After the Outbreak: Preparing for the Return of Cancer Cases

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In Brief

Cancer programs are facing multiple challenges related to treating patients in a COVID-19 environment. First, centers must design and implement systems and processes to ensure the health and safety of both patients and caregivers. Second, given the widespread disruptions in health care services experienced between mid-March and mid-May, it is anticipated that nationally there is a large backlog of new cancer patients. Therefore, cancer programs need to also deploy systems and processes to help navigate these patients into the healthcare system and to work through this backlog as quickly as possible within existing resources.

While shelter-in-place orders limited many people across the United States from leaving their homes to do more than buy groceries, cancer patients faced a more daunting challenge—how to continue their treatment, potentially in different ways than they had planned (e.g., telehealth appointments). Others have experienced the initial symptoms of a new cancer (such as a new source of pain or discomfort) but, due to closures and restrictions for healthcare services, were unable to initiate care.

Preliminary data from Harvard University researchers and Phreesia indicate a precipitous drop in outpatient volumes over a two-week period in mid-March.[1] Oncology providers saw, on average, a 47 percent decline in outpatient visits during this period.[2] Given the widespread disruption to healthcare services and the U.S. economy, these data are not surprising. It is estimated that more than 1.8 million new cancer cases will be diagnosed in 2020[2] (an average of 150,000 new cancer cases per month).

The surge in patient volume after the pandemic will depend on the magnitude and duration of the disruption to clinical care, because patient volume will be driven by the number of patients who had to delay care. For some cancer programs, the increase may be considerable—as much as 30 percent above average—and will potentially last through the end of 2020.

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With the precipitous drop in outpatient visits due to COVID-19, it is likely that many of these new cancer patients were unable to initiate care. Data from Flatiron Health validate this assumption, reflecting an approximate 40 percent decline in new patient visits from early March to early April.[3] Similar to the outpatient visit data shown above, the rate of new patient visits stabilized in April at a baseline level for the pandemic period. With service disruptions for cancer programs lasting at least two months (mid-March to mid-May), and extrapolating from the data above, it is estimated that there is a backlog nationally of approximately 120,000 new cancer patients. Accordingly, cancer programs operating in the new COVID-19 environment must account for how they will work through this backlog.

ECG recently spoke with leaders from National Cancer Institute (NCI)-designated cancer centers across the country to learn how COVID-19 is impacting their programs during the pandemic and how they are preparing for recovery. The interviews we conducted show that every cancer program's decline in clinical volumes is unique, as is the nature of their recovery. Because the COVID-19 pandemic is a dynamic situation, local trends may change over time and require a more—or less—aggressive response by cancer providers. The surge in patient volume after the pandemic will depend on the magnitude and duration of the disruption to clinical care, because patient volume will be driven by the number of patients who had to delay care. For some cancer programs, the increase may be considerable—as much as 30 percent above average—and will potentially last through the end of 2020.

Planning for a volume surge following COVID-19 requires a comprehensive approach across six domains affected by the pandemic: clinical operations, financial performance, quality and safety, workforce, facilities, and research. All of these areas are likely to be affected. Below we will explore key strategies for each of these areas. To help guide their cancer programs through a successful recovery, physician and administrative leaders should:

1. Prepare your clinical operations to accommodate an increase in patient demand while ensuring patient and staff safety.
2. Deploy financial management systems to maximize your revenue.
3. Develop or maintain strict safety protocols to ensure the safety of patients.
4. Prepare the clinical and nonclinical workforce to respond to increases in demand.
5. Update the physical environment to meet current social distancing requirements, while at the same time accommodating additional patient volumes.
6. Thoughtfully resume clinical research efforts.
7. Improve communication with patients, allaying their fears while also educating them about the risks inherent with delaying treatment.

In the remainder of this article, we explore key strategies for each of the six domains identified above.

Domain 1. Clinical Operations

Over the last two to three years, many cancer programs began experiencing the combined effects of an aging facility, a growing community, the integration of acquired practices, or the addition of newly recruited providers. Though the COVID-19 public health emergency may provide temporary relief from the overcrowding experienced just a few months ago, this will last only until the recovery begins. It will be important, in preparation for recovery, for many cancer programs to deploy strategies to increase their capacity.

Telehealth

Most cancer programs rapidly implemented or expanded their use of telehealth during the COVID-19 pandemic. Oncology leaders told ECG that they saw a 100-fold to 1,000-fold increase in use of the telehealth platform in March 2020. For many cancer programs, the adoption of telehealth services led to a redesign of clinical workflows (e.g., no longer requiring a physician visit before chemotherapy). Telehealth was embraced by many patients and providers and is a logical tool for managing routine follow-up and survivor visits. Leading cancer programs are planning to maintain telehealth as a core service delivery tool, anticipating that 25 to 50 percent of office visits will be provided remotely. Telehealth services offer both near- and long-term benefits, including:

- Increasing capacity by allowing providers to see more in-person patients at the physical care location while also offering care remotely.
- Improving social distancing by reducing the number of patients physically in the cancer center.
- Creating market differentiation, as early results from both patients and providers indicate positive feedback of virtual visits.

Cancer programs should look for opportunities to extend telehealth services, particularly related to survivorship clinics, social work support, and clinical pharmacist follow-up visits for medication management.

Operational Debulking

Cancer programs should carefully evaluate clinical practices across the organization to identify opportunities to further reduce the number of on-site clinical encounters, such as:

- Eliminating unnecessary encounters (e.g., physician consultations before each chemotherapy procedure)
- Transitioning encounters to alternate care settings (e.g., oral oncoloytics or in-home infusions)
- Reducing the number of encounters required (e.g., hypofractionation for patients undergoing radiation therapy).

Surgical Alternatives
Facilitate discussions with medical staff leadership to develop or update clinical protocols regarding the use of radioembolization, radio frequency ablation, and cryoablation as alternatives to surgical procedures.

Addressing Bottlenecks
Identify operational bottlenecks in the system (both in the cancer center and in upstream/diagnostic service areas) and develop solutions to improve capacity (e.g., extended operating hours, increased staffing).

Operating Hours
Of the NCI-designated cancer center leaders ECG interviewed, most are planning to extend operating hours to increase their capacity. Cancer programs should develop a clear plan that addresses factors such as when to implement extended hours, how to staff the clinic, etc.

Decanting to Smaller Centers
Many NCI-designated cancer centers are looking to use their community-based network to decant volume out of the main center. Doing so requires a staffing plan, clinical algorithms regarding the appropriate care locations, and the potential use of telehealth services to augment the provider services in community clinics. Centers that have begun implementing this strategy report increased patient satisfaction in being able to receive care closer to home.

Testing
COVID-19 testing protocols for patients and staff are a key concern for NCI-designated cancer centers. All recommended developing a set of policies governing the routine testing of asymptomatic patients and staff. The frequency of testing will evolve, based on the availability and turnaround time for tests; however, the following steps were recommended:
- Test all patients before initiating treatment.
- Test patients receiving therapy every two to four weeks.
- Develop protocols for staff testing, although there was no consensus regarding the frequency of this testing.

Visitor Policy
All NCI-designated cancer centers had implemented a strict no visitor policy. Though these policies are viewed as being in the patients' best interests, it was acknowledged that they take an emotional toll and are not very patient friendly. Although these policies are currently necessary, cancer programs must evaluate alternative models to support visitors, such as COVID-19 testing, required use of personal protective equipment (PPE), or other strategies. The phasing back in of visitors will also need to be gated with the pace of recovery and the incidence rate in the community. Nonetheless, cancer programs should monitor this policy vigilantly to ensure that they provide an optimal healing environment.

Social Distancing
Policies have been enacted across all NCI-designated cancer centers to increase social distancing. Examples include:
- Not collecting copays to minimize the number of patients at reception.
- Conducting virtual scheduling of new patients, including collecting all necessary financial information.
- Reducing the number of infusion chairs in operation to increase the distance between patients.

Domain 2. Financial Performance
One of the most significant challenges of COVID-19 is the financial strain it places on cancer programs. During the height of the pandemic, many cancer programs operated at reduced revenue levels. This will be followed by periods of volume growth, although the payer mix will likely be less favorable than before. Many patients are transitioning to public payer plans (Medicare or Medicaid) or an exchange product or have no insurance after losing private insurance that was tied to their job.

Cancer programs need to develop a holistic financial improvement plan, complete with scenario modeling and quantification of potential tactics, as soon as possible to understand available tactics, their financial impact, and potential strategic implications. Strategies to include in such a financial improvement playbook are below.

Payer Strategy
Begin key conversations with payers early; NCI-designated cancer centers indicate that most have yet to begin these efforts. Cancer programs can start by:
- Identifying alternative payment constructs that support changes to the care delivery model discussed above (e.g., shorter course therapy, oral chemotherapy).
- Exploring potential development of value-based payment models that may generate additional income for the cancer program.
- Identifying potential areas of payer assistance (e.g., accelerated or advanced payments) and enrolling patients in these programs.
- Toughening the negotiation strategies (if possible) for contracts that are currently being negotiated. Take advantage of the fact that payers are likely to be in a favorable financial position.
- Negotiating with payers to extend or expand telehealth coverage models that were implemented during the pandemic. Specifically, seek to preserve telemedicine rate parity with facility-based services.

Financial Navigation
Recognizing the financial challenges that many patients may be facing, develop or expand your financial navigation program by increasing the number of dedicated FTEs.

Accounts Receivable

The irregular distribution of patients in calendar year 2020 will create unique challenges from a cash flow and accounts receivable perspective. In preparation for the recovery surge, add support for accounts receivable functions, either by staffing up in this department or by seeking short-term vendor support. Given the potential competition for limited skilled resources, develop a solution early, before costs increase.

Expense Management

Look for creative ways to reduce costs and eliminate waste, such as the consolidation of regional programs or termination of underperforming programs or services. Given the potential lead time to implement these strategies and the expense management efforts already under way, this is unlikely to be a primary strategy for most programs.

Capital Investments

Operational decanting and debulking strategies should create considerable capacity that will likely endure beyond COVID-19. Cancer programs may find that this virtual capacity enables them to delay potential capital investments that would otherwise have been required to expand physical capacity.

Domain 3. Quality and Safety

Now, more than ever, quality and safety issues are of paramount importance. Cancer programs will simultaneously seek to adopt new care models and refine operational practices to improve patient access and ensure patient safety. However, change creates disruption and must be carefully monitored to avoid adverse impacts on patients. Start by looking at these areas:

- *Infection Control.* Many cancer programs adopted a variety of infection control policies during the pandemic, such as requiring patients to pass a COVID-19 screening, restricting visitors, limiting vendor access, and mandating use of PPE by patients and employees. Extend these policies for the foreseeable future to ensure a safe, healing environment for cancer patients.
- *Guideline Relaxation.* With an eye to the future, establish the criteria and policies that will be used to determine when to relax COVID-19 infection control measures.
- *Triage Criteria.* Anticipating periods during the recovery surge when the cancer program is overwhelmed by patient demand, develop (or adopt) a set of triage protocols that govern access to services. The triage protocols published by the American Society of Clinical Oncology[4] and the American College of Surgeons[5] to guide patient management through the pandemic may provide a baseline from which to begin.

Domain 4. Workforce

The post-outbreak period presents several workforce challenges. Cancer programs will need to balance staffing to meet patient demands with efforts to prevent burnout among the workforce. Though specific challenges will likely vary by location, employee category, and the specific needs of the cancer program, specific areas to consider include capacity, staffing, and compensation.

Increase Capacity

Develop plans to scale up staffing, as appropriate, to meet increased patient demands. Given the physical limitations of each facility, many could find that this involves moving to extended hours of operation, as most of the NCI-designated cancer programs we interviewed are planning to do. Begin by surveying staff to understand their preferences and/or flexibility for alternative work schedules. With limited day care options, younger parents may favor work schedules that allow them to balance childcare with their significant other. At the same time, evaluate your compensation policies to ensure that staff are fairly paid and incentivized to provide much-needed services.

Provider Staffing

Evaluate your provider (physician and advanced practice provider) staffing model soon. Stress-test the model to determine how much additional capacity it can absorb and then begin looking for additional resources to fill any gaps. In addition, consider potential changes in the provider mix and roles (e.g., more advanced practice providers working at the top of their license to manage follow-up and survivorship visits). Cancer programs with a clinical affiliation partner may be able to tap into additional resources to provide in-person care or to support telemedicine visits.

Provider Compensation

During the pandemic, some cancer programs offered guarantees or subsidies to providers on production-based compensation plans. It is important to address how these guarantees will be treated going forward. Many cancer programs are extending the compensation plan's reconciliation period to look at the full year of 2020, rather than doing a midyear reconciliation. If providers can meet the demands of the recovery surge, they should be able to make up the guarantees that were extended during the pandemic period. However, it is important to have clear communication with providers about what to expect for 2020 from a compensation perspective.

Domain 5. Facilities

Preparing cancer programs for the post-outbreak volume recovery involves readiness for an increase in patient volume while also ensuring patients' health and safety. Start by looking at these key areas.

Maintain Distancing Measures

Until a vaccine is widely distributed, plan on continuing key safety measures that were implemented during the pandemic, such as physical barriers for reception, decreased seating capacity in waiting areas, screening stations at entrances, and similar measures. Distinct egress and circulation for patients and staff should be defined to minimize risk within the building if possible. Doing so will help to prevent the spread of COVID-19 through the center and reassure patients that their health and safety is of paramount importance.

Adjust the Air Pressure Environment

An updated air pressure environment will help supplement the distancing measures already in place. Establish a positive air environment to better protect patients from COVID-19 entering their room (or zone). For patients who have tested positive for COVID-19, a negative pressure environment should be established, or measures put in place, to filter air in exiting rooms or zones housing those patients. These spaces should be developed by first assessing current conditions, installing room pressure monitors, and then updating operations of the centralized HVAC system. In general, establishing positive pressure zones is a low-cost measure that can be accomplished with most existing HVAC systems. Establishing negative pressurization usually requires more costly modifications or adjustments to existing systems.

Off-Site Operations

Consider relocating non-clinical and non-essential staff and operations off site from the cancer center. Doing so will reduce the density of people in the building and support efforts to create spatial distancing. This practice will free up additional office space for clinicians or provide an area for positive pressure zone(s).

Additional Space

The combined effect of social distancing and patient volume increases may mean that additional office space must be found for consultations. Begin identifying nearby options now, potentially in the offices of other specialists or clinics that are not projected to experience a surge in volume. In identifying additional clinical space, it is important to ensure that spatial and/or temporal distancing from the non-oncology patients can be achieved and that the spaces will be cleaned and maintained in a manner that is similar to the primary oncology spaces.

Telehealth Space

Given the increase in digital and telehealth care in the industry, additional space for telemedicine clinicians should be made available. Using existing clinical offices on site, and with support of the main oncology staff, could prove valuable.

Alternative Waiting Spaces

Evaluate alternative options for check-in and patient waiting to avoid large groups of patients in waiting areas. For example, consider a pager system that allows patients to wait in their car until the provider is ready. Another alternative is to install temporary structures (e.g., modular trailers) outside, adjacent to the main building egress point.

Parking

The surge of patient volume may be more than the site's parking was originally planned to accommodate. Give top priority to patients needing access close to the building's egress point(s). Short-term solutions that could be implemented quickly include implementing or expanding shuttle service, leasing additional space, and/or rezoning staff or physician spaces near the center.

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Domain 6. Research

In early May, only 10 percent of clinical research sites remained open to enrollment, because most research programs halted screening and enrolling participants. For ongoing trials, research teams have struggled with protocol adherence due to fewer patients and research staff. The good news is that a significant backlog of trials is planned. Cancer programs will be able to continue to serve their patients with novel treatments; this will be balanced against the need to conduct research in a new, post-outbreak environment. It is vital that research efforts be coordinated with previously discussed processes, especially around PPE distribution, infection control, and facilities management. Consideration and planning should be given to the following issues.

Federal Guidelines

Cancer programs must continue to follow announcements from the U.S. Food and Drug Administration, NCI, National Institutes of Health, and other federal agencies related to the management of covered clinical studies. Clinical research leadership should monitor the respective websites for updates and provide this information to investigators and study teams as new guidance is released or organizational protocols shift.

Virtual Studies

Research participants are hesitant to travel to their health systems for care. This has forced research teams to implement and expand telehealth, mobile nursing, and other remote monitoring tools throughout the pandemic. Though there are few clinical oncology studies that can be fully managed in a virtual format, investigators and research teams should continue to embrace remote consent, telehealth, remote patient care, and mobile nursing visits with research participants.

Sponsor Management

Our clients report continued challenges with protocol modifications due to the pandemic that are starting to lighten up as the entire industry adapts to the need for flexibility in contracting, site visits, and drug distribution. Clinical research administration must document, by sponsor, their respective protocol modifications and make this information available to study teams.

Study Management

Protocol deviations will continue to be a concern, because research participants may be reluctant to fully comply with their scheduled visits. Research teams must continue to fully document whether these constitute minor or major protocol deviations, with any major deviations being reported per organizational protocol to the appropriate institutional review boards.

Research Staff

Cancer programs need to continually monitor the workload of the respective study teams. Some may consider centralizing their clinical research staff to better manage study deployment, and others may create dedicated backup teams to manage any staff shortages.

Blood and Tissue Samples

Many organizations stopped collecting biospecimens for all patients in the early stages of the pandemic. Coordinate with infection control to document handling precautions for COVID-19-infected and noninfected patients. There are typically no additional handling precautions for noninfected samples; however, biospecimens from COVID-19 patients should have clearly documented procedures around collection, processing, and disposal.

Domain 7. Communication

Communication with patients is vitally important—now more than ever. For months, patients have seen images on television of overwhelmed hospitals, and many are avoiding healthcare services for fear of being at an increased risk of exposure to COVID-19. However, for cancer patients, these fears may place them in greater danger of an unfavorable outcome from their disease. Now is the time for cancer programs to proactively begin a dialogue with their patients around:

- *Education.* Providers should educate patients about local developments in the community and how these impact their treatment.
- *Safety.* Patients need to understand that providers are taking their safety seriously. Communication to patients should clearly identify the various safeguards put in place to protect them.
- *Risks.* Providers also need to make certain that patients fully understand the risks inherent with treatment delays. For patients with cancer, this is a key concern—delays in treatment may result in a more advanced disease and/or may affect the type of therapy they receive.
- *Compassion.* Cancer is a scary and emotional journey for patients. Providers should seek to engage with patients to understand their fears and concerns as a treatment plan is being formulated. In certain cases, the care team may consider alternative treatment pathways, such as the use of neoadjuvant therapy, to navigate these challenges. By empowering patients to have a role in establishing their treatment plan, providers can better address patients' psychological needs while treating their physical needs, thereby keeping them engaged with their therapy.

COVID-19-Positive Patients

Interviews with NCI-designated cancer centers highlighted the need to develop a plan to care for COVID-19-positive patients with cancer. The prevalence of this patient population will trend with the COVID-19 incidence, but it is possible that any community may encounter these patients. The cancer program leaders we interviewed stressed the importance of physical distancing this patient population from other patients. For instance, one cancer program asks COVID-19-positive patients with cancer to use a separate entrance to the facility and manages these patients in an area that is isolated from the rest of the patient population. Many of the facility planning issues discussed above may be applied to improve segregation of this patient population (e.g., physical barriers, airflow), and many operational precautions will also apply. In addition, cancer programs may choose to have dedicated staff supporting these patients either full time or on a rotational basis. Doing so reduces the use of PPE by staff moving in and out of the "hot zone."

The Imperative for Planning

Regardless of your organization's or your community's current circumstances, now is the time to begin planning or refining strategies to support the recovery of the cancer program. A recovery plan will ensure that the necessary resources are in place to maintain support for the expected surge in cancer patients who need care. The recovery plan needs to be comprehensive—encompassing the care delivery model, operational requirements, financial implications, and near- and long-term strategic considerations. When such a plan is carefully developed and vetted with program and health system leadership, it will be ready for implementation when it is needed.

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