ORTHOPEDICS

Service Line Outlook 2024

health care intelligence

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ORTHOPEDICS

Service Line Outlook 2024

Today's orthopedics programs face a permanently altered health care landscape. The shift of procedures to outpatient status and ambulatory sites has grown steadfast, amplifying the tussle between hospital-based and ambulatory services. Deteriorating payer mix and evolving Certificate of Need regulations have exacerbated this shift. Health systems are now feeling the impact of tightly squeezed top and bottom lines.

Meanwhile, overall growth of orthopedics services is softening. Competition for market share has ramped up, with new market entrants—notably private equity/VC-backed orthopedic supergroups and virtual rehab vendors—heightening pressure. Further complicating today's market dynamics are workforce constraints, evolving physician alignment, inflation and payer restrictions.

Looking ahead, a two-fold strategic agenda is clear: compete and safeguard financial sustainability. Swift action is needed to strengthen programs' value propositions with physicians, payers, employers and consumers. That means staying nimble in the short term while making strategic bets to enhance and expand care delivery over time.

Executing on that agenda will require strong physician and provider alignment; optimized cost-management; innovative workforce recruitment, retention and redeployment; the right mix of service capabilities; and a well-designed care model that aligns access channels with market demand. Programs able to offer a well-coordinated, integrated clinical product while eliminating silos that impede multidisciplinary care will be best positioned to address current challenges and ensure sustainability.

This report, *Orthopedics Service Line Outlook 2024*, is Sg2's guide to building high-performing services in the competitive and challenging orthopedics arena. It provides details from our most recent Impact of Change® national demand forecast, an overview of new and notable trends, and Sg2's guidance on how to grow and differentiate orthopedics services to sustain service line success.

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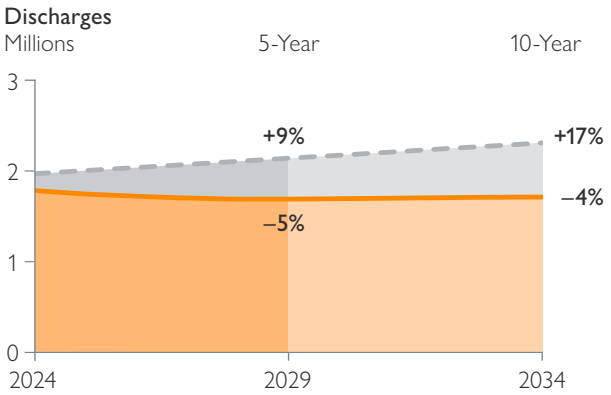
LEARN THE LANDSCAPE

Overall, health systems' orthopedics programs are contending with declining inpatient discharges and rising acuity while vying for outpatient market share. With the shift to lower-cost ambulatory sites a new normal, progressive approaches to physician engagement and ambulatory capacity will be key. Equally vital will be adherence to best practice protocols and care pathways to deliver consistent, high-quality hospital-based care to all populations, including patients who are socioeconomically disadvantaged.

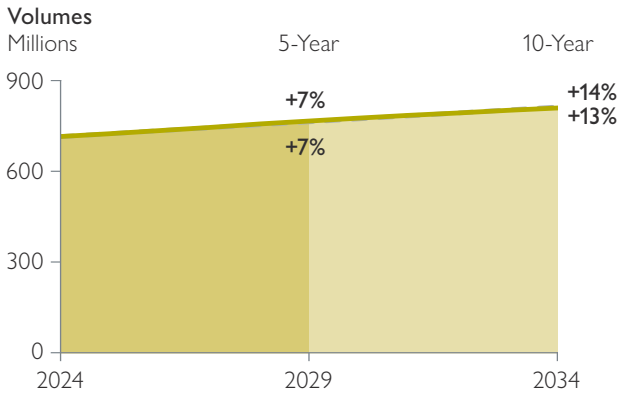
Orthopedics Inpatient and Outpatient Demand Overview

Inpatient surgeries continue to shift to outpatient payment status; additionally, the vast majority of joint replacements are now same-day discharges. These care delivery changes have been driven by new patient care protocols, payer policies and continued improvements in peri-/postoperative care management—all aimed at reducing length of stay. Potential exists for traditionally hospital-based joint revisions to also shift, although the majority currently remain inpatient. Higher-acuity procedures like hip and femur fractures, however, will remain hospital based.

Inpatient Orthopedics Forecast
US Market, 2024–2034

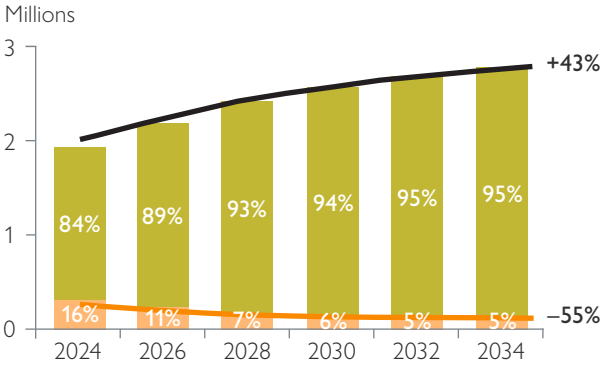


Outpatient Orthopedics Forecast
US Market, 2024–2034

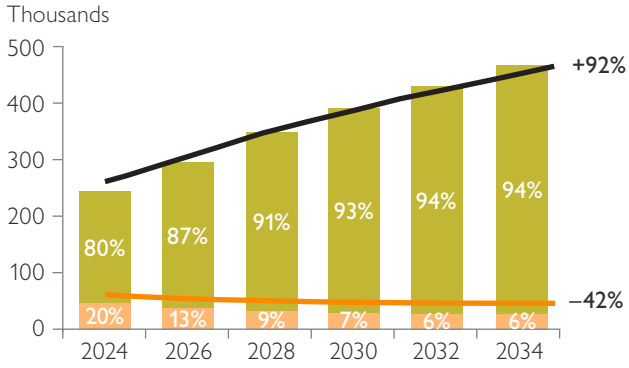


Overall **outpatient** growth is robust, enabled by enhanced recovery protocols, multimodal pain management and incentivized value-based payment models. Heightened focus on patient access will buoy E&M visits (both in-person and virtual) and imaging (eg, CT), although ongoing payer scrutiny and heightened cost sensitivity will dampen overall growth.

IP/OP Primary Hip and Knee Replacement Forecast for Osteoarthritis, US Market, 2024–2034



IP/OP Primary Shoulder Replacement Forecast
US Market, 2024–2034





Note: Analysis excludes 0–17 age group. Hip and knee replacement includes primary hip/knee replacement for the Osteoarthritis CARE Family only. **Sources:** Impact of Change®, 2024; HCUP National Inpatient Sample (NIS). Healthcare Cost and Utilization Project (HCUP) 2019. Agency for Healthcare Research and Quality, Rockville, MD; Proprietary Sg2 All-Payer Claims Data Set, 2022; The following 2022 CMS Limited Data Sets (LDS): Carrier, Denominator, Home Health Agency, Hospice, Outpatient, Skilled Nursing Facility; Claritas Pop-Facts®, 2024; IQVIA; Sg2 Analysis, 2024.

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Developing trends paint a clearer picture of what orthopedics leaders are up against as they pursue success.

New and Notable in Orthopedics

PAYMENT & POLICY

- **Site-of-care restrictions** and CMS's expanded coverage of procedures in ASCs (eg, shoulder replacements) are protracting site-of-care shifts, creating backfill opportunities for hospital-based procedures and increasing the need for ASC capacity.
- Momentum continues to build for **innovative value-based care design** within total joint services (eg, knee, hip and shoulder replacements):
  - Third-party administrators working with ASCs, employers and commercial insurers to bring bundled payment products to market
  - Evolving arrangements (eg, via Medicare Advantage, commercial payers) that allow participants to share savings from the cost differential across surgical sites
  - CMS's mandated reporting of PRO-PMs for inpatient hip and knee arthroplasty
  - CMS's proposed Transforming Episode Accountability Model (TEAM) to incentivize optimization of acute care episodes (eg, lower extremity joint replacement)

FOCUS ON:
Creating new operational processes and clinical protocols to enhance care delivery at optimal sites of care. Streamline IT systems and solidify relationships with physicians, both affiliated and independent.

CARE DELIVERY

- Orthopedic programs continue to compete on **consumer priorities**, as steerage through progressive benefit design and heightened efforts to engage individuals with commercial coverage threaten to disrupt traditional referral patterns.
- To help address the **opioid crisis**, CMS has begun covering interoperative pain management methods as part of a multimodal perioperative pain management pathway to achieve opioid-free procedures in ASCs.
- Programs are exploring **novel workforce approaches** to create efficiencies:
  - Use of advanced practitioners to augment surgeons' time, including unassisted TJR surgery models that utilize physician assistants outside of the OR
  - Expanded role of physical therapists in patient triage and broadening use of technology (eg, sensorless tracking) to extend their reach
  - Use of supervising athletic trainers to lead sports medicine programs
- Looking to take advantage of a projected 10% increase in sports medicine OP volumes by 2034 and physician specialty growth, **state-of-the-art orthopedic programs** are expanding sports medicine capabilities to provide consumer-friendly offerings that span pre- to postinjury care for athletes of all abilities.

FOCUS ON:
Deploying initiatives to improve costs and efficiencies via best practice implementation (eg, pain management protocol standards). Leverage innovative approaches to address workforce constraints and promote subspecialty service offerings.

TECHNOLOGY ADVANCES

- **Technology-assisted surgery** is expanding beyond traditional robotics. Image navigation and augmented reality systems have transitioned from training modules into the OR. Device suppliers are optimizing equipment for use in ASCs.
- **Implant enhancements** are enabling surgeons to improve outcomes for broader populations. Smart knee implants now provide postsurgery data; fully customizable, surgeon-designed shoulder implants are increasingly mainstream.
- **Remote patient monitoring** is proving increasingly vital to a comprehensive orthopedics program, with case reports and small case series suggesting its ability to reduce hospitalization rates, lower mortality rates and increase patient engagement.
- **Orthobiologics** have gained traction as a viable alternative to surgical joint repair, but costs vary widely and therapies are offered primarily on a cash basis. Further research is still needed, but recent studies show promising short- and long-term clinical results.

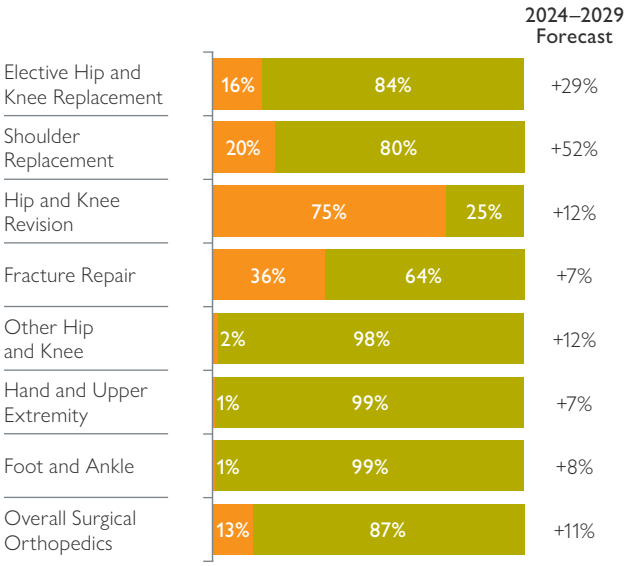
FOCUS ON:
Carefully considering the impact of ongoing site shifts and alignment with broader programmatic strategy when assessing new technology investments and clinical approaches.

Sources: Ambulatory Surgery Center Association. CMS releases 2024 final payment rule. November 2, 2023; CMS. Overview: reporting of the THA/TKA PRO-PM. Accessed May 2024; CMS. *Overview Fact Sheet: Transforming Episode Accountability Model.* Accessed May 2024; Oberfeld K. Introducing TEAM, Medicare's newly proposed mandatory bundled payment model [blog]. Vizient. May 16, 2024; CMS. Ambulatory surgical center (ASC) payment. January 12, 2024; Association of American Medical Colleges. *Physician Specialty Data Report: Percentage Change in the Number of Active Physicians by Specialty, 2016–2021.* Accessed May 2024; Enovis. ARVIS: the next era of orthopedic technology. Accessed August 2023; Shah N et al. *Curr Rev Musculoskelet Med.* 2021;14(6):378–391; Vizient. *Vizient Tech Watch: Medical Device.* 2021;2:19–25; Mavrogenis AF et al. *Int Orthop.* 2023;47(7):1645–1662.

PINPOINT GROWTH OPPORTUNITIES AND GAPS

As orthopedics leaders set about reigniting their strategic planning efforts, a more granular view into the inpatient and outpatient procedures, services and/or visit types that offer the best growth potential—or, conversely, present cause for concern—is essential for strategic prioritization.

Orthopedics Surgical Procedure Location Mix and Forecast, US Market, 2024

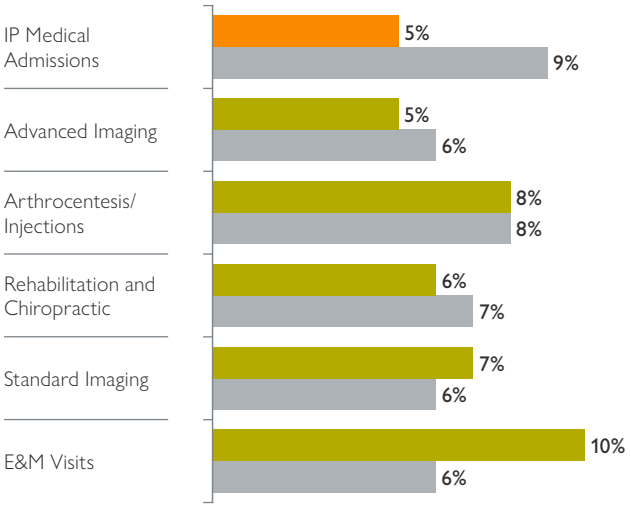


IP/OP PROCEDURE HIGHLIGHTS

- Steady growth is expected for **elective hip and knee replacement**, as payer coverage, patient eligibility and utilization continue to expand.
- Robust growth for **shoulder replacement** is expected, fueled by next-generation implants, emerging and innovative surgical techniques, expanded CMS coverage and improved outcomes.
- **Revision procedures** will increase and remain inpatient, driven by robust TJR growth. However, volumes will be dampened by improvements in outcomes and clinical advancements.
- Fluctuating growth in **fracture care** is expected. Trauma-related injuries and a growing aging population will contribute to short- and long-term growth, respectively. Efforts to prevent and treat osteoporosis and better manage fall risk will slow growth in fragility fractures.

Nonoperative Orthopedics Volumes

US Market, 2024–2029



NONOPERATIVE HIGHLIGHTS

- **Medical admissions** will grow as the shift of lower-acuity care to lower-cost settings leaves a mix of complex, frail and trauma patients to be cared for in the inpatient setting.
- Growth of **advanced imaging** will ramp up as efforts to reduce utilization reach their limit and advances in low-cost portable modalities expand use cases. However, overall growth will be dampened by consumer cost sensitivity, expansion of medical necessity coverage and clinical decision support initiatives.
- Despite an uptick in **OP rehab** visits for initial evaluation, growth for follow-up visits will continue to be dampened by consumer sensitivity to copays, heightened payer scrutiny of visit frequency and broader adoption of virtual rehab.

Sg2 Inpatient Forecast | Population-Based Forecast | Sg2 Outpatient Forecast | Sg2 IP/OP Forecast

Note: Analysis excludes 0–17 age group and includes the orthopedics service line only. Overall surgical orthopedics includes all IP/OP major procedures plus OP arthroscopy. Elective hip and knee replacement includes Osteoarthritis CARE Family only and primary hip/knee replacement. Shoulder replacement includes primary shoulder replacement for the Osteoarthritis and MSK Injury—Shoulder/Elbow/Upper Arm CARE Families only. Hip and knee revision excludes hip and femur fracture. Fracture repair includes all IP fracture repair and OP open treatment of fracture, plus surgical procedures within the Hip and Femur Fracture CARE Family (arthroscopy, IP/OP major therapeutic procedure group). Other hip and knee includes MSK Injury—Knee and Pelvis/Hip/Femur CARE Families and excludes fracture repair and revision hip and revision knee replacements. Hand and upper extremity includes MSK Injury—Hand/Wrist/Forearm and Shoulder/Elbow/Upper Arm CARE Families and excludes shoulder replacement and fracture repair. Foot and ankle includes MSK Injury—Lower Leg/Foot/Ankle CARE Family and excludes fracture repair. IP medical admissions exclude major therapeutics. Advanced imaging includes CT, MRI and PET. Standard imaging includes nuclear medicine/SPECT, ultrasound and x-ray. **Sources:** *See page 8.*

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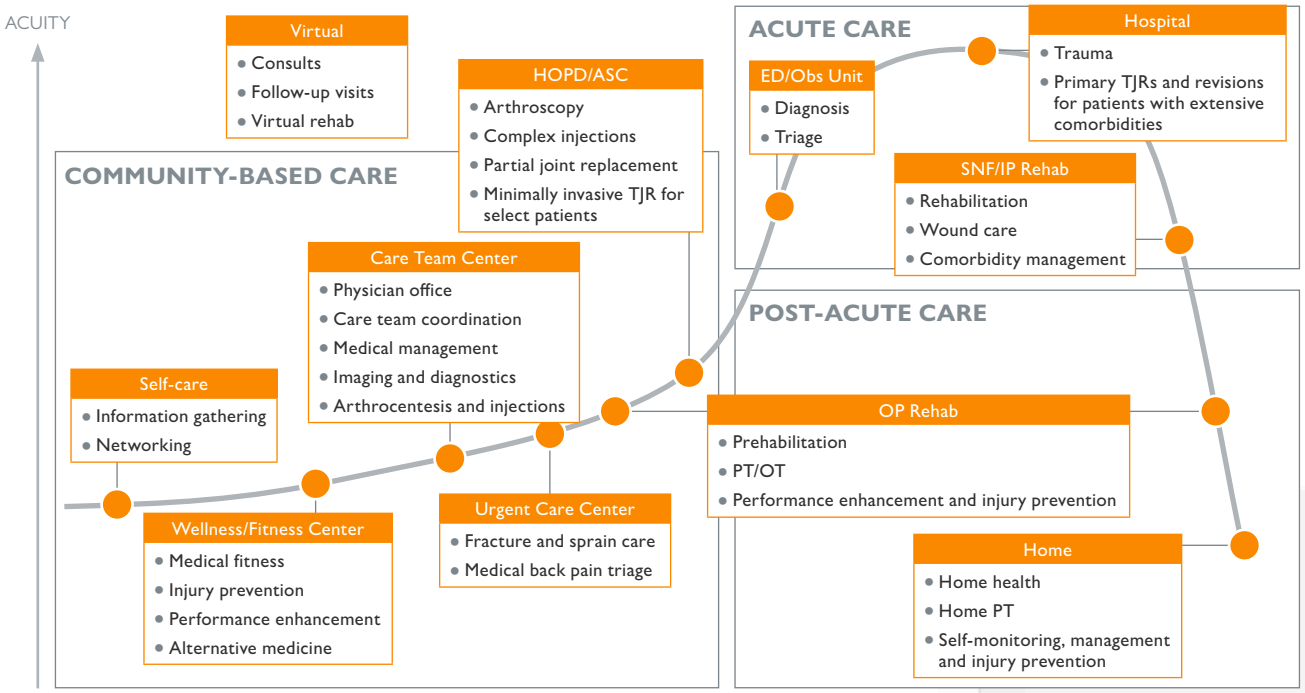
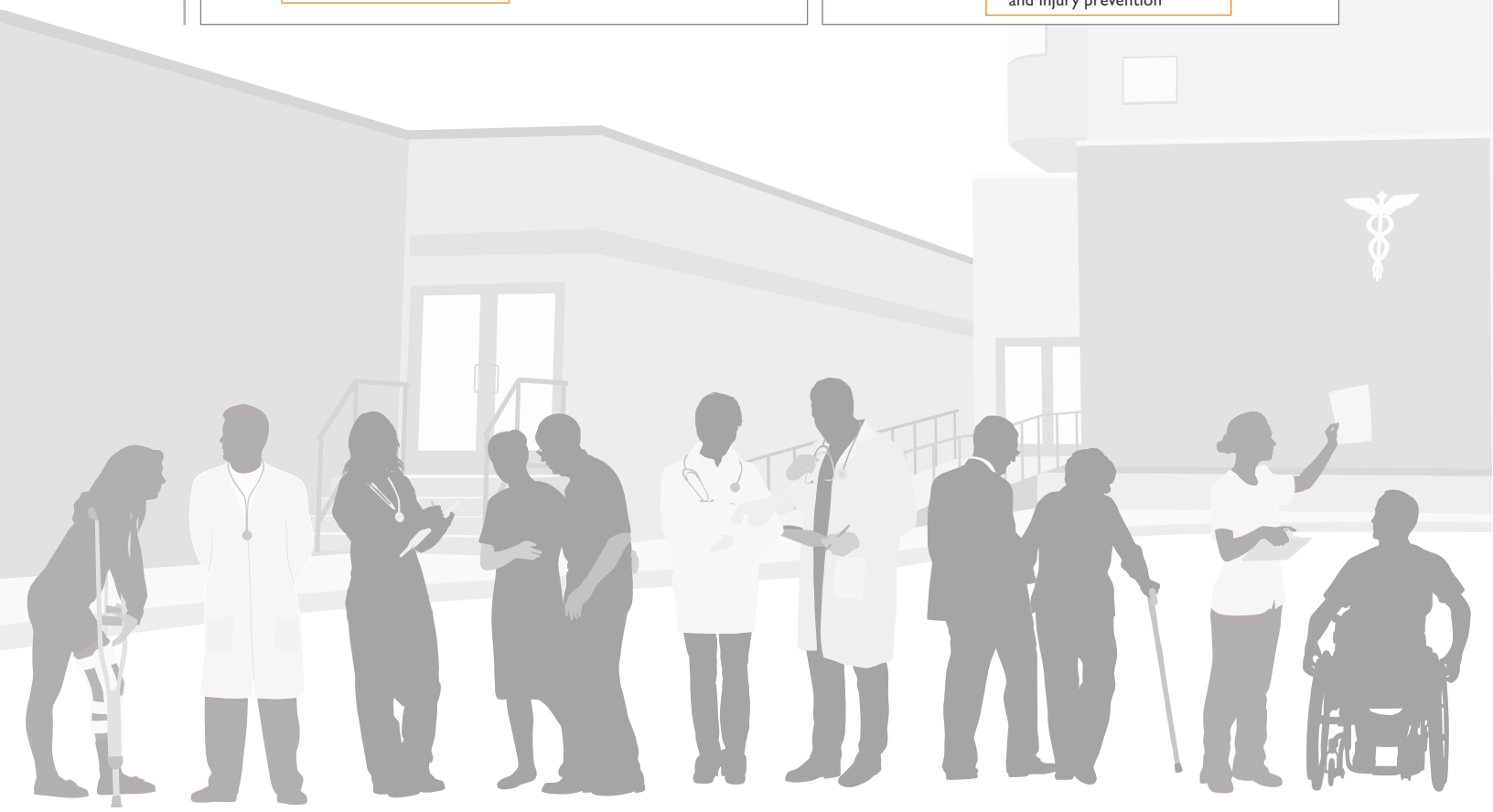
MAXIMIZE CHANNEL MANAGEMENT

Orthopedics leaders looking to enhance patient acquisition and retention must assess and address gaps in their System of CARE design. A comprehensive mapping of key services along the care continuum makes clear optimal access points and areas for coordination among community-based, acute and post-acute settings.

Orthopedics System of CARE





STRATEGIZE FOR SUCCESS

ACTION PLAN: GROW AND DIFFERENTIATE ORTHOPEDICS SERVICES

Service Capabilities

- Build a comprehensive and integrated portfolio of patient-centered services that addresses new market realities.
- Assess the market- and organization-specific factors impacting the transition to ASCs. As a mounting number of procedures shift, prioritize quality, service and price. Pursue commercial contracts and DTC strategy as needed. Incorporate operational, patient optimization and supply chain best practices to match ASC experience and efficiency for cases that remain on the hospital campus.
- Evaluate distribution of hospital-based services. As elective cases (eg, shoulder replacements) shift to ambulatory sites, reconsider the resources required to deliver higher-acuity care while meeting diverse community needs.
- Address workforce needs. Mitigate potential staff shortages via recruitment, retention and reimagined roles (eg, physical therapists with ultrasound certification, athletic trainers supplementing hospital workforce).
- Tailor programs to discrete populations (eg, weekend warriors, sports performance, wellness/injury prevention, women's sports medicine, osteoarthritis, bone health). Emphasize multispecialty care and appropriate-level resources.
- When evaluating new technologies, determine how buy-in and deployment will be achieved and what incremental volume or outcomes improvements are needed to justify investment.

Channel Management

- Revamp marketing strategies to align with consumer and employer priorities. Put in place mechanisms to seamlessly capture patient reviews of physicians and facilities (eg, patient and family advisory councils).
- Streamline front-end services and sites to improve capture and retention of orthopedic volumes. Focus on rapid access, patient experience, competitive pricing and community relationships to address care gaps (eg, social determinants of health). Integrate primary care networks, physical and occupational therapists, and athletic trainers as alternative access channels and to triage patients.
- Develop and market offerings that include hospital and ASC options to self-funded employers and insurers.
- Seek to codevelop solutions with payers and employers (eg, bundled payment offerings that plug into existing benefit plans).

Care Coordination

- Closely align with other specialties (eg, rheumatology, podiatry, neurosurgery) and a broader care team (eg, physician extenders, nonoperative providers, care navigators, athletic trainers, physical therapists, chiropractors). Consider multispecialty provider co-location, codevelopment of care pathways and collaborative decision-making.
- Home in on appropriate site-of-care selection and expand efforts to demonstrate superior clinical outcomes and cost-effectiveness. These can be a market differentiator.
  - Fine-tune patient selection criteria, using evidence-based practices to maintain quality across all sites. Carefully document patient complexities and comorbidities to justify site-of-care selection.
  - Recommit to OR efficiency and cost reduction initiatives to counterbalance cost pressures as patient acuity increases and reimbursement declines due to site-of-care shifts.
- Partner with physicians to establish and deploy clinical pathways designed to optimize patient outcomes in alignment with CMS's PRO-PMs. Track and share results to encourage buy-in and peer-to-peer accountability.
- Consider technologies that support patient activation, access to physical therapy (eg, virtual rehab, internet-based exercise therapy) and proactive intervention for patients steering from their expected recovery path.

Physician Alignment

- Engage physicians and key providers across the continuum to understand and address their needs (eg, innovation, work-life balance, financial).
- Explore data contract agreements associated with collection of PRO-PMs to promote quality-based collaborations among independent and affiliated orthopedists and their teams.
- Fine-tune physician alignment models. Invest in dedicated OR staffing; modify formal comanagement agreements to account for ambulatory shift and rising acuity in hospital-based cases; explore joint venture opportunities in ASCs; and consider sharing risk with surgeons in bundled payment, gainsharing and value-based enterprise initiatives.

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Sg2 RESOURCES

Service Line Intelligence

This overview complements a robust set of forecast-related resources available in Sg2 Service Line Outlook 2024 online hub, including:

Orthopedics Subspecialty Guides

Two-page strategic deep dives into select subspecialty services:

- Hip and Femur Fracture
- Joint Replacement
- Outpatient Rehab
- Sports Medicine

Orthopedics Service Line Snapshot

An at-a-glance view of orthopedics opportunity—one of a series of 12 similar snapshots

Orthopedics Landscape Webinar

An on-demand opportunity to hear Sg2's orthopedics experts discuss this year's latest trends and opportunities for growth

Impact of Change (IoC) Methodology—Orthopedics

A review of the IoC impact factors and a list of orthopedics-specific CARE Families

Basic to Comprehensive Orthopedics Program Offerings

A road map showing how services, technologies and staffing needs vary across programs

Orthopedics Slide Packet

Downloadable PowerPoint slides featuring forecasts and subspecialty System of CARE maps/program offerings

Orthopedics Resource Kit

A one-stop shop for relevant resources

Service Line Analytics

Sg2 Analytics enable you to drill down into data that are most relevant in your market and for your organization.

- Impact of Change hyperlocalization forecasting to home in on growth opportunities and gaps
- Patient Flow™ to unearth utilization patterns contributing to, or compromising, network integrity
- Vizient® Clinical Data Base benchmarking for understanding peer-to-peer performance

Service Line Consulting

Robust service line planning demands data-driven, multifaceted approaches across variable domains and time frames. Building upon your Sg2 membership, Sg2 Consulting is uniquely positioned to help your organization rapidly and strategically address challenges and unearth opportunities in the orthopedics landscape, such as program development, service line optimization (cost and quality opportunities), service distribution and specialist alignment.

For assistance accessing additional Sg2 service line insights, or to learn more about our broader solutions, contact membercenter@Sg2.com.

Sg2 Glossary

ASC	ambulatory surgery center	HOPD	hospital outpatient department	SNF	skilled nursing facility
CARE	Clinical Alignment and Resource Effectiveness	MSK	musculoskeletal	SPECT	single photon emission computed tomography
DTC	direct to consumer	obs	observation	TJR	total joint replacement
E&M	evaluation and management	PRO-PM	patient-reported outcome-based performance measure	VC	venture capital

Pinpoint Growth Opportunities and Gaps Sourcing (page 4)

Sources: Impact of Change®, 2024; HCUP National Inpatient Sample (NIS). Healthcare Cost and Utilization Project (HCUP) 2019. Agency for Healthcare Research and Quality, Rockville, MD; Proprietary Sg2 All-Payer Claims Data Set, 2022; The following 2022 CMS Limited Data Sets (LDS): Carrier, Denominator, Home Health Agency, Hospice, Outpatient, Skilled Nursing Facility; Claritas Pop-Facts®, 2024; Sg2 Analysis, 2024.

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Anticipate the Impact of Change

Sg2, a Vizient company, is the health care industry's trusted partner for accelerating growth and improving financial results. Our analytics and expertise help health care leaders achieve sustainable growth and maintain market relevance by optimizing System of CARE, payer and consumer strategies.

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