



Introducing a New Service Line at Your ASC: You Want to Do What?

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Accepted: 8 February 2024 / Published online: 15 February 2024

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Abstract

Purpose of Review Surgical procedures have been increasingly migrating from traditional inpatient settings to a variety of outpatient settings. Many ambulatory surgical centers (ASCs) will be facing the question of how to add new service lines at their facility. This article will outline, in a stepwise manner, some of the considerations before undertaking new procedures at the ASC.

Recent Findings Several market research reports predict continued growth in the ASC sector for both revenue and procedural volumes. The key drivers of this growth are improved surgical capabilities, advanced anesthetic techniques, cost savings, update in payment policies from CMS increasing payment rates under the Outpatient Prospective Payment System, and changes to the Medicare inpatient only list over the last 3 years. It is expected that ASCs will see higher volumes of surgical procedures with an estimated 15% increase by 2028.

Summary By starting with a clear business plan and involving key stakeholders from the outset, what can seem like a daunting task can be broken down into a number of parallel processes enabling a successful and sustainable implementation of the new service. Future research should include the impact of value-based care on patient and economic outcomes.

Keywords Service line · Inpatient procedure list · Regulatory requirements · Multidisciplinary · Accreditation · Infrastructure · Payer mix

Introduction

Ambulatory surgical centers (ASC) are defined by the Centers for Medicare and Medicaid Services (CMS) as distinct entities operating exclusively to provide surgical services to patients not requiring hospitalization and the expected duration of services not exceeding 24 h following an admission [1]. Surgical procedures have been increasingly migrating from traditional inpatient settings to a variety of outpatient settings including hospital outpatient departments (HOPDs), ASCs, and office-based settings. Several market research reports predict continued growth in the ASC sector for both revenue and procedural volumes. The key drivers of this growth are improved surgical capabilities including minimally invasive procedures, advanced anesthetic techniques

promoting rapid recovery, cost savings for both patients and payers, update in payment policies from CMS increasing payment rates under the Outpatient Prospective Payment System by an Outpatient Department fee schedule increase factor of 3.1% for 2024, and changes to the Medicare inpatient only list over the last 3 years resulting in procedures previously only approved for inpatient surgery now being reimbursed in the outpatient setting [2]. It is expected that ASCs will see higher volumes of surgical procedures with an estimated 15% increase by 2028.

The implications of this shift will require ASCs to evolve to meet new demands and hospitals and health systems to incorporate robust outpatient surgery programs. In 2017, 5603 Medicare-certified ASCs treated over 3.4 million Medicare fee-for-service beneficiaries. ASC ownership models include sole physician ownership; joint venture between physicians and an ASC management company; joint venture between physicians and a hospital system; three-way joint venture between physicians, an ASC management company, and a hospital system; and finally a solely hospital-owned model [3]. Practice environments are becoming increasingly complex with greater regulatory requirements, health

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information technology, insurer contracting, and other business costs making it difficult to sustain the sole physician ownership model for ASCs. This is resulting in physicians partnering outside investors including private equity in the ASC sector [4]. Private equity involvement in US healthcare has resulted in concerns about patient welfare and quality of care. A large database study found that the presence of private equity ownership did not impact physician decision-making and agency on behalf of patients nor did it impact case volumes or types of cases performed [5].

With the anticipated growth in outpatient surgery, many ASCs will be facing the question of how to add new service lines at their facility. This article will outline, in a stepwise manner, some of the considerations before undertaking new procedures at the ASC.

What Is a Service Line?

A service line is a specific grouping of multidisciplinary services by comorbidity, organ system, or demographics to serve a defined patient cohort. Examples of service lines include interventional cardiology, women's health, interventional radiology, spine surgery, and total joint replacement. A service line model provides value-based healthcare services with a focus on multidisciplinary, coordinated high-quality, and cost-effective care.

Why Add a New Service Line?

An important question to consider before expanding services at an ASC is who is driving the request for the new service line: surgeon, health system current needs in the area versus ASC management. The ultimate success and sustainability of the program depend on the drivers of growth.

Market Analysis

A good starting point is to assess the need for a new service in the geographical location. Is the service in demand? Are other health systems and ASCs in the area providing this service and if so how are they performing? What are the wait times for patients? Consider if there will be enough case volumes to support growth. It is also worth projecting anticipated case volumes or predicting the need for a new service line in the area based on population growth and payer mix. There also needs to be a business plan which includes key stakeholders, anticipated case volumes, reimbursement rates for different payers, and costs per case including supplies and personnel. Evaluate capital expense costs and factor in any facility improvements that

may be necessary such as waiting room expansion, adding a kitchen, and expanding operating room space.

Which Service Line to Add?

Deciding which service line to add or expand should consider regulatory requirements which vary by state. The service line should be on the CMS and the state department of health-approved procedure list for outpatient surgery. Reimbursements for the procedure done in an ASC should be viable and sustainable. For example, it would not be prudent to add a service line if the procedure reimbursement rate in the outpatient setting does not cover the cost of the procedure or implants that may be necessary. Similarly, adding a service line that complements an existing specialty would be cost-effective in terms of shared equipment and supplies. Understand the landscape of the geographical area and where procedures are migrating before adding the service line. For example, if the service line is migrating to the office-based setting, it does not make sense for an ASC in the area to add it to their repertoire.

Regulatory Requirements

After ascertaining that the planned services are on the CMS covered procedure list, it is also important to determine the state department of health (DOH) requirements for the services. For example, three percutaneous coronary intervention (PCI) procedures were added to the CMS covered procedure list in 2019. However, some states outright exclude ASCs from performing PCI procedures while other states require ASCs to apply for a certificate of need (which may or may not be approved) in order to perform the procedures. In addition, state departments of health may also require that ASCs meet certain criteria such as provision of other services or joint ownership with an acute care hospital offering those services or approval from local acute care hospitals for the ASC to perform these procedures. State DOH may also require applications for exemption to do certain procedures at an ASC even if they are on the covered procedure list such as laparoscopic surgery. Third-party specialty-specific (i.e., cath lab) accreditation is required in some states and not in others. The time required to obtain these permissions needs to be factored into the implementation timeline. The DOH may also need to do a site inspection before approval of the new service line especially if infrastructure changes were made.

Infrastructure Requirements

The Facility Guidelines Institute (FGI) is a not-for-profit organization that develops guidelines for designing and building hospitals and other healthcare facilities. These guidelines have been adopted by several states and accrediting organizations [6]. The guidelines provide recommendations for minimum space, risk assessment, infection prevention, architectural detail, surface, built-in furnishing, and building system requirements. Design requirements of the patient care area are determined by the level of invasiveness, likelihood of infection, number of staff and equipment, and type of anesthesia required. Areas are classified as examination rooms, procedure rooms, operating rooms, imaging rooms, or hybrid rooms (Table 1). Operating rooms require maintenance of prescribed environmental controls. A procedure room or examination room can only be used to perform cases requiring high-level disinfection whereas an operating room meets the requirements of a restricted area and is designated and equipped for performing surgical or invasive procedures requiring an aseptic field. An ambulatory facility that only has procedure rooms and wants to expand its procedure list to include surgery would require major infrastructure modifications to construct operating rooms. There may be operating room size requirements for certain procedures that would need to be met or exemptions applied for. There are studies in total joint arthroplasty patients that showed that temperature and humidity differences and significantly lower airborne biologic particle counts were found in large compared to small operating rooms but these studies did not examine the impact of this finding on infection rates [7••, 8].

Equipment Needs

There needs to be a clear plan for equipment needs, suppliers/vendors for the required equipment, establishing vendor relationships, and negotiating leasing options or other arrangements to pace investment costs for capital equipment. ASC contracts may be different from hospital or HOPD contracts and should not be a last-minute surprise.

Personnel Requirements

Some service lines require additional training and certification before providers can start performing the procedure. The governing body of the ASC needs to ensure that all providers who will be performing the new procedure obtain the required training and certification and are appropriately credentialed and privileged. In addition, training is also

required for the peri-anesthesia staff and the operating room staff especially if the new service involves equipment or pharmaceuticals that require special handling. This training needs to be completed well before the anticipated start date of the service. It is useful to contact the vendors for service lines requiring new equipment since they are able to provide the required in-services to the staff. Establish a “champion” in each area: proceduralist/surgeon, nursing, anesthesia, and administration [9].

Quality Assurance and Process Improvement

It is important to establish benchmarks for the new service line ahead of time using existing data from other centers that have performed high volumes of these procedures [10]. For a new or emerging procedure, there may not be well-established benchmarks. It is important, in these situations, to outline care processes and expected outcomes and processes for follow-up and tracking outcomes. Clinically relevant outcome parameters should be measured such as readmission, length of stay, and comprehensive complication index [11–13].

Literature supports that benchmarking stimulates quality improvement [14••]. Benchmarking helps define and measure the best achievable results, establishing a meaningful reference to evaluate surgical performance and compare outcomes across institutions [15, 16].

The providers performing the new service may need to be proctored by an experienced provider if possible or a clear process be outlined for peer review of the first few cases to ensure quality and outcomes.

Patient Selection

The implementation and long-term success of a new service line depend on careful patient selection. Patient selection is a dynamic interplay of facility and procedural and patient factors [17•]. Each facility will need to establish procedure-specific patient selection criteria. Evidence-based procedure-specific criteria can improve patient safety and outcomes and reduce costs both from a patient and health system standpoint [18]. In the outpatient setting, primary outcomes of interest are prolonged length of stay, hospital transfer or readmission, and acute-care or emergency room visits after discharge. Procedure-specific patient selection criteria need to be established in collaboration with the surgeons and anesthesiologists. There may be existing patient selection criteria for well-established service lines which can be adopted by the facility [19].

However, if the facility is implementing a service line that is relatively new to the outpatient setting, patient selection

Table 1 Design requirements for patient care areas. Guidelines for Design and Construction of Outpatient Facilities, The Facility Guidelines Institute, 2018 Edition

| Room type | Use | Accessed from | Ventilation | Surfaces |
|--------------------------|--|--|--|--|
| Exam room/treatment room | Patient care that may require high-level disinfection or sterile instruments but does not require the environmental controls of a procedure room | Unrestricted area | 4 air changes per hour for general exam room 6 air changes per hour for exam rooms programmed for use by patients with undiagnosed gastrointestinal symptoms, respiratory symptoms, or skin symptoms No pressure requirement Standard diffuser and return array | Ceilings: cleanable with routine housekeeping equipment Floor: no special requirement Walls: no special requirement |
| Procedure room | Patient care that requires high-level disinfection or sterile instruments and some environmental controls but does not require the environmental controls of an operating room | Unrestricted or a semi-restricted area | 15 air changes per hour Positive pressure Standard diffuser and return array | Ceilings: smooth and without crevices, scrubable, non-absorptive, non-perforated; capable of withstanding cleaning chemicals Floor and wall base assemblies for cystoscopy, urology, and endoscopy procedure rooms: monolithic with an integral covered wall base that is carried up the wall a minimum of 6' Wall finishes for endoscopy: free of fissures, open joints, or crevices that may retain or permit passage of dirt particles |
| Operating room | Any invasive procedure during which the patient will require physiological monitoring and is anticipated to require active life support | Semi-restricted area | 20 air changes per hour Positive pressure Primary supply diffuser array extends a minimum of 12' beyond the footprint of the surgical table on each side At least two low sidewall return or exhaust grilles spaced at opposite corners or as far apart as possible | Ceilings: monolithic, scrubable, capable of withstanding cleaning and/or disinfecting chemicals, gasketed access openings Floor and wall base assemblies: monolithic with an integral covered wall base that is carried up the wall a minimum of 6' Wall finishes: free of fissures, open joints, or crevices that may retain or permit passage of dirt particles |

criteria will need to be developed based on evidence from other related procedures with clear outcome goals. When moving a service line from the hospital to the ASC setting, questions to be considered are as follows: can this patient be discharged home after this procedure, will preoperative optimization of comorbidities allow the patient to be discharged home after this procedure, does the patient have any comorbidities that absolutely exclude them from the outpatient setting, and does the patient's social situation allow for outpatient surgery?

Previously established exclusion criteria may not be applicable to the new service line. For example, an ASC adding interventional cardiology services will necessarily be performing procedures on patients with low ejection fractions, dysrhythmias, or coronary artery disease [20, 21]. Well-established, pragmatic patient selection criteria will ensure smooth implementation of the new service line.

Protocols and Pathways

The ASC needs to establish enhanced recovery protocols for the new service line. Enhanced recovery protocols involve multidisciplinary teams: surgeons, anesthesiologists, care coordinator (nursing director), and staff (nurses and allied staff) that care for the patient in various areas, for development and implementation. The protocols are evidence based and are geared towards the best practices before, during, and after surgery to accelerate patient recovery. These protocols, originally applied to colorectal surgery, have been shown to improve outcomes such as length of stay and patient satisfaction and reduce costs [22]. Currently, enhanced recovery protocols exist for multiple surgical specialties. Esper et al. showed that a simplified enhanced recovery protocol uniformly implemented across multiple surgical specialties and hospital types improved short- and long-term mortality, clinical outcomes, length of stay, and discharge disposition to home [23•].

A typical protocol would start at the time of patient scheduling and end at the time of the first follow-up appointment after discharge [24]. Important components of an enhanced recovery protocol are preoperative optimization and prehabilitation both of which have shown to improve outcomes [25–27].

Implementation

Successful implementation is a well-orchestrated event involving multiple parallel processes to achieve the shortest timeline from conception to execution. The addition of a new service line should not disrupt existing patient care. A formal implementation plan will ensure smooth operations.

It is useful to perform a tabletop exercise prior to implementation. This exercise will identify any barriers and allow the team to develop backup plans.

Conclusion

Many ASCs will likely explore adding a new service line as a growth strategy given the current landscape of ambulatory surgery. By starting with a clear business plan and involving key stakeholders from the outset, what can seem like a daunting task can be broken down into a number of parallel processes enabling a successful and sustainable implementation of the new service. Future research should include the impact of value-based care on patient and economic outcomes.

Data Availability No datasets were generated or analyzed during the current study.

Declarations

Conflict of Interest The author does not have any conflicts of interest.

Human and Animal Rights and Informed Consent This article does not contain any studies with human or animal subjects performed by any of the authors.

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