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Beyond COVID-19: Managing the Anticipated Surge of Elective Surgical & Procedural Volume

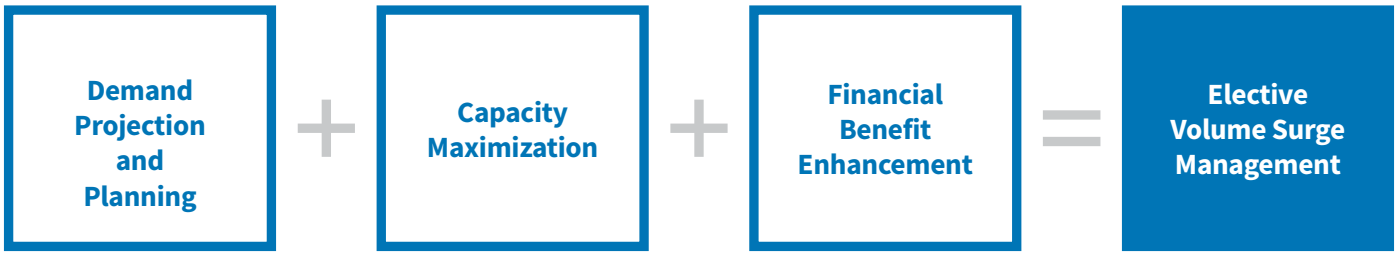
The United States is experiencing an unprecedented public health emergency from the COVID-19 pandemic. The crisis has been transforming the healthcare landscape nationwide. Per government guidance, since mid-March many provider organizations have halted nonessential care across the healthcare continuum. Among the deferred services are elective surgeries and procedures, the primary source of revenue for many hospitals. These high-margin services have historically allowed hospitals to remain financially healthy as they take a loss on certain other services. In light of the Centers for Medicare & Medicaid Services (CMS) recommendation to reopen facilities to provide non-emergent, non-COVID-19 healthcare, hospital executives ought to outline strategies and tactics to attract and accommodate elective procedures in the immediate future.

70-75%

of cases in most hospitals & 99% in Ambulatory Surgery Centers are elective. These cases have mostly not been addressed since the COVID-19 pandemic.

In our observation, typically 70%-75% of procedures in most hospitals and 99%+ of cases in Ambulatory Surgery Center (ASC) are elective. These procedures generally are performed during a given time period in the day and rely highly on the available asset: physical space (operating room, pre-op and post-op space), multifunctional care providers, ancillary services, equipment, instruments and supplies. The complexity of the operational requirement along with the dependencies on support of many functional areas outside the ORs make it challenging to optimize capacity. The pre-COVID throughput effectiveness (on-time start, room turnover, discharge effectiveness) most certainly plays a significant role in efficient use of the asset. However, the conventional solutions are inadequate due to the pent-up demand that is growing each day, the augmented requirement ensuring patient and staff

safety, and the evolving social and economic environment. In this article, we would like to explore key steps and success factors in managing the surge of elective procedures as organizations start to open up the capacity of elective volume.



Opening Elective Volume | Demand Projection and Planning

Several months of shrinking surgical revenue coupled with increased demand requires leaders, providers and other stakeholders to shift to a higher gear and act soon. Patients and families are likely to seek care soon and may look for alternatives if their desired providers are not proactive in retaining volume capacity and offering options.

First, organizations need to understand the potential pent-up demand and the related financial implications. Missed case volume can be quickly estimated using the following formula:

Days of COVID-19 nonessential care halt x average # of cases/day x % of elective cases = # of halted elective cases

This number represents the volume that needs to be accommodated as the OR expands its capacity. The longer an organization waits, the more likely it will lose cases to its competitors, and thus suffer from loss of revenue.

# of halted elective cases x avg. revenue/case = deferred or loss of revenue

A deeper dive into OR operation logs and historical KPIs — e.g., average case duration by service line, turnover time at service line or provider level, and contribution margin — will further help management get a better understanding of need for OR time, and appropriately prioritize and allocate cases during capacity planning.

After building a solid understanding of the demand for care, leadership should project associated needs for resources. A key aspect of this would be to examine the governance of procedural services, dialogue with surgeons and anesthesiologists/CRNAs to support the pent-up surge. Prioritizing the halted cases by clinical need as well as potential for higher ROI is crucial as the governance structure addresses surge demand. Involving the key stakeholders with robust data early is essential. This collaboration and coordination will be required at all levels, starting with daily management of the procedure rooms and running the board.

The increased workforce coverage will expand beyond the ORs and address all aspects of procedural services — nursing, supply chain, sterile processing, facilities, EVS, and finance. This expanded coverage will require balancing the need for requisite skill sets with potential burnout. A proactive approach is required in order to garner support from part-time, per-diem and other areas and should be coordinated through a central staffing pool for Procedural Care Services.

Supply chain has taken a huge toll in this crisis, and while PPEs are still critically short, the surgical case surge will place additional hardship on obtaining case-specific supplies, especially Producer Price Indexes (PPIs). CMS recommends that healthcare providers and staff wear surgical face masks at all times. Procedures on mucous

membranes including the respiratory tract, with a higher risk of aerosol transmission, should be done with great caution, and staff should utilize appropriate respiratory protection such as N95 masks and face shields. All these requirements further necessitate that supply chain, sterile processing and specific service-line managers work with physicians' practices to establish supply needs and vendor delivery requirements.

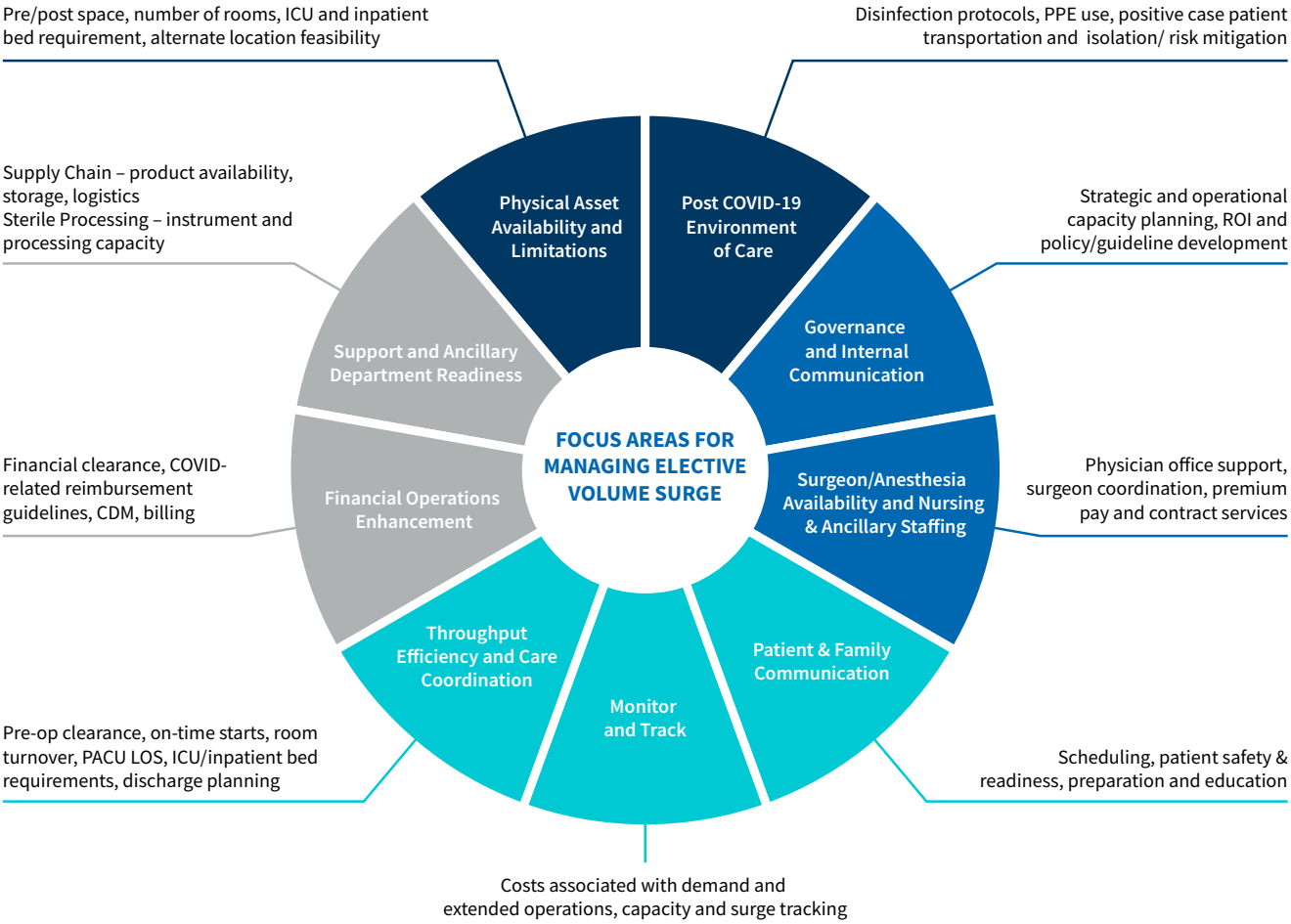
Accommodating Elective Volume | Capacity Maximization

As organizations embark on opening the elective procedural volume, a critical assessment of capacity vs. demand becomes essential.

It is common knowledge that managing effective throughput in a procedural care environment during ordinary times is complex and challenging. This crisis has compounded the complexity, especially because of evolving new requirements around environment of care, unforeseen demand on supplies and equipment, and the reduced production of products required for elective cases. Determining answers to some of the following questions will help in understanding capacity as well as its limitations:

- What was the pre-crisis capacity and was it optimized?
- If the hours of operations are extended on weekdays and weekends, what are the changes in workforce that can be implemented and what are the costs associated with premium time or agency staff?
- How do we create flexibility in OR schedules and clinic hours to balance surgeons' OR time and physicians' office time?
- How can the scheduling office consolidate cases in one location, either at hospital main OR and ASC, to reduce surgeon travel time and increase efficiency?
- What are the allowances/limitations for anesthesiologists/CRNAs to extend their presence in the OR and NORA locations, taking into consideration the needs of additional staff for COVID-19 patients?
- Do we have sufficient pre-operative and post-operative space to manage patients?
- Are there any closed OR or procedural rooms that can be opened to manage the surge?
- How will sterile processing cope with increased demand from instrumentation and processing needs?
- Will there be enough lead time to manage the requirements on supply chain, as most organizations were heavily dependent on JIT?
- Can vendors scale their availability to support procedures that require their presence — ortho, spine, EP, etc.?
- How do we balance the available capacity vs. required capacity and ROI?

An orchestrated approach is key to answering some of the questions and organizations must focus on the following areas:



While it is imperative that healthcare organizations do everything possible to recoup the lost volume, it is equally important to balance the demand with capacity and safety. It is the need of the hours to develop a data-driven capacity planning tool to help the leadership make decisions related to elective volume surge. Despite the lack of definitive clinical guidelines, current practice adopted and recommended by other countries that experienced COVID-19 earlier already demonstrates the need for longer OR time, extended turnover time, and additional personnel. These factors should be incorporated while OR leaders formulate the capacity plan.

Timely, proactive patient communications and education related to plans for reopening, case scheduling, availability and preparation are essential and must be aligned with physicians' offices. This requires a clear platform for communicating plans between hospital/ASCs and physician offices that includes scheduling, pre-admission testing requirements and financial clearance. An equally concerning area for communication should be around safety and environment of care for patients, families and staff. Administration and facility management need to modify physical setup to facilitate social distancing, such as spacing chairs at least six feet

apart, and minimizing surgery waiting time. The facility needs to make the effort to soothe concerns of patients and their families.

Facilitating Elective Volume Absorption | Financial Benefit Enhancement

Hospital administration and perioperative leaders should actively explore reimbursement and emergency/relief funds related to lost volume. Notable provisions in the Congressional COVID-19 stimulus package include:

- Funding for providers – Provides $100 billion to reimburse healthcare providers for expenses or lost revenues associated with COVID-19.
- Funding for medical supplies – Allots $16 billion for supplies of pharmaceuticals, personal protective equipment, and other medical supplies to be distributed to state and local health agencies and healthcare providers.
- Suspension of Medicare sequester – A suspension of the previously enacted two percent sequester of Medicare payments through December 31.
- Health extenders – Extends the following programs into November:
  - Disproportionate Share Hospital (DSH) cuts – Delays DSH pay cuts until FY2022, meaning the cuts will now take effect from FY2022 through FY2028 (the cuts had previously been set to expire FY2025).
  - Community health centers funding – Gives $1.32 billion for community health centers.

While enhancing revenue by maximizing capacity and exploring other funding sources, hospital management needs to closely monitor additional cost associated with demand and extended operations, since not all of them are warranted. Premium labor cost, especially agency/traveler recruitment and expense, should be justified based on thoughtful analysis, thoroughly documented and centrally managed. The terms of service agreement should provide certain flexibility and be aligned with projected surge duration.

Conclusion

The COVID-19 crisis has derailed normal operations across health systems and dependent stakeholders. The pent-up demand for surgery and elective procedures must be addressed in the next 30 to 60 days to ensure that demand correction will be accommodated. Healthcare leaders working along with physicians and other staff will be required to shift their focus in order to address this surge and recover some lost revenue. The complexity of surgical and procedural services is a challenge for organizations during the normal course of business, and this surge will compound it even further — but if surge procedures are planned, executed and tracked well, organizations will rebound and may even apply some of the lessons learned to a new norm in managing perioperative and procedural services.

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