centers, and for greater equity and inclusion in how the institution’s resources are managed and allocated, cultural competency, or the ability to understand and relate to individuals from other cultures, will become even more important. However, these leadership

attributes are difficult to quantify and tend to be relatively undervalued (6,31).

Fortunately, there is a recognition of the need to expand leadership competencies as noted in the AACI survey described above. As shown in Figure 3, respondents in AACI cancer centers endorsed several perceived needs that could be addressed within leadership development programs. The most frequently endorsed needs included communication (91%), collaboration (91%), skills and capabilities needed to lead in a complex cancer center environment (87%), career development advice for cancer center leaders (74%), and conflict management (70%). These were followed by resiliency (65%), emotional intelligence (61%), and negotiation (48%).

The value of these attributes and capabilities for exercising leadership in cancer centers is supported by a growing evidence for the benefits of certain leadership behaviors (32). For example, in a large survey of leaders within the Mayo Clinic Health System, ratings of leadership behaviors, such as providing feedback and coaching, supporting career development, recognizing success, clear communication about changes, and treating employees with respect and dignity, predicted reduced burnout and increased job satisfaction 2 years later (33). Other studies have shown that transformational leadership styles are associated with job satisfaction and retention (34,35). At the core of all competencies, however, is adaptive leadership, referring to the ability

to learn from challenges and adjust one’s leadership approach or style as needed (31,36). Although these capabilities are paramount to realizing a bold cancer center vision, these skill sets are not included in the traditional training and practice of physicians and scientists who lead the nation’s cancer centers. In other words, “what got you here won’t get you there” (37).

A ROADMAP FOR LEADERSHIP DEVELOPMENT AND DIVERSITY IN CANCER CENTERS

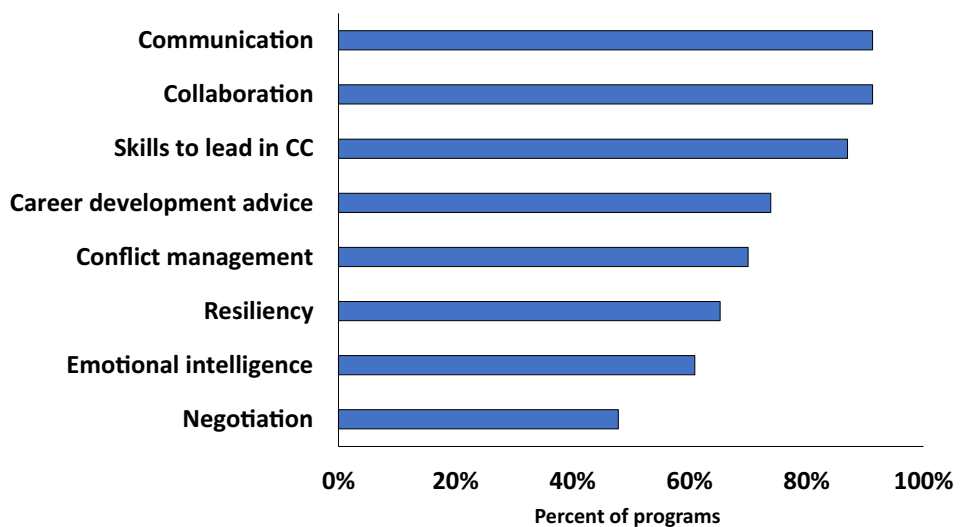
Leadership development programs for executives in business and health care have become commonplace. Yet, in the AACI survey noted above, surprisingly few respondents reported that their center offers a formal leadership development program for their members (23 of 82 centers surveyed). Below, we discuss key strategies and tactics for promoting leadership development and diversity at NCI-designated cancer centers.

Creating a Diverse Pool of Future Leaders

Based on the striking ethnic, racial, and gender disparities that exist in all levels of cancer center leadership, creating a diverse pipeline of emerging leaders from the broader cancer membership base may not be easy and will take time, but it is worth the effort. However, potential leaders from underrepresented groups may not view themselves as leaders, because of conscious or unconscious bias, uninformed cultural norms they have been subjected to, or other key

Figure 3. Perceived needs for leadership development programs. Cancer centers that had a leadership development program in place indicated what skills and abilities.

CC = cancer centers



social determinants. Thus, broad efforts across multiple dimensions to identify talent from within the center afford an opportunity to offer progressively increasing responsibilities and mentoring at each stage in development, creating a longitudinal pathway for leadership evolution. As noted for health care more broadly (6), talented early stage clinicians and scientists who show an appetite and aptitude for leadership could be selected to participate in and then lead or co-lead task forces or committees including strategic planning, program development, and evaluation activities. These candidates would ultimately be groomed for progressively elevated leadership roles with institutional support for leadership development and coaching. Ideally, these future leaders would represent disciplines across the cancer continuum, from basic, translational, and clinical science to disciplines that tend to be underrepresented in cancer center leadership, such as public health and social sciences.

Deliberate inclusion of faculty members who are underrepresented in medicine and science is vital throughout this process, though not sufficient. Beyond ensuring diversity in the pipeline, other benefits can be derived from best practices that foster an environment and culture that supports the career evolution of emerging leaders within the organization. These practices include but are not limited to provision of implicit bias training for all faculty and staff, expansion of the diversity of the pool of faculty mentors, creation of social networks among emerging leaders from diverse backgrounds, inclusion of underrepresented minority faculty in sponsorship activities and opportunities (ie, recommendation for grant review panels, invited speaking opportunities), and dedicated institutional support for participation in leadership development programs. Certain geographic areas may be more challenged to identify sufficient numbers of emerging leaders and/or faculty members, however, this challenge could potentially be addressed through the creation of partnerships with colleges or universities where members of certain groups are more strongly represented (eg, historically Black colleges, indigenous Tribal Nations Colleges and schools).

Given this set of circumstances, meeting the DEI aspirations of NCI-designated cancer centers over the next 5 to 10 years as they strive to diversify their leadership will be a tremendous challenge until the pipeline of minority and underrepresented faculty is sufficient to represent a robust proportion of the applicant pool for cancer center leadership roles. Currently, searches for senior cancer center leadership positions often fail to elicit even a single underrepresented or minority candidate in many areas of the country. Unfortunately, this reflects our society's long-standing failure to ensure that all segments of our population have the educational foundation, equivalent access, and opportunity to pursue careers dependent on graduate and professional school. Unless we expand these opportunities beyond White, upper middle-class individuals, we will never be able to address the substantial health disparities that continue to plague this country (38).

We also need to develop and implement initiatives that accelerate the process of expanding the pipeline with well prepared, highly motivated individuals who are ready to take on the challenges that we face with health disparities. These initiatives must prioritize the early identification of talented individuals; foster their interests in science, technology, engineering, and mathematics careers; provide robust training and mentorship opportunities; and develop peer-to-peer networking and support mechanisms that can connect candidates with institutions seeking to diversify their leadership. Encouraging and incentivizing faculty to engage with high schools to foster minority students' interests in the sciences will help create a more diverse pipeline in the future. Such initiatives need to be paired with specific funding mechanisms that provide for early career development of these individuals to enhance the likelihood of their success. Having a clear framework of metrics will be essential for any organization to objectively measure the success of efforts to enhance diversity and compare data with other organizations.

Search Practices

External recruitments for open leadership positions afford opportunities for increasing diversity in cancer centers.

Many cancer centers reported in the AACI survey that they rely on external searches for open cancer center leadership roles such as associate directors and program leaders (68.3% of respondents). External searches also provide a time for reflection on the strengths and opportunities of the center and an opportunity to reassess the goals and qualifications for the role and can help ensure that all options are considered for qualified women and underrepresented groups.

Adhering to best practices for creating a diverse pool of applicants is necessary, and there are many reports on this topic (39-41). First, regardless of whether the searches are internal or external, how the search is communicated will influence the applicant pool. The center's commitment to diversity and inclusion ought to be clearly stated, and key attributes of candidates can be framed in the most inclusive and culturally competent manner. Second, applicants from diverse backgrounds may be more motivated to apply if they see diverse representation on the leadership search committee. Third, implicit and explicit bias training prior to the launch of the search committee is critical to lay the foundation for an inclusive process. Fourth, every effort should be made to place advertisements in outlets that are most likely to reach diverse groups and reach out to leaders at other institutions for recommendations; search firms should be similarly charged with producing a diverse slate of candidates. Fifth, sensitivity to cultural differences during the screening and interview process will foster retention of diverse candidates in the pool, and use of structured interviews and objective evaluation criteria may minimize the impact of implicit bias. Further, every effort should be made to ensure that a disproportionate burden is not placed on candidates with childcare or eldercare needs during visits when partners are invited. Importantly, creating term limits on leadership positions will provide opportunities to refresh leadership and enhance diversity; fresh ideas and approaches are necessary for organizations to evolve and innovate.

Onboarding and Integrating New Leaders

Irrespective of whether new leaders are recruited from within the organization or externally, their success requires more than domain expertise and a track record as a distinguished clinician and/or scientist. As noted above, today's cancer center leaders must collaborate with department chairs and other institutional leaders for recruitment and program development, balance institutional strategic priorities with faculty interests and needs, and champion diversity in practice. With increasing responsibility for the cancer practice and cancer care delivery as well as research and philanthropic portfolios, they need significant financial acumen. New leader onboarding is a critical first step to develop enterprise leaders who can realize these goals, either as a new member of the organization or as a current member moving into an elevated leadership role.

Onboarding new leaders is a multistage process. First and foremost, new leaders will benefit from receiving standard informational content, such as review of critical documents prior to arrival or during the recruitment process (eg, center and institutional strategic plans, budgets, and key metrics). Upon arrival, structured meet and greets will help orient new leaders and foster relationship development.

Understanding institutional culture and building relationships takes time, though there are some best practices to accelerate a new leader's integration. This requires understanding of institutional values and structure including formal and informal reward systems, institutional coordination and control mechanisms, appropriate communication pathways, and the level of interdependence among units. Deliberate peer-to-peer education about the cultural nuances of organizational leadership at a particular institution is important to help new leaders navigate the environment. Fostering congruence and alignment in institutional culture at every level of the organization will ensure the new leader's success.

Leadership Development, Coaching, and Mentorship

Depending on the new leader's experience within the organization, technical training in the institution's transactional practices is recommended to expand key capabilities. Ideally, such technical training is provided by institutional leaders to ensure alignment with organizational processes. Key elements of technical training may include institutional financial and funds flow structures, budget creation and management, interpretation of profit and loss statements, development of business plans, and research and clinical data analytics. Best practices for team building, strategic planning, and change management are also highly beneficial and may be offered through university professional development or human resources units or through executive coaching.

Executive coaching, supported by the institution, can provide tremendous benefit for new leaders as well as seasoned leaders. Through a confidential 1:1 process, new leaders are typically assessed via a 360-degree interview evaluation led by the coach at least 3 months into the new role. Generally conducted through 20-minute interviews of key stakeholders (direct reports, peers, and supervisors), this evaluation provides the basis of a personal learning agenda for the new leader. Although learning agendas vary based on skills and experience, coaching often includes improvement in communication, persuasion, negotiation, and change management. Key change management capabilities for new leaders include the ability to articulate a vision, effectively communicate change throughout the process, demonstrate continuous commitment to the future state, engage stakeholders and other leaders while managing relationships and emotional responses, and create enthusiasm and buy-in for change throughout the organization (42). Maintaining relationships with executive coaches as part of leadership development can provide valuable recurring mentorship and advice that are critical to problem solving.

At all stages of leadership, there are also benefits to assigning peer mentors for new leaders who can share their experiences

(both successes and failures, with lessons learned) and answer questions regarding institutional culture and processes for obtaining stakeholder and leadership support for new initiatives. They can also identify leadership development opportunities for new leaders. The optimal peer mentors are those who have a demonstrated track record that reflects understanding of institutional culture and ability to effect positive change and who are accessible to answer questions and provide support.

Formal leadership development or executive education programs offered within or outside the institutions will foster development across most or all capabilities described above. Two overarching models for such programs include 1) concentrated 2- to 5-day workshops and 2) longitudinal cohorts with training and mentorship distributed over a 1- to 2-year period. Regardless of the format, such programs include skills to foster execution (vision, strategy, communication, negotiation, business literacy), relationship building (collaboration, team building, talent development, difficult conversations), and transactional skills (strategic planning and change management) (43,44).

Ongoing formal and informal self-assessments coupled with annual internal reviews provide an opportunity for feedback to promote continuous learning and organizational improvement. Objective evaluation criteria are key to create an evidence base for future efforts in leadership development in cancer centers. Key evaluation metrics of the impact on institutional performance may include quality metrics, staff morale, turnover, burnout, and financial metrics such as patient volumes, fundraising, and grants (45).

Retention of Leaders From Underrepresented Groups

Leadership development programs support emerging leaders at an individual level, but institution-level interventions are also needed to counter systemic barriers that lead to higher rates of attrition for underrepresented groups (46). Faculty and physicians from underrepresented groups are often

expected to lead minority recruitment efforts and DEI initiatives, contributing to the minority tax, which is defined as extra, financially uncompensated duties and responsibilities that minorities are asked to perform to increase diversity at their institutions and contributes to talented minority faculty leaving academia. To foster retention efforts for these future leaders, these efforts can and should be supported by institutional offices of DEI, and those who engage in service activities should be appropriately recognized and compensated with administrative support (47,48). Institutional transparency around rank and salary, clear expectations around criteria for promotions, and antibias training for members of promotion committees can remove structural barriers to promotion (49). Institutions should also recognize that women and members of underrepresented minority groups are more likely than their male and majority group colleagues to have substantial family caregiving and financial responsibilities; programs that support caregivers and provide supplemental resources to these groups may alleviate some of these burdens (50,51). Increasing representation of women, gender minorities, and racial and ethnic minorities among senior leadership will also increase the pool of mentors for emerging future leaders and reduce feelings of isolation that lead to burnout and attrition. Additionally, increasing representation of racial and ethnic minorities in senior leadership may enhance visibility of the institution in the catchment area and foster community engagement.

CONCLUSION

To achieve the nation's goal to "end cancer as we know it" (52), cancer centers can and should prioritize leadership development and diversity as an organizational priority. Ultimately, diverse leadership will be required to develop and recruit a diverse workforce, and a diverse workforce will maximize the organization's potential. This process begins by enhancing the diversity of the cancer center membership itself, continues with an equitable search process to create a diverse pool of candidates, and is followed by deliberate and inclusive processes of onboarding, integration, and leadership development. Cancer centers that deploy

these strategies will be best positioned to meet the challenges of an increasingly complex oncology ecosystem and respond to the needs of the communities they serve.

FUNDING

This work was supported by the National Cancer Institute at the National Institutes of Health (P30 CA014089 to USC Norris Comprehensive Cancer Center [CL]; P30 CA015083 to the Mayo Clinic Comprehensive Cancer Center [CLW]; P30 CA016056 to the Roswell Park Comprehensive Cancer Center [ER]; P30 CA023108 to the Norris Cotton Cancer Center at Dartmouth [YS]; P30 CA082709 to the Indiana University Melvin and Bren Simon Comprehensive Cancer Center [KPL]; P30 CA016058 to The Ohio State University Comprehensive Cancer Center [DMG]; P30 CA168524 to the University of Kansas Cancer Center [RAJ]; P30 CA014599 to the University of Chicago Comprehensive Cancer Center [KO]; P30 CA86862 to the Holden Comprehensive Cancer Center at the University of Iowa [GW]; and P30 CA014195 to the Salk Institute Cancer Center [RS]).

NOTES

Role of the funder: The funding agency was not involved in the writing of the manuscript or the decision to submit it for publication.

Disclosures: No authors have conflicts of interest to report.

Author contributions: Conceptualization: CL. Writing – original draft: CL, MF, and CH-H. Formal analysis and visualization: MF.

Funding acquisition: CL, DMG, RAJ, KPL, KO, ER, YS, RS, GW, CLW. Writing – review & editing: CL, CH-H, MF, DMG, RAJ, KPL, EM, KO, JWP, ER, YS, RS, GW, CLW.

Acknowledgements: The authors acknowledge the valuable input of the Association of American Cancer Institutes (AACI) and Emily Stimmel, who executed the survey and provided the data for analysis. We also thank members of the AACI Board of Directors who provided input used to frame manuscript content.

Disclaimers: The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

DATA AVAILABILITY

The data underlying this article will be shared on reasonable request to the corresponding author.

References

1. McDowell S, Ludwig Rausch S, Simmons K. Cancer research insights from the latest decade, 2010 to 2020. American Cancer Society; 2019. <https://www.cancer.org/latest-news/cancer-research-insights-from-the-latest-decade-2010-to-2020.html>. Accessed January 12, 2022.
2. Kruger S, Ilmer M, Kobold S, et al. Advances in cancer immunotherapy 2019 –latest trends. *J Exp Clin Cancer Res*. 2019;38(1):268.
3. Ignatiadis M, Sledge GW, Jeffrey SS. Liquid biopsy enters the clinic – implementation issues and future challenges. *Nat Rev Clin Oncol*. 2021;18(5):297-312.
4. Bedard PL, Hyman DM, Davids MS, et al. Small molecules, big impact: 20 years of targeted therapy in oncology. *Lancet*. 2020;395(10229):1078-1088.
5. Halbert CH, Allen CG, Jefferson M, et al. Lessons learned from the Medical University of South Carolina Transdisciplinary Collaborative Center (TCC) in precision medicine and minority men's health. *Am J Mens Health*. 2020;14(6):1557988320979236.
6. Lerman C, Jameson JL. Leadership development in medicine. *N Engl J Med*. 2018;378(20):1862-1863.
7. Gajra A, Bapat B, Jeune-Smith Y, et al. Frequency and causes of burnout in US community oncologists in the era of electronic health records. *J Clin Oncol Pract*. 2020;16(4):e357-e365.
8. Downing NL, Bates DW, Longhurst CA. Physician burnout in the electronic health record era: are we ignoring the real cause? *Ann Intern Med*. 2018;169(1):50-51.
9. Kroth PJ, Morioka-Douglas N, Veres S, et al. Association of electronic health record design and use factors with clinician stress and burnout. *JAMA Netw Open*. 2019;2(8):e199609.
10. Dzau VJ, Kirch D, Nasca T. Preventing a parallel pandemic – a national strategy to protect clinicians' well-being. *N Engl J Med*. 2020;383(6):513-515.
11. Hartzband P, Groopman J. Physician burnout, interrupted. *N Engl J Med*. 2020;382(26):2485-2487.
12. Sinsky CA, Brown RL, Stillman MJ, et al. COVID-related stress and work intentions

- in a sample of US health care workers. *Mayo Clin Proc Innov Qual Outcomes*. 2021;5(6):1165-1173.
13. Cook I. Who is driving the ‘Great Resignation’? *Harvard Business Review*. September 15, 2021. <https://hbr.org/2021/09/who-is-driving-the-great-resignation>. Accessed January 12, 2022. 2021.
 14. Caruso C. NCI paylines drop as grant applications climb. *Cancer Discov*. 2019; 9(5):568.
 15. Sharpless NE. Familiar fiscal challenges for NCI. *NCI Bottom Line Blog*. December 6, 2021. <https://www.cancer.gov/grants-training/nci-bottom-lineblog/2021/familiar-fiscal-challenges-for-nci>. Accessed January 13, 2022.
 16. Congressional Research Service. National Institutes of Health (NIH) Funding: FY1996-FY2022; 2021. <https://sgp.fas.org/crs/misc/R43341.pdf>. Accessed January 13, 2022.
 17. Bai G, Yehia F, Chen W, et al. Varying trends in the financial viability of US rural hospitals, 2011-17. *Health Aff (Millwood)*. 2020;39(6):942-948.
 18. Hall K. Financial Effects of COVID-19: Hospital Outlook for the Remainder of 2021. Kaufman, Hall & Associates, LLC; 2021.
 19. Winkfield KM, Flowers CR, Patel JD, et al. American Society of Clinical Oncology strategic plan for increasing racial and ethnic diversity in the oncology workforce. *J Clin Oncol*. 2017;35(22):2576-2579.
 20. Salsberg E, Richwine C, Westergaard S, et al. Estimation and comparison of current and future racial/ethnic representation in the US health care workforce. *JAMA Netw Open*. 2021;4(3):e213789.
 21. Morgan A, Shah K, Tran K, et al. Racial, ethnic, and gender representation in leadership positions at National Cancer Institute–designated cancer centers. *JAMA Netw Open*. 2021;4(6):e2112807.
 22. Penner LA, Dovidio JF, Gonzalez R, et al. The effects of oncologist implicit racial bias in racially discordant oncology interactions. *J Clin Oncol*. 2016;34(24):2874-2880.
 23. Duma N, Durani U, Woods CB, et al. Evaluating unconscious bias: speaker introductions at an International Oncology conference. *J Clin Oncol*. 2019; 37(36):3538-3545.
 24. Jagsi R, Means O, Lautenberger D, et al. Women’s representation among members and leaders of national medical specialty societies. *Acad Med*. 2020; 95(7):1043-1049.
 25. Ma Y, Oliveira DFM, Woodruff TK, et al. Women who win prizes get less money and prestige. *Nature*. 2019;565(7739):287-288.
 26. National Science Foundation. National Center for Science and Engineering Statistics, Survey of Doctorate Recipients; 2015. <https://www.nsf.gov/statistics/2017/nsf17310/data.cfm>. Accessed January 12, 2022.
 27. Valantine HA, Collins FS. National Institutes of Health addresses the science of diversity. *Proc Natl Acad Sci USA*. 2015;112(40):12240-12242.
 28. American Association of Medical Colleges. Applicants and matriculants data, 2010-2011; 2011. <https://www.aamc.org/data-reports/students-residents/report/facts>. Accessed January 12, 2022.
 29. American Association of Medical Colleges. 2021 FACTS: applicants and matriculants data; 2021. <https://www.aamc.org/data-reports/students-residents/interactive-data/2021-facts-applicants-and-matriculants-data>. Accessed January 12, 2022.
 30. Dimant OE, Cook TE, Greene RE, et al. Experiences of transgender and gender non-binary medical students and physicians. *Transgend Health*. 2019;4(1):209-216.
 31. Simone JV. Understanding cancer centers. *J Clin Oncol*. 2002;20(23):4503-4507.
 32. Halpern MT, Gasoyan H, Aaronson WE. Metrics to evaluate the performance of cancer center leadership: a systematic review. *J Healthc Manag*. 2020;65(3):217-235.
 33. Dyrbye LN, Major-Elechi B, Hays JT, et al. Physicians’ ratings of their supervisor’s leadership behaviors and their subsequent burnout and satisfaction: a longitudinal study. *Mayo Clin Proc*. 2021;96(10):2598-2605.
 34. Kleinman C. The relationship between managerial leadership behaviors and staff nurse retention. *Hosp Top*. 2004;82(4):2-9.
 35. Labrague LJ, Nwafor CE, Tsaras K. Influence of toxic and transformational leadership practices on nurses’ job satisfaction, job stress, absenteeism and turnover intention: a cross-sectional study. *J Nurs Manag*. 2020;28(5):1104-1113.
 36. Heifetz RA, Linsky M, Grashow A, *The Practice of Adaptive Leadership: Tools and Tactics for Changing Your Organization and the World*. Boston, MA: Harvard Business Press; 2009.
 37. Goldsmith M, Reiter M, *What Got You Here Won’t Get You There: How Successful People Become Even More Successful*. Revised Ed. New York City, NY: Hachette-Books; 2007.
 38. Lansigan F, Thomas CR. Jr., Solving the equation of structural inequities in the oncology workforce. *JAMA Oncol*. 2022;8(2):230-231.
 39. Shubeck SP, Newman EA, Vitous CA, et al. Hiring practices of US academic surgery departments—challenges and opportunities for more inclusive hiring. *J Surg Res*. 2020;254:23-30.
 40. Glastonbury CM, Bucknor M, Wall SD, et al. Hiring through the lens of diversity: strategies to create diverse departments. *Acad Radiol*. 2021;28(12): 1775-1778.
 41. Sensoy O, Diangelo R. “We are all for diversity, but.”: how faculty hiring committees reproduce Whiteness and practical suggestions for how they can change. *Harvard Educ Rev*. 2017;87(4):557-580.
 42. Barsade S, O’Neill OA. Manage your emotional culture. *Harvard Bus Rev*. 2016:58-66.
 43. Garman AN, Standish MP, Wainio JA. Bridging worldviews: toward a common model of leadership across the health professions. *Health Care Manage Rev*. 2020;45(4):E45-E55.
 44. Sullivan EE, Moftah D, Mbye P, et al. An e-leadership training academy for practicing clinicians in primary care and public health settings. *J Clin Transl Sci*. 2021;5(1):e83.
 45. Lucas R, Goldman EF, Scott AR, et al. Leadership development programs at academic health centers: results of a national survey. *Acad Med*. 2018;93(2):229-236.
 46. Owoyemi O, Aakhus E. Underrepresentation in oncology: identifying and addressing structural barriers. *Oncologist*. 2021;26(8):630-634.
 47. Carson TL, Aguilera A, Brown SD, et al. A seat at the table: strategic engagement in service activities for early-career faculty from underrepresented groups in the academy. *Acad Med*. 2019;94(8):1089-1093.
 48. Amaechi O, Foster KE, Tumin D, et al. Addressing the gate blocking of minority faculty. *J Natl Med Assoc*. 2021;113(5):517-521.
 49. Murphy M, Callander JK, Dohan D, et al. Women’s experiences of promotion and tenure in academic medicine and potential implications for gender disparities in career advancement: a qualitative analysis. *JAMA Netw Open*. 2021; 4(9):e2125843.
 50. Jagsi R, Jones RD, Griffith KA, et al. An innovative program to support gender equity and success in academic medicine: early experiences from the Doris Duke Charitable Foundation’s Fund to retain clinical scientists. *Ann Intern Med*. 2018;169(2):128-130.
 51. Kalet A, Libby AM, Jagsi R, et al. Mentoring underrepresented minority physician-scientists to success. *Acad Med*. 2022;97(4):497-502. doi:10.1097/ACM.0000000000004402.
 52. The White House. Fact Sheet: Fact Sheet: President Biden Reignites Cancer Moonshot to End Cancer as We Know It. <https://www.whitehouse.gov/briefingroom/statements-releases/2022/02/02/fact-sheet-president-biden-reignitescancer-moonshot-to-end-cancer-as-we-know-it/>. Published February 2, 2022.

Three Approaches for Cancer Centers to Drive Access and Efficiency

BY LILI HAY, NORA PITTMANN, AND MATT STURM

The past 20 years have seen considerable change and innovation in the field of cancer care. Cancer programs expanded their facilities and added incremental service offerings, but many are now at capacity and face resource constraints – which will continue to increase pressure on programs as demand for cancer services grows in the coming years.

Looking to the next decade, administrative and clinical leaders will need to implement novel approaches to cancer care to support increased patient access and improved operational efficiency. Below are three high-priority building blocks for oncology programs as they prepare for the future.

I. ALTERNATIVE CARE STRATEGIES

Given the magnitude of expense associated with cancer care, oncology programs are under pressure to avoid unnecessary costs. Popular alternative care models currently being used by cancer centers include approaches that allow for the reduction in the cost of care delivery while maintaining the highest levels of quality and clinical efficacy. They also have the added benefit of improving patient satisfaction through the provision of convenient and patient-centric care. Options to consider implementing, and their associated benefits, include:

Oncology urgent care centers

- Address adverse effects of treatment and symptoms before they become significant issues.
- Reduce unnecessary hospital admissions.
- Avoid exposure to the general population for immunocompromised patients.
- Provide a venue for unscheduled visits, without disrupting busy clinic schedules.

Home infusion programs

- Improve patient access, particularly for patients who may have challenges related to comorbidities, cancer-related symptoms, or transportation limitations.
- Address clinic capacity issues by providing treatment in an alternative setting.

Electronic patient reported outcomes (ePROs)

- Enable more timely interventions from clinic staff when serious issues arise, particularly for patients requiring additional monitoring to reduce adverse treatment-related events.
- Improve patient outcomes, satisfaction, and compliance with clinical therapies.
- In certain instances, help providers and researchers gain more detailed insight into aspects of a patient’s care journey or response to clinical treatments.

II. ACCESS OPTIMIZATION

In addition to expecting high-quality cancer care, patients increasingly want rapid access to appropriate oncology specialists following diagnosis and the ability to initiate treatment quickly. To improve oncology new-patient access, programs need to prioritize capabilities that will support a seamless patient experience while decreasing time to first appointment. A variety of strategies, which must be approached in relation to one another, can help increase capacity without adding resources, including:

Capacity management

- Measure supply/demand for new patient appointments.
- Optimize infusion scheduling templates.
- Assess appointment fill rate.
- Maximize clinic resource and room utilization.
- Load-balance infusion services to unlock capacity without adding chairs or staff.

Provider work standards and optimization

- Set clear standards for provider time.
- Maximize use of advanced practice providers.
- Evaluate office hours and coverage expansion.
- Standardize provider scheduling templates and optimize block scheduling.

Referral coordination

- Understand referral patterns.
- Develop seamless care-transition workflows.

- Provide navigation for all patients, including self-referred and screening-program patients.
- Coordinate logistics for out-of-area patients.

III. CLINICAL COLLABORATIONS

Community cancer programs often face financial and operational challenges that limit their ability to provide specialized clinical services, treat patients with rare and complex cancers, or conduct clinical research. As a result, programs are increasingly recognizing the value of formal relationships with tertiary and quaternary cancer centers rather than attempting to develop the necessary capabilities and services in-house. Collaborations of this nature should ensure access to:

- **Subspecialty expertise for patients locally:** Creation of a “direct line” to clinical subspecialists at the partner institution and the ability for those providers to consult with local providers on cases, participate in local tumor boards, provide educational sessions, etc.
- **Specialized clinical care:** Seamless processes in place to ensure patients receive care in the most appropriate setting. In some instances, a patient may need to travel to the partner institution if their cancer is rare or cannot be safely treated locally. In others, a “shared care” clinical model may be possible.
- **Ancillary and support services:** Extension of valuable resources and services from the partner institution to community-based patients (e.g., genetic counseling, psychosocial services, high-risk clinics).
- **Clinical trials:** Implementation (or enhancement) of research trial capabilities within the community cancer center.

As the demand for high-quality and highly patient-centric cancer care continues to increase over the next decade, cancer programs that have prioritized the high-impact strategies described here will be best positioned to continue meeting the needs of their diverse communities, maintain competitive success, and realize programmatic volume growth.

Analyzing the Pandemic's Impact on Clinical Trials & Healthcare Law

BY RON DIGIAIMO, MBA, FACHE, DR. DEBRA PATT, MD, PH.D., MBA

Cancer growth and cancer care have never stopped in the world of Oncology and the COVID-19 pandemic. Hospitals and cancer centers faced unique challenges like reduced clinical trials, elective procedure, and PPC access. We were forced to adapt quickly to ensure the safety of cancer patients, at heightened risk for COVID-19. Across the nation, we saw oncologists, healthcare workers, and patients come together to overcome the challenges and produce incredible solutions that may be with us for years post-pandemic.

We sat down with Dr. Debra Patt, MD, Ph.D., MBA, VP of Texas Oncology, an expert in breast cancer, member of the ASCO Board, and Professor of Oncology at UT Austin to get her perspective on large-scale changes to oncology, telemedicine, and health care as a result of the ongoing pandemic with potential impact for decades to come.

THE EFFECTS OF DIMINISHING SCREENINGS AND CLINICAL TRIALS ON CANCER CARE

Industry leaders like Dr. Debra Patt, Texas Oncology Vice President, and

societies like [ASCO are forecasting long-term challenges and repercussions of diminished cancer screenings](#) throughout the Medical Oncology side of cancer care. Results of the above paper showed, there was a substantial decrease in cancer screenings, visits, therapy, and surgeries, in March-July 2020, in comparison with the baseline period of March-July 2019, with variation by cancer type and site of service.

“At the peak of the pandemic in April, screenings for breast, colon, prostate, and lung cancers were lower by 85%, 75%, 74%, and 56%, respectively.” Screenings were not the only thing reduced, however, as “significant utilization reductions were observed in April for hospital outpatient evaluation and management (E&M) visits (–74%), new patient E&M visits (–70%) and established patient E&M visits (–60%).”

Similarly, and according to survey research done by ASTRO, representing the Radiation Oncology side of cancer care; [two-thirds of physicians said new patients are presenting with more advanced disease](#) compared to pre-pandemic.

Dr. Patt's team partnered with Avalere Health to study cancer screening visits in 2020 compared to 2019 and found that they were down more than 58% in April 2020 and averaged a net decrease of about 30% through the year. Cancer-related procedures across the board had decreased due to natural barriers related to the pandemic. Fear of leaving home, the replacement of elective procedures with high priority COVID-19 cases, and limited capacities at places like breast cancer mammography screening centers all contributed.

“The results we are seeing now will lead to increased cancer morbidity and mortality in the next 5 to 10 years,” Dr. Patt continued “and anecdotally, one of the other reasons I witnessed was related to many patients losing their health insurance. About 5,000,000 Texans do not have health insurance.”

Disparities in care were highlighted by the pandemic, as [disadvantaged groups saw more intense socioeconomic barriers to care](#), considering the increased burdens that Americans felt within the last year of tumultuous events.



Dr. Debra Patt, MD, Ph.D., MBA, VP of Texas Oncology

Participation in clinical trials also diminished greatly and will prove to have lingering effects on research for the next half-decade or more. While clinical trials were still open and available, “patients do not have the individual ability to consider clinical trials given their surroundings” Dr. Patt reasoned, as patients have spent double the normal amount of time receiving information, proceeding with safety measures, and managing higher rates of stress due to the pandemic.

In the face of this crisis, maintaining clinical trials was a low priority, but the lingering effects are already beginning to be felt in the oncology sector and will remain for years to come.

2021: BANNER YEAR FOR LEGISLATION AND DIGITAL TECHNOLOGIES IN ONCOLOGY

“There was an unprecedented change to the entire house of medicine, and the entire world,” Dr. Patt begins; referencing the quick and brutal effects on health care, headed by COVID-19 and followed by smaller, but impactful events like Texas’s “snowpocalypse” where Dr. Patt saw struggles with statewide energy crises in early 2021.

Despite the challenges of the past two years, Dr. Patt believes there have been numerous promising developments in medicine, due to PDM reforms, anti-steering, and anti-clawback legislation, which can have incredibly meaningful effects for patients. These updates, in addition to changes that can liberalize the ability to care for patients out of state “signal the most significant and promising progress in medicine we have seen in 20 years, all due to and in spite of COVID-19.”

“Not as promising as I would like of course, but you don’t always get everything you want.”

With cancer care being perennially “on the chopping block” from federal legislative changes, drug pricing strategies, and insurance distribution; cancer care and health care associations need to take the opportunity of change within the industry to push for positive legislation and action. Heightened awareness for complicated, multi-faceted issues is necessary, as, at their core, they limit the ability of patients to receive the care they need. With regard to cancer care, Dr. Patt believes that “we’re either going to be at the table or on the menu.”

The push for change in legislation was kickstarted by the immediate need for virtual care and telemedicine expansion in health care. Early in the pandemic and backed by guidelines formed by task forces and organizations like ASCO (American Society Clinical Oncology), Dr. Patt assisted these goals by testifying before state courts.

Expanding and cementing telemedicine as a viable alternative for care early on allowed health care to tackle the

pandemic and care for patients much easier and in a safe environment. Across the nation, transportation and face to face exposure came with risk, [cancer care in transportation-affected areas like Hawaii](#), and disadvantaged populations like the [Navajo Nation in New Mexico](#) were immediately impacted and helped to spur the quickest legislative action tied to care, financials, documentation requirements, and operations ever experienced by our specialty within the United States.

“The digital reformation of healthcare was catalyzed during the pandemic, headed by a robust buy-in to telemedicine.” Dr. Patt said, in reference to the expedited decision-making for digital technologies like telehealth and virtual care, along with general optimized communication across the board. Dr. Patt’s team at Texas Oncology launched an electronic health patient-reported outcomes platform during the pandemic and set aside time to optimize and facilitate communication through catch-up calls, regular touchpoints within the large organization, and emerging digital communication like podcasts and town halls.

These necessary and innovative changes were a silver lining of the pandemic. Their emergence and implementation showcased digital solutions out of urgent needs and will likely remain for decades to come. The time of fast and impactful change in cancer care has not ended and will continue to be spurred on by oncology leaders, advocacy groups, and cancer centers in the industry; “we will need nationwide support and unity to push these very possible improvements into reality at the rate we now know is possible,” Ron DiGiaino echoes.

OVERCOMING COVID-19, THE DELTA VARIANT, AND THE NURSE SHORTAGE WHILE TREATING CANCER

For Texas Oncology, a large practice that represents over 210 sites of service to immediately implement the CDC protocols, screenings, and over 250,000 telemedicine visits, overcoming the pure volume of functionality changes and expansions, required fantastic, adaptable teams to successfully treat cancer. Dr. Patt is proud to say they did just that.

“Our team at every level rose to the challenge, and everyone worked a lot harder in the last year and a half, it was amazing to experience” Dr. Patt reports.

With the Delta Variant reaching peak pandemic levels in many communities; information crowdsourcing, as well as continuously evolving CDC guidelines and vaccine boosters are the tools that health care needs to overcome another wave of the pandemic. Taking what was learned the first round will allow for better and faster solutions through the diffusion of accurate information for everyone.

For cancer patients, infusion site visits at cancer centers are still the most ideal and safest way to get chemotherapy, tests, and some treatment, despite the usefulness of virtual care. Safety protocols to ensure immuno-compromised had to be perfect in all offices across Texas, as most procedures still required patients to come into the office. “As of 2021, and the foreseeable future, I don’t think we are ready for procedures like home infusion to be done consistently, efficiently, or safely” Dr. Patt stated.

Furthermore, the shortage of nurses prevents economically efficient ways to deliver care to patients in homes nationwide. “Even if it weren’t for the pandemic, we would be in a national crisis due to the availability of nurses,” Dr. Patt said, “I think that the pandemic has escalated that need, as our nurses have been with us on the frontlines fearing for their lives and their families.”

The Great Resignation may be on the horizon and will undoubtedly drive the future of cancer care in the years to come.

LEAVING THE DETAILS TO DR. DEBRA PATT

Debra Patt, MD, Ph.D., MBA, is an expert in breast cancer, policymaker and advocate in oncology, member of the ASCO Board, Professor of Oncology at UT Austin, all while having time to lead the world’s largest independent, physician-led practice as Vice President of Texas Oncology. For Dr. Patt, it all started with the need to help people with cancer in detailed, innovative ways, and building relationships over time with patients, while improving cancer care. Across her state’s 210 sites of service, Dr. Patt’s drive is to

answer the question: How can we best deliver great care at each of these sites and their communities?

“Even 15 years in, it still gets me up every morning excited, and I think that we’re doing really good work.”

Additionally, her work in policy and advocacy ensures that across the country, work is being done to improve cancer care and lead the nation towards delivering the best possible service. She testifies in front of the Senate, produces telemedicine guidelines with ASCO, and works with other leaders in oncology to prepare and handle issues on the horizon that all impact the industry at large.

Dr. Patt’s work in these various roles and environments allows for broadening her admittedly monocular lens from just the world of cancer care to social factors impacting the world at large. In response to working on COVID-related legislation, Dr. Patt said she was “shocked to review statistics illustrating a fourfold increase in anxiety and depression. Psychiatrists and social workers also informed us about the increase in domestic violence, homelessness, and mental health that have been exacerbated during the pandemic.” This is a horrendous statistic by any measure but combined with a diagnosis of cancer can be easily and justifiably overwhelming.

Open-mindedness and taking on multiple roles in cancer care and the broader world of health care are key in her abilities as a leader and driver of oncology legislation



Carlos Alfonso/Unsplash

and technology adoption, especially in a world threatened to slow down and stop by COVID-19 and the Delta Variant. Luckily for Texas and her patients, Dr. Patt’s journey to deliver great care every day will continue through the pandemic and long after.

ABOUT REVENUE CYCLE CODING STRATEGIES & RC BILLING

Revenue Cycle Coding Strategies has provided specialty medical coding, revenue cycle, and compliance consulting services, as well as educational and training materials to the healthcare industry for over 20 years. RCCS’s key to excellence lies in its extensive team of specialized coding experts and industry leaders, who create and implement customized revenue cycle solutions. Its comprehensive consulting solutions include billing auditing and assessments, compliance reviews, in-depth process mapping, and customized outsourced options, providing our clients the

assistance they need to thrive in the complex and ever-changing healthcare industry.

RCCS’ sister company, RC Billing, is the largest privately-held oncology company based in the US. Founded in 2003, RC Billing is the provider of choice for over 350 of the nation’s top medical, radiation, and surgical oncology practices. Their team is made up of experts with oncology-specific clinical backgrounds, years of experience, and a passion for oncology. RC Billing specializes in putting revenue-enhancing billing and collection systems in place that will help streamline operations and improve profitability where possible.



The State of Cancer Centers in 2022: 3 Key Findings From New Operational Survey

In mid-2022, capacity management expert LeanTaaS conducted a survey to capture data and insights from cancer center nursing directors and operational leaders from across the country, to better understand current challenges in cancer centers and how AI-based technology can help.

Nearly 100 cancer center leaders from across the US answered this survey, including those employed by community

and academic health centers, as well as private oncology practices. Respondents manage between 10-30 infusion chairs in their center and the majority hold vice president, director, and administrator titles.

CRITICAL FINDINGS FOR INFUSION CENTER OPERATIONS:

The survey found a significant number of cancer centers face common operational

challenges that prevent them from functioning at their optimal capacity. 40% of infusion center leaders surveyed believe they have already run out of space and would need to physically expand to accommodate any further patient volume growth. Further, inadequate tools and strategies are hindering smooth daily operations. The top three focus areas for cancer centers today are as follows:

1. INFUSION CENTER RESOURCE CONSTRAINTS

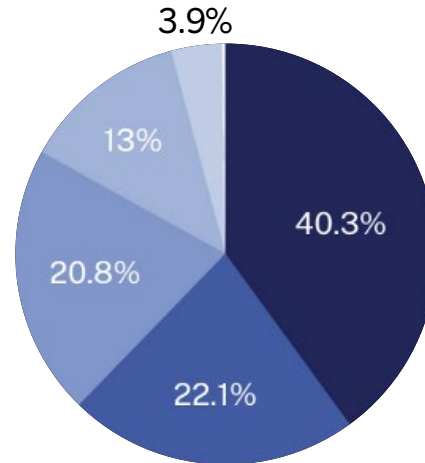
Resource constraints that infusion centers face include limited infusion chairs, nurse shortages, and pharmacies that are not able to keep up with drug demand. On top

of the 41% of respondents who said they would need to physically build capacity in order to accommodate additional patient growth, another 13% reported not having the resources they needed to add space or infusion chairs to help with volume growth.

COVID-19 safety measures also led to a backlog of patient demand that many centers are still working through. More than half of survey respondents need major investment in order to meet their current patient demand for appointments.

Figure 1. Does your center plan to add infusion chairs in the future?

- We have run out of space at our current center, so we need to build to accommodate additional growth
- No - we are steadily maintaining current volumes; there is no need for additional chairs
- Yes - our current space has the capacity to add chairs due to growing volume
- No - we do not have resources to add or build
- Yes - we are only adding back the chairs we lost due to COVID-19



2. STAFFING SHORTAGES AND BURNOUT

Survey respondents have tried a variety of approaches to address the widespread nursing shortage impacting [healthcare organizations nationwide](#). Most commonly, infusion centers have used travel or temporary nurses, modified shifts, and increased nurse-to-patient ratios to optimize resources.

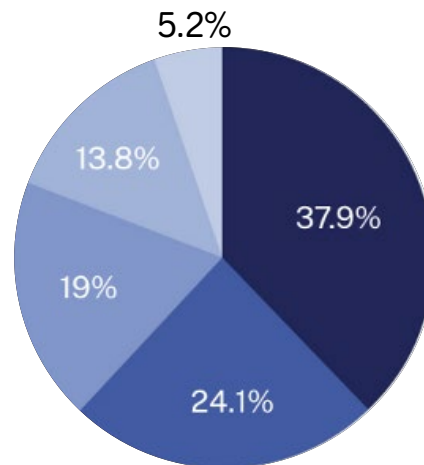
The method centers use to assign nurses to patients greatly impacts how efficient they can be with their existing nurse resources. The survey further finds that fewer than 20% of respondents are using the “nurse pull” methodology, which is mathematically and operationally the most efficient way to manage nursing capacity at infusion centers.

burnout. The most popular responses included offering staff recognition events and increased pay or benefits, closely followed by nurse support programs and team-building exercises. While helpful in the short-term, these tools are not well-suited for promoting long-term nurse retention while maintaining the operational and financial health of the health center.

We also asked respondents what tools they use to address nurse stress and

Figure 2. What method are you using to match nurses to patients?

- Pushing in advance (pre-assign nurses to patients)
- Pushing in real-time (assign when patient arrives)
- Pull (nurses take patients as they are ready throughout the day)
- Primary assignment (nurses see the same patient every visit)
- Other



3. LACK OF ACCESS TO RELEVANT EHR DATA

Infusion center personnel have access to EHR data to help inform decision-making, but they know that EHRs are not built to optimize asset utilization or improve patient access. Optimizing capacity is a difficult math problem that can never be solved by an EHR by itself.

It takes constraint-based optimization methods, machine learning, artificial

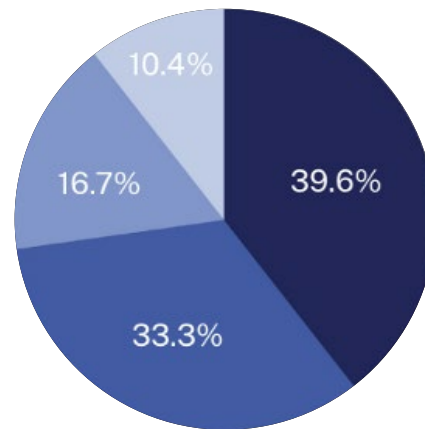
intelligence, and simulation algorithms to solve problems to unlock capacity and provide prescriptive recommendations. This challenge is illustrated in the nearly 50% of respondents who find it somewhat or extremely difficult to access the data they need from their EHR.

Additionally, nearly 50% of infusion centers are tracking their operational performance manually in spreadsheets, which are inefficient, a resource drain, and prone to human error.

Attempting to manually access data in the EHR and tracking performance metrics in spreadsheets is especially cumbersome, given the complex scheduling patterns in infusion centers. These results show a clear need for an easier and more effective way to draw actionable insights from EHR data. Supplementing the EHR with AI tools will show staff the specific volumes, assets, resources, and needs of their particular center.

Figure 3. How difficult is it to pull the data you need from your EHR?

- Somewhat difficult
- Somewhat easy
- Very easy
- Very difficult



THE CHALLENGES AHEAD: NAVIGATING INFUSION CENTER CAPACITY IN THE NEXT FEW YEARS

While the healthcare industry still faces new waves of COVID-19, the pandemic has undeniably exacerbated challenges in cancer center operations. Infusion center leaders will have to cope with:

- Staffing shortages due to burnout, stress, and retirement/aging of the nursing population
- Sicker patients who have delayed cancer screenings or treatment
- Doing more with fewer resources, and therefore operating more efficiently
- Innovating to accommodate patient growth without large capital investments
- Providing easier access to actionable data on health center operational performance

For the complete analysis, and discussion of AI-based solutions to these challenges, [download the survey report here](#).