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Service Line Strategy: A Cross–Service Line Perspective

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Learning Objectives

- Discuss how to anticipate growth opportunities for inpatient and outpatient services in the next three, five and 10 years for high-growth service lines.
- Identify the factors and strategic levers that will most influence future demand.
- Assess how shifts in care delivery locations will impact future growth opportunities.
- Explain how to leverage growth opportunities and better prepare for an evolving system of CARE.

CARE = Clinical Alignment and Resource Effectiveness.



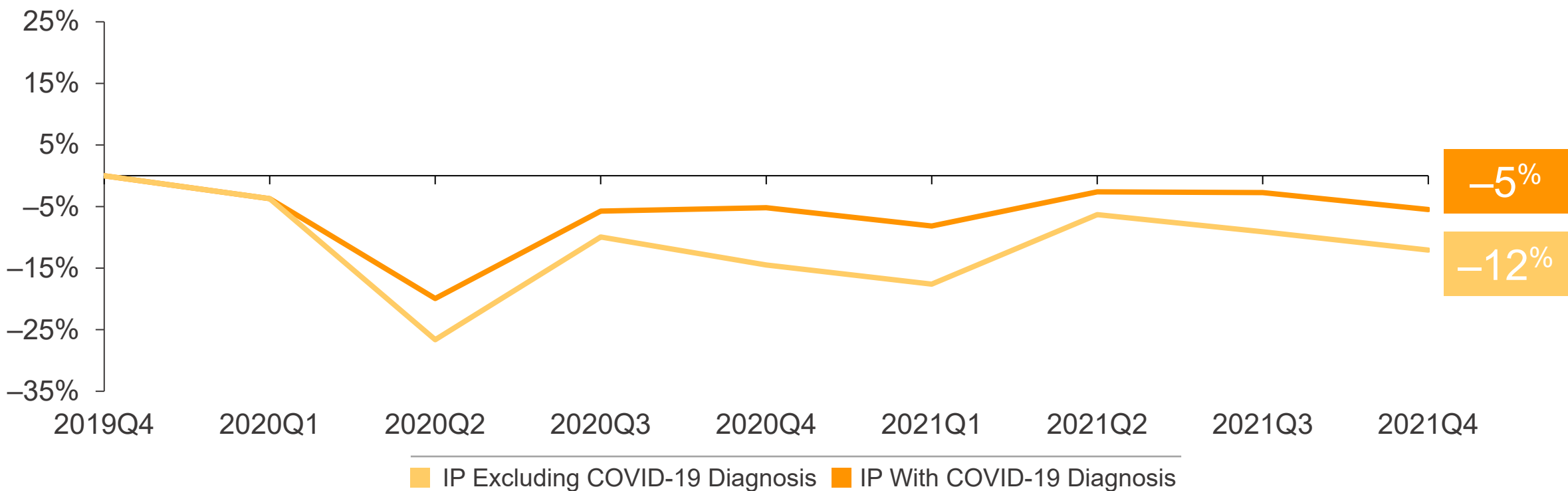
Service Line Strategy: A Cross–Service Line Perspective

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Nationally, IP Utilization Remained Well Below Pre-Pandemic Levels by the End of 2021

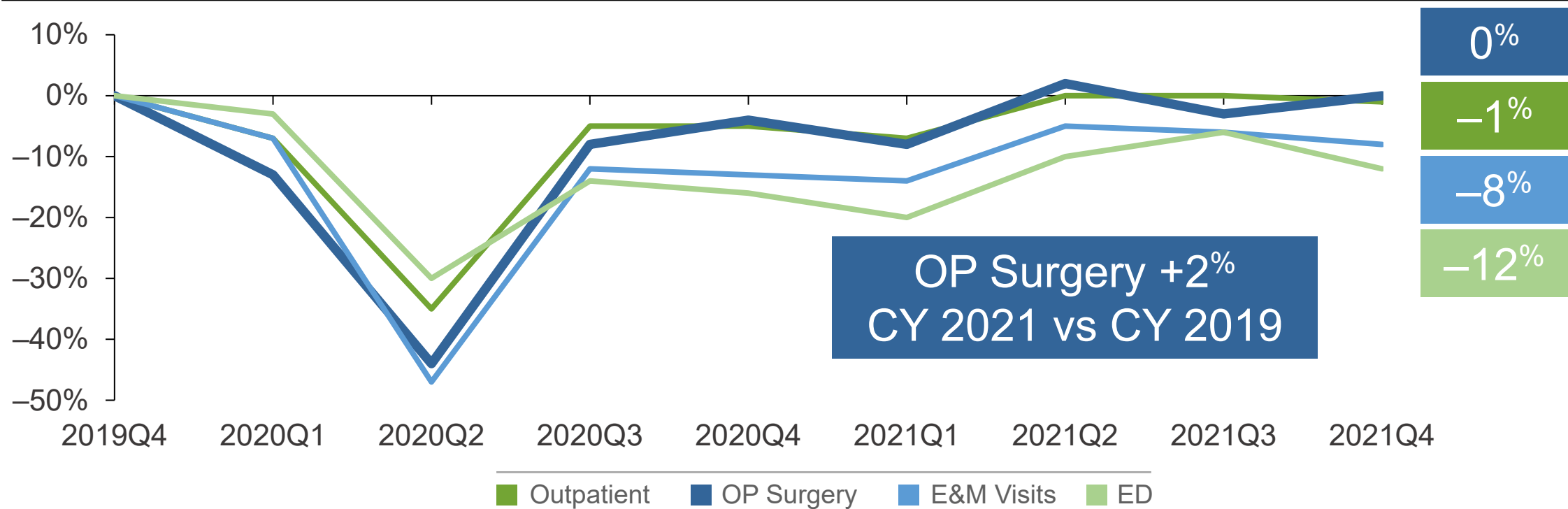
Adult Quarterly Comparison of Volumes, 2019 vs 2020–2021
Vizient Clinical Data Base



Sources: Data from Vizient® Clinical Data Base used with permission of Vizient, Inc, Q1 2019–Q4 2021. All rights reserved; Sg2 Analysis, 2022.

While OP Surgery Rebounded, Overall OP Activity Remained Below Pre-Pandemic Levels

Adult Quarterly Comparison of Volumes Including COVID-19, 2019 vs 2020–2021
Strata Decision Technology



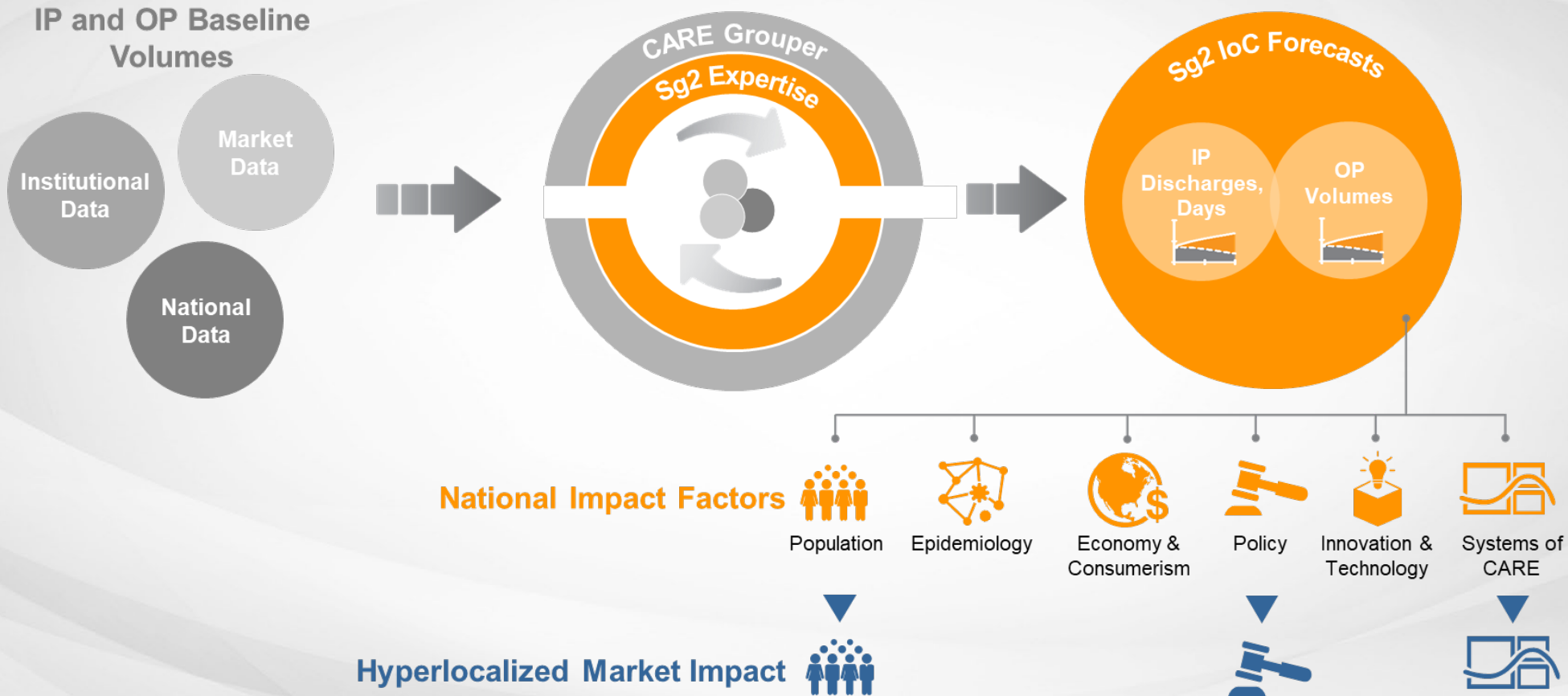
Note: Analysis includes volumes for ICD-10 diagnosis code U07.1, COVID-19 infection and virtual visits. OP surgery defined as outpatient procedures—major and endoscopy. E&M = evaluation and management.
Sources: Strata Decision Technology. National Patient and Procedure Volume Tracker. 2019–2021; Sg2 Analysis, 2022.

Organizations Are Planning for Growth in a Constrained Environment

Organizations struggle with the same themes:



Sg2's Impact of Change[®] Forecast Methodology



IoC = Impact of Change.

Key 2022 Forecast Considerations

Endemic COVID-19



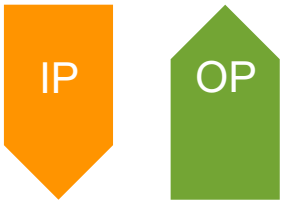
Rising Patient Acuity



Shift to OP Slowing



Expanded Care at Home Capabilities



Record MA Enrollment



Note: Orange = IP volumes impact; green = OP volumes impact; dotted = minimal volumes impact; gray = no real impact in IP or OP volumes. MA = Medicare Advantage.

Hospital-Based Demand Grows

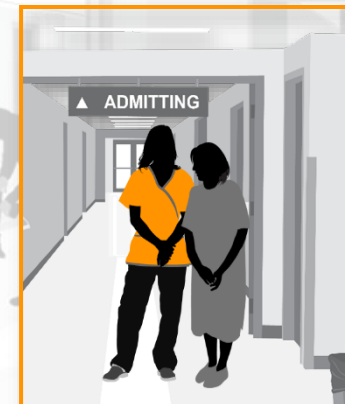
Adult Hospital Forecast: +6%



+2%
Inpatient
Discharges
2022–2027
(29.8M)

+8%
Observation
Discharges
2022–2027
(18.9M)

+8%
HOPD
Discharges
2022–2027
(56.3M)



+8%
Inpatient Days
2022–2027
(149M)

Note: Analysis excludes 0–17 age group. HOPD = hospital outpatient department. **Sources:** Impact of Change®, 2022; 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, 2019; The following 2019 CMS Limited Data Sets (LDS): Carrier, Denominator, Home Health Agency, Hospice, Outpatient, Skilled Nursing Facility; Claritas Pop-Facts®, 2022; Sg2 Analysis, 2022.

Ability to Maintain Quality Challenged as Acuity Rises

Adult Inpatient
Discharges
2022–2027

Adult
Inpatient Days
2022–2027



+19%
Tertiary
(2022 Baseline: 1M)



+7%
Chronic Care
(2022 Baseline: 3M)



+12%
Critical Care
(2022 Baseline: 2M)

+11%
Tertiary
(2022 Baseline: 10M)

+20%
Chronic Care
(2022 Baseline: 18M)

+15%
Critical Care
(2022 Baseline: 7M)

Note: Analysis excludes 0–17 age group. **Sources:** Impact of Change®, 2022; HCUP National Inpatient Sample (NIS). Healthcare Cost and Utilization Project (HCUP) 2019. Agency for Healthcare Research and Quality, Rockville, MD; Claritas Pop-Facts®, 2022; Sg2 Analysis, 2022.

Improved Access to Care Intensifies Strain on Workforce



+8%
All E&M Visits
2022–2027
(1.6B)



19%
Virtual E&M
Visits
by 2027
(300.3M)



–13%
In-person
E&M Visits
2022–2027
(1.3B)

Top Growing E&M Service Lines	Five-Year % Change 2022–2027
Endocrine	18%
Hepatology	15%
Behavioral Health	15%
Nephrology	14%

Top Virtual Visit Service Lines	2027 Volumes
General Medicine	90,311,621
Behavioral Health	47,680,487
Endocrine	27,146,127

Note: Analysis excludes 0–17 age group. **Sources:** Impact of Change®, 2022; Proprietary Sg2 All-Payer Claims Data Set, 2019; The following 2019 CMS Limited Data Sets (LDS): Carrier, Denominator, Home Health Agency, Hospice, Outpatient, Skilled Nursing Facility; Claritas Pop-Facts®, 2022; Sg2 Analysis, 2022.

Rising Acuity Will Increase Pressure on All Aspects of Care Delivery

Capacity

Access

Workforce

Quality

Five-Year Chronic Care Forecast by CARE Family

+7%

Inpatient
Chronic Care
2022–2027

Top Growing IP CARE Families

Chronic Lung Disease: +20%
Diabetes: +16%
Advanced Liver Disease: +13%

+5%

HOPD
Chronic Care
2022–2027

Top Growing HOPD CARE Families

CHF: +20%
ESRD: +12%
Chronic Lung Disease: +12%

+3%

ED
Chronic Care
2022–2027

Top Growing ED CARE Families

Diabetes: +8%
Dementia: +6%
ESRD: +5%

+27%

E&M Visit*
Chronic Care
2022–2027

Top Growing E&M* CARE Families

Dementia: +39%
Diabetes: +31%
Advanced Liver Disease: +30%

*Visit growth captures only office/clinic and virtual sites of care. **Note:** Analysis excludes 0–17 age group. CHF = congestive heart failure; ESRD = end-stage renal disease. **Sources:** Impact of Change®, 2022; 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, 2019; The following 2019 CMS Limited Data Sets (LDS): Carrier, Denominator, Home Health Agency, Hospice, Outpatient, Skilled Nursing Facility; Claritas Pop-Facts®, 2022; Sg2 Analysis, 2022.

Acuity Underlies Utilization Shifts



1. Inpatient volumes and bed days rise.



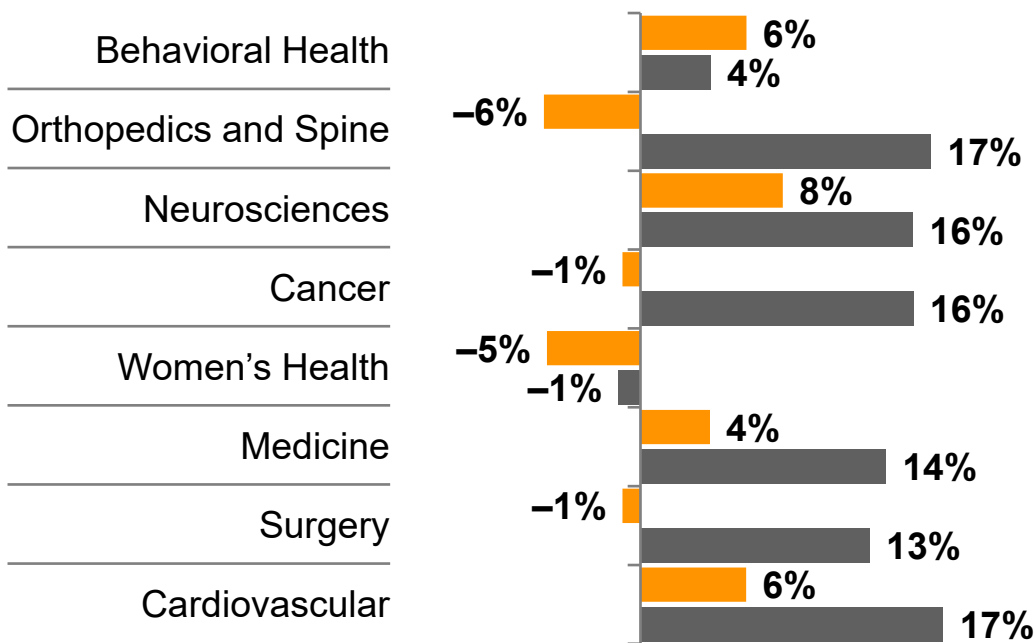
2. Care redesign influences demand across the System of CARE.



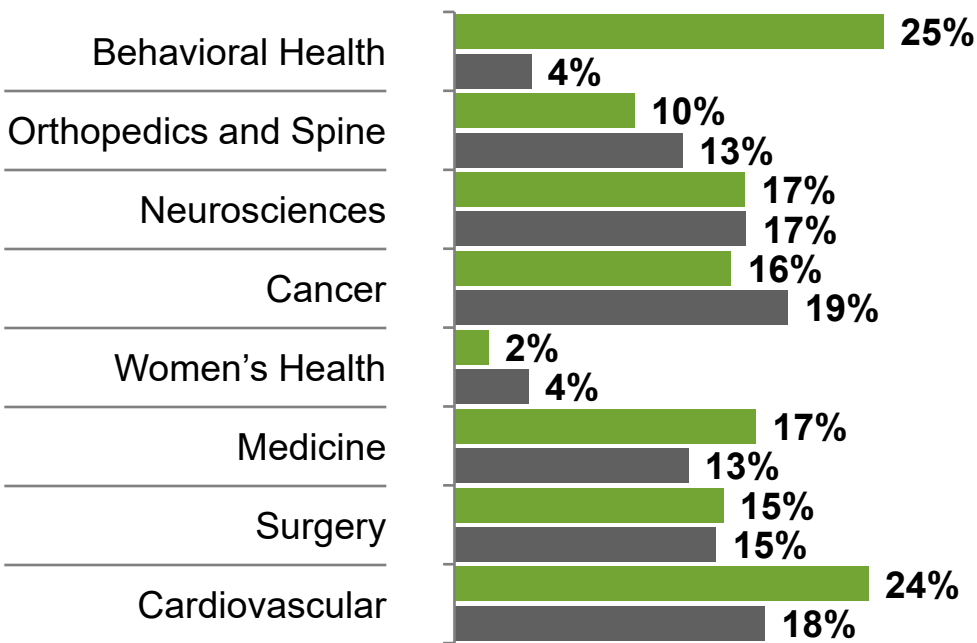
3. Shift to outpatient slows as procedures hit inpatient floor.

Utilization Trends Vary Across Service Lines

Inpatient Service Line Growth, US Market, 2022–2032



Outpatient Service Line Growth, US Market, 2022–2032



■ Sg2 IP Forecast ■ Population-Based Forecast ■ Sg2 OP Forecast

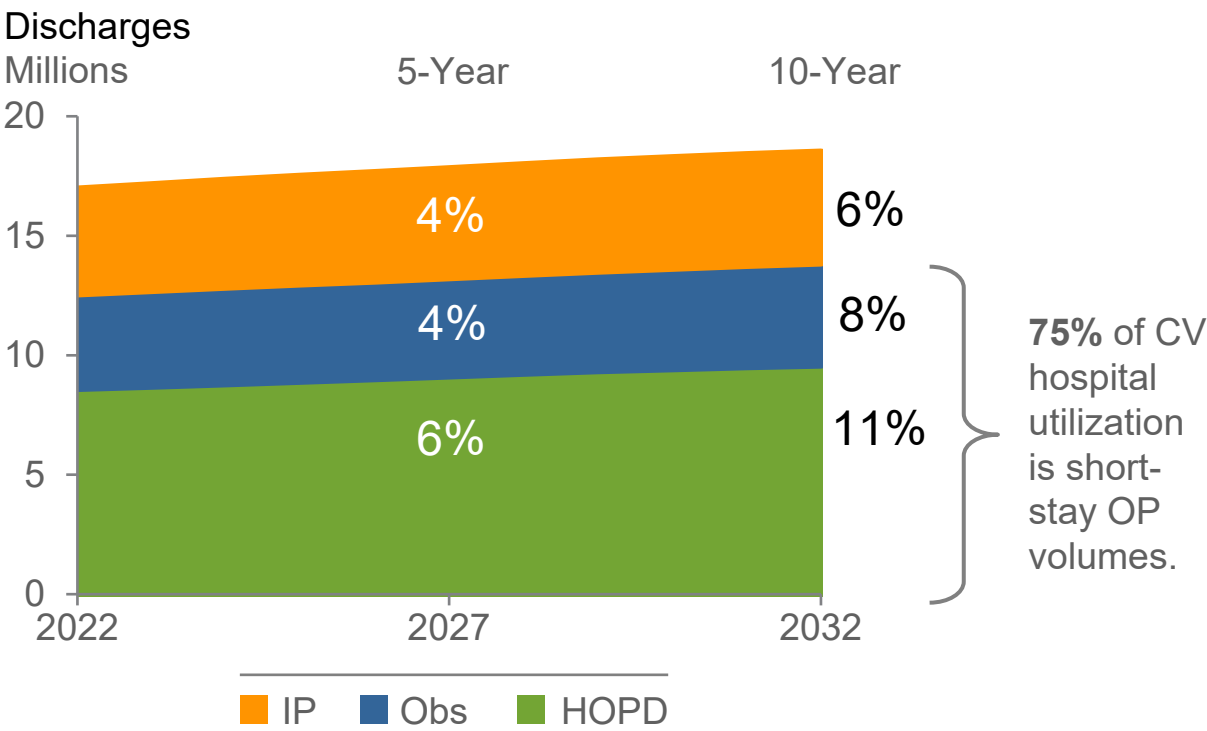
Note: All service lines exclude 0–17 age group. Cardiovascular includes cardiology and vascular. Medicine includes allergy and immunology, dermatology, endocrinology, gastroenterology, genetics, hematology, hepatology, infectious diseases, nephrology, pulmonology, and rheumatology. Surgery includes burns and wounds, otolaryngology, general surgery, ophthalmology, and urology. **Sources:** Impact of Change®, 2022; 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, 2019; The following 2019 CMS Limited Data Sets (LDS): Carrier, Denominator, Home Health Agency, Hospice, Outpatient, Skilled Nursing Facility; Claritas Pop-Facts®, 2022; Sg2 Analysis, 2022.



Cardiovascular

Hospital Remains Core for CV Care Delivery

Hospital Cardiovascular Forecast: 9%, US Market, 2022–2032



IP growth driven by CHF (10%) and valve surgery (72%)

Observation visits driven by chronic diseases like CHF (18%) and dysrhythmia (19%)

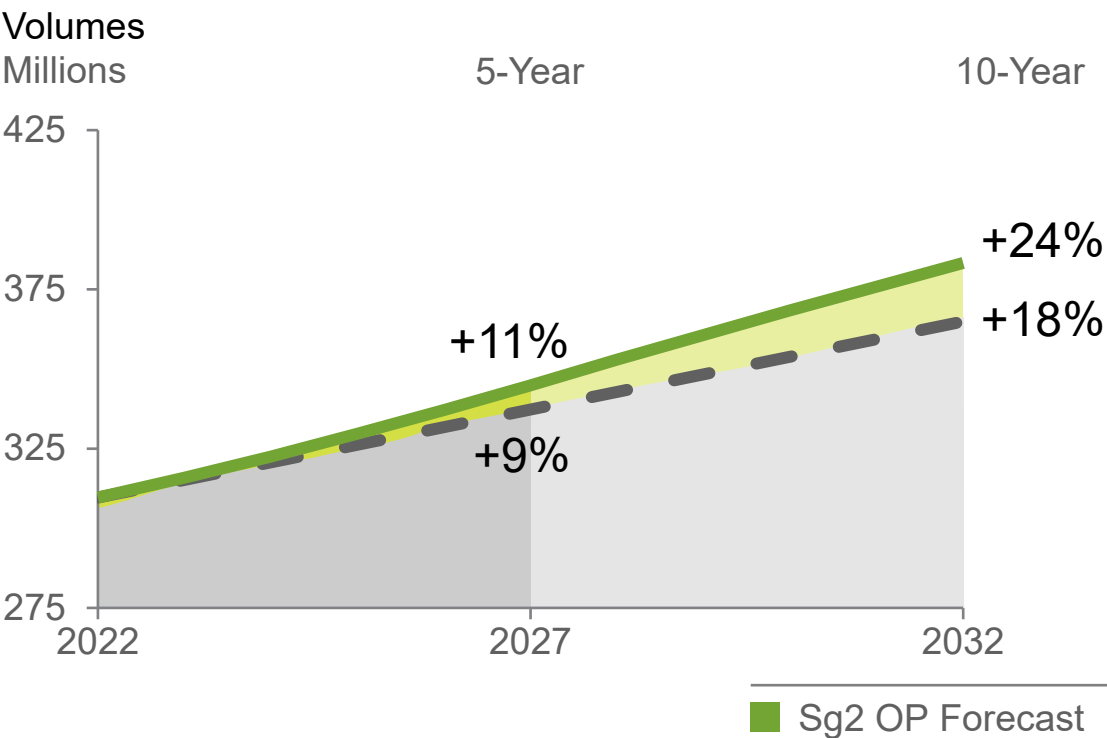
HOPD growth pushed higher by EP procedures
Cardiac ablation: 56% | Pacemaker/ICD: 16%

ALOS: +1% | Bed days: +7%
1.35M CV bed days over the next decade

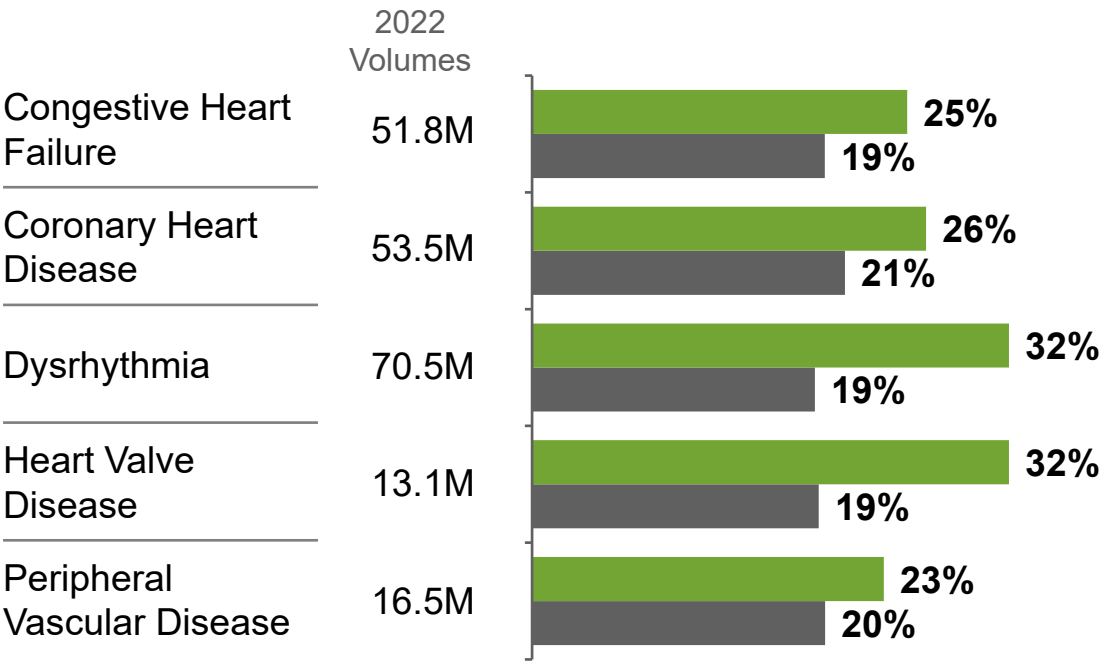
Note: Analysis excludes 0–17 age group. Hospital forecast includes the following: IP discharges; visits—observation in HOPD; HOPD procedures—major/minor; and select diagnostics in the HOPD including diagnostic catheterization, CV stress testing, EP studies and implantable loop recorders. EP = electrophysiology; ICD = implantable cardioverter defibrillator; obs = observation; valve surgery = transcatheter valve procedure and surgical valve procedure. **Sources:** Impact of Change®, 2022; 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, 2019; The following 2019 CMS Limited Data Sets (LDS): Carrier, Denominator, Home Health Agency, Hospice, Outpatient, Skilled Nursing Facility; Claritas Pop-Facts®, 2022; IQVIA; Sg2 Analysis, 2022.

Rising Acuity Drives Demand—Especially for Outpatient

Outpatient Cardiovascular Forecast
US Market, 2022–2032



Outpatient Cardiovascular Volumes for Select
CARE Families, US Market, 2022–2032



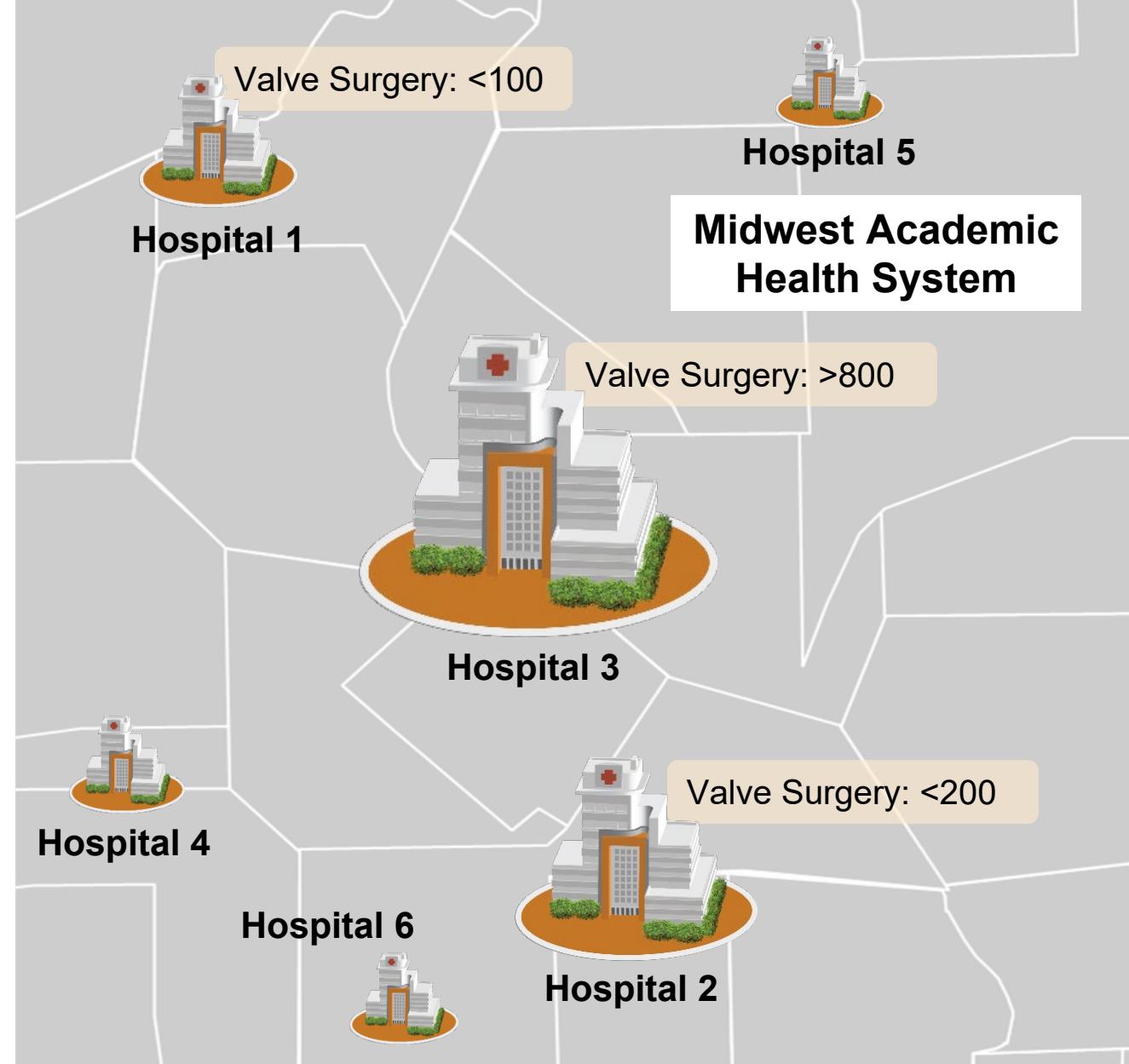
Note: Analysis excludes 0–17 age group. **Sources:** Impact of Change®, 2022; Proprietary Sg2 All-Payer Claims Data Set, 2019; The following 2019 CMS Limited Data Sets (LDS): Carrier, Denominator, Home Health Agency, Hospice, Outpatient, Skilled Nursing Facility; Claritas Pop-Facts®, 2022; Sg2 Analysis, 2022.

Quality and Cost Data Inform Service Distribution

Hospital CDB Quality Performance MS-DRGs 216–221 and 266–267

	Hospital Volume Category	Total Cases (n = Number of Hospitals)
Change as volume decreases	1–99	4,022 (n = 106)
	100–199	5,763 (n = 38)
	200–399	15,857 (n = 52)
	400–799	29,551 (n = 54)
	800+	25,867 (n = 21)

Note: Analysis based on 2021 annual data. CDB = Clinical Data Base. **Source:** Vizient® Clinical Data Base used with permission of Vizient, Inc, 2019. All rights reserved.



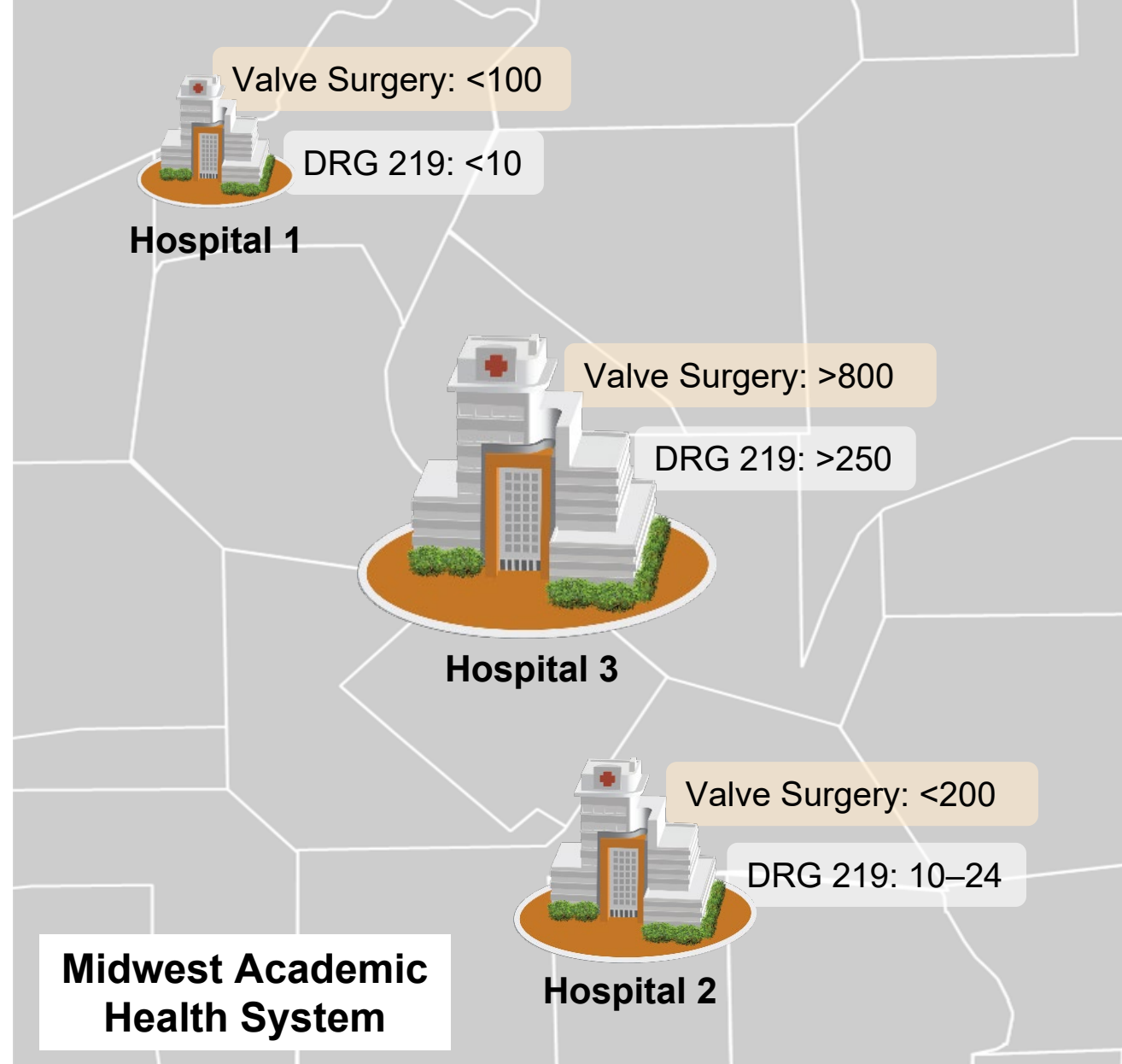
Quality and Cost Data Inform Service Distribution

Volume to Outcomes Comparison—National Benchmarks, DRG 219

Hospital Volume Category	Mortality Rate	ALOS	Related Readmits	Direct Cost
<10	7.6%	10.1	3.0%	\$34,902
10–24	5.2%	9.6	2.3%	\$35,223
25–49	3.6%	9.4	2.4%	\$35,412
50–74	3.3%	9.4	2.0%	\$36,327
75–124	2.9%	9.3	2.3%	\$35,897
125–174	1.8%	9.0	1.8%	\$36,792
175–249	1.6%	8.5	2.2%	\$39,203
250+	1.2%	8.5	1.5%	\$31,665

Change as volume increases

Note: DRG 219 = cardiac valve and other major cardiothoracic procedures without cardiac catheterization with major complication or comorbidity. Analysis based on 2021 annual data. **Source:** Vizient® Clinical Data Base used with permission of Vizient, Inc, 2019. All rights reserved.

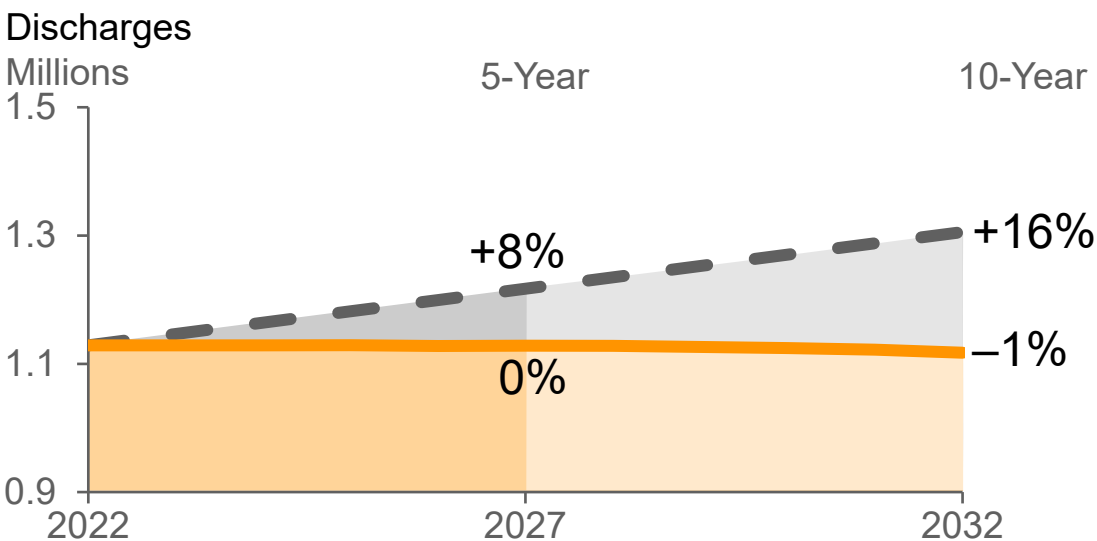




Cancer

High-Acuity Surgical and Complex Care Drive IP Growth; Steady Innovation in Treatments, Patient Preference Contribute to OP Growth

Inpatient Cancer Forecast, US Market, 2022–2032



SURGERIES DRIVE IP
CANCER GROWTH



Prevalence/Acuity



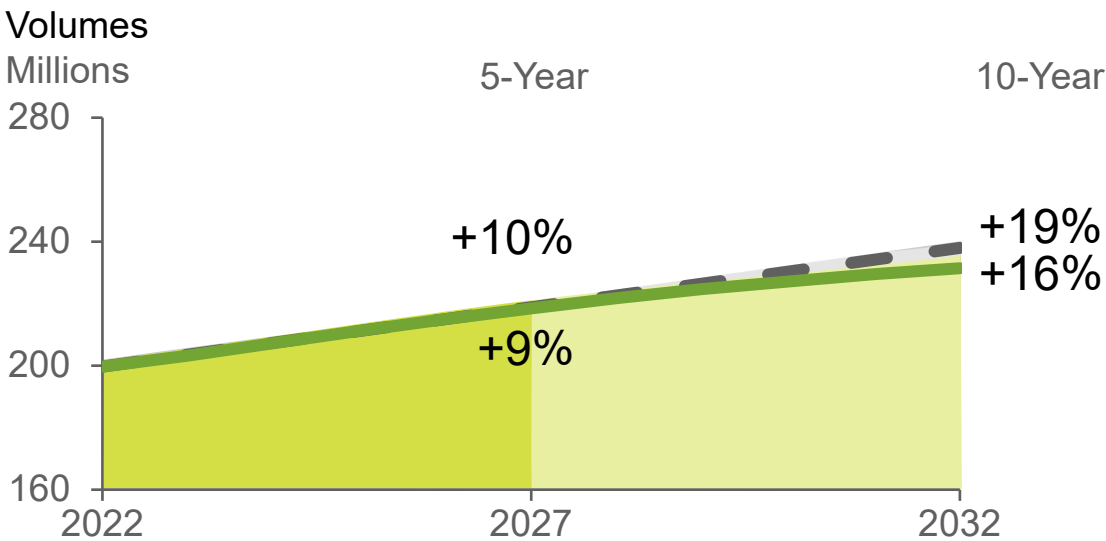
Urgent/Emergent



Precision

Sg2 IP Forecast
Sg2 OP Forecast
Population-Based Forecast

Outpatient Cancer Forecast, US Market, 2022–2032



EMERGING APPROACHES DRIVE
OP CANCER GROWTH



Digital Health



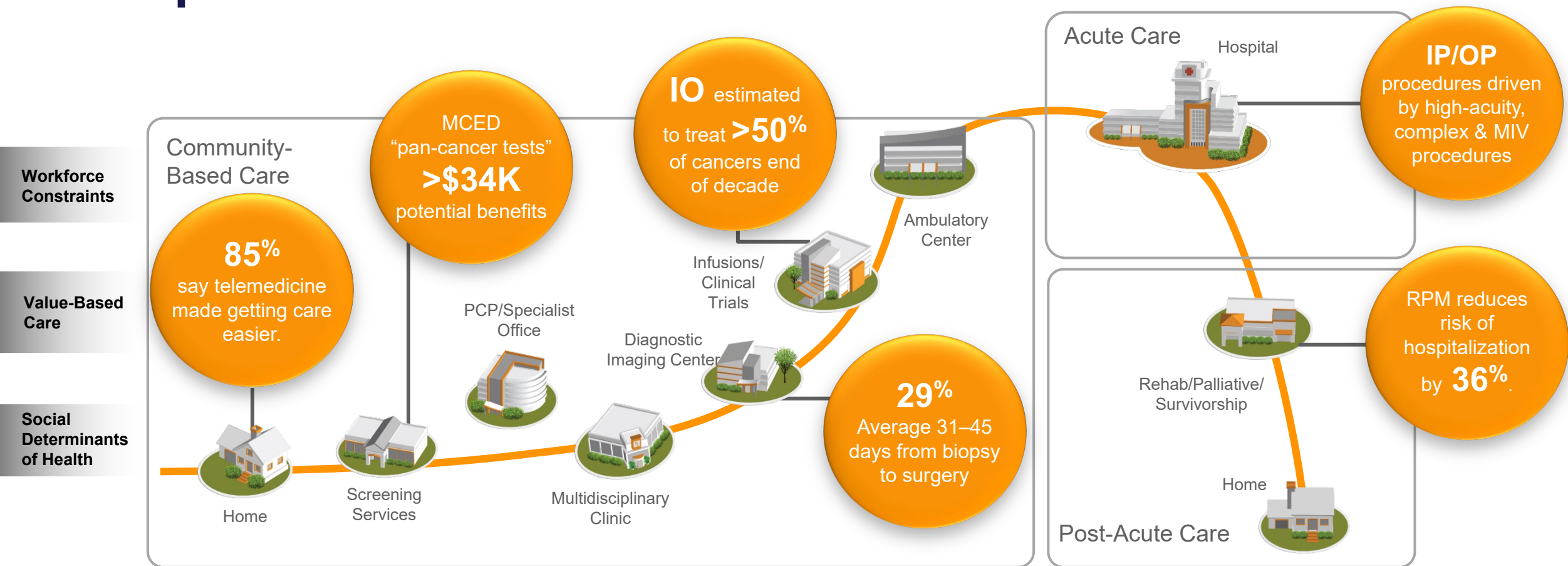
Care Design



Innovative Therapies

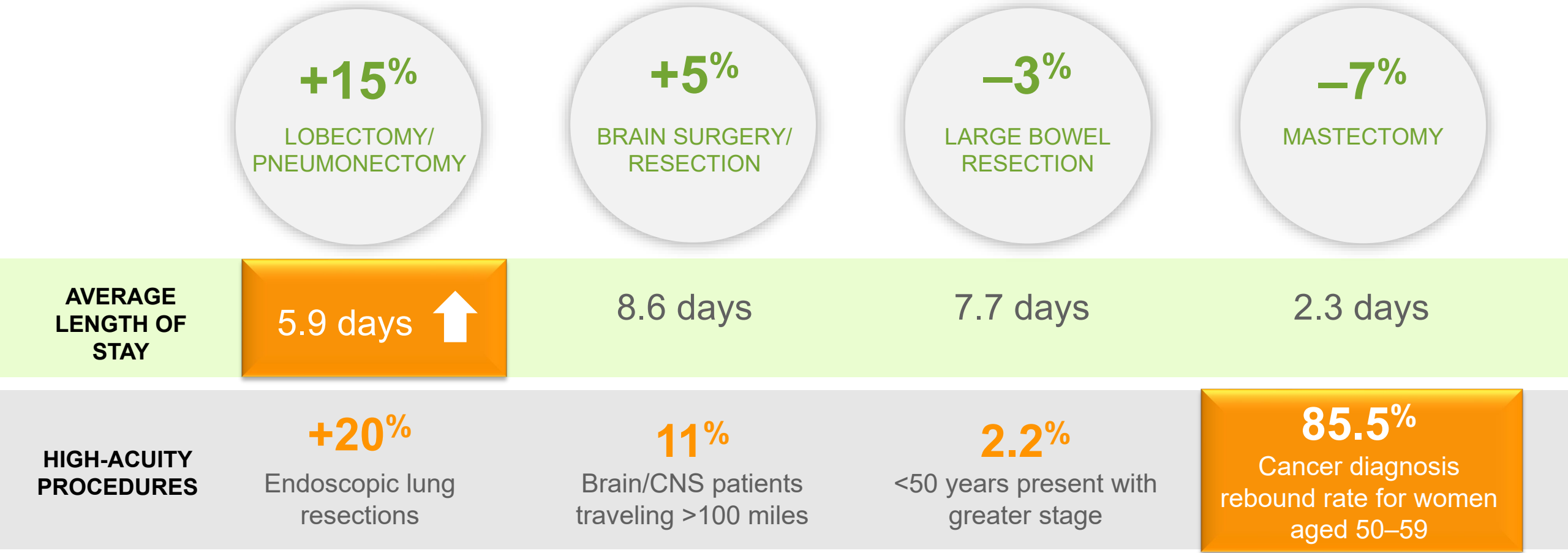
Sources: Impact of Change®, 2022; HCUP National Inpatient Sample (NIS). Healthcare Cost and Utilization Project (HCUP) 2019. Agency for Healthcare Research and Quality, Rockville, MD; Proprietary Sg2 All-Payer Claims Data Set, 2019; The following 2019 CMS Limited Data Sets (LDS): Carrier, Denominator,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

System of CARE Model—Access, Novel Innovation and Competition Power Future Demand



IO = immuno-oncology; MCED = multicancer earlier detection; MIV = minimally invasive; PCP = primary care provider; RPM = remote patient monitoring. **Sources:** Beer TM. *Am J Manag Care*. 2021;27(suppl 19):S347–S355; Vizient® Clinical Data Base used with permission of Vizient, Inc, 2019. All rights reserved; Sg2 Executive Briefing: *Strategically Deploying Digital Health*, 2021; Vizient. *Pharmacy Market Outlook*. Winter 2022; Sg2 digital health spotlight: cancer care. 2021; Sg2 Analysis, 2022.

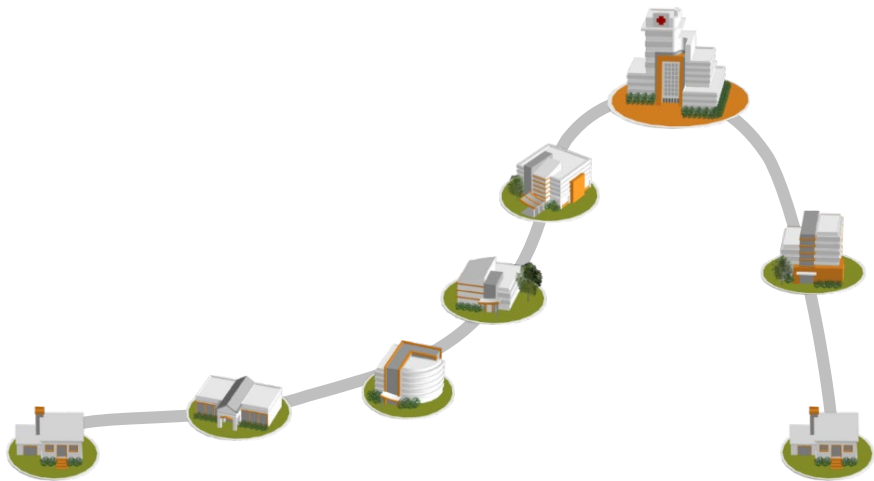
Coverage Expansion, Lifestyle Factors and Screening Eligibility Changes Impact IP Volumes Over the Decade



CNS = central nervous system. Sources: Grimm LJ et al. *J Am Coll Radiol*. June 8, 2022 [Epub ahead of print]; Sg2 Analysis, 2022.

Why It All Matters—Key Cancer Takeaways

SERVICE LINE FRAMEWORK



Quality
Care

Growth

Best
Practice

Innovation

GOVERNANCE

QUALITY

- Evaluate therapy capabilities to treat patient population with emerging therapeutics.
- Establish clinical and performance benchmarks (eg, time to treat, clinical outcomes).

GROWTH

- Consider comprehensive infrastructure when developing service offerings (eg, right patient, right location).
- Assess System of CARE by tumor type, creating clarity of program multidisciplinary and integrative capabilities.

OPERATION

- Redesign the work, workflows and teams to adapt to current workforce constraints.
- Pursue innovative care and business models that can be efficiently leveraged through value-based vertical.

INNOVATION/RESEARCH

- Identify opportunities to broaden clinical trials to an expanded cancer population through technology and process design.
- Establish an emerging-technology acquisition assessment plan supporting clinical and service offering relevance.

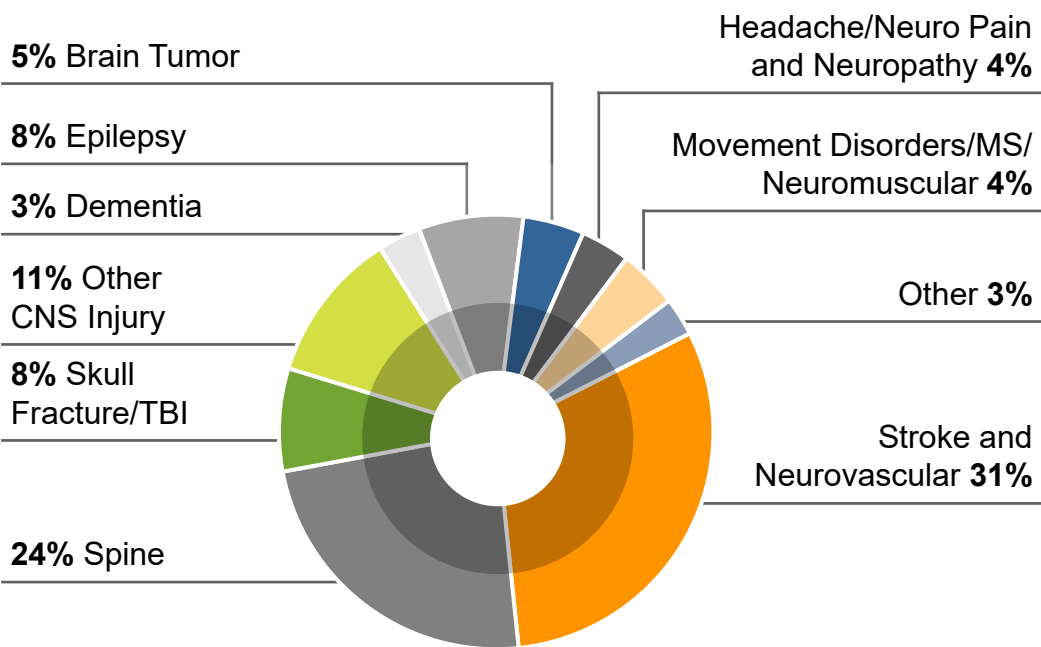


Neurosciences

Understand Inpatient Growth Opportunity in the Context of Volume

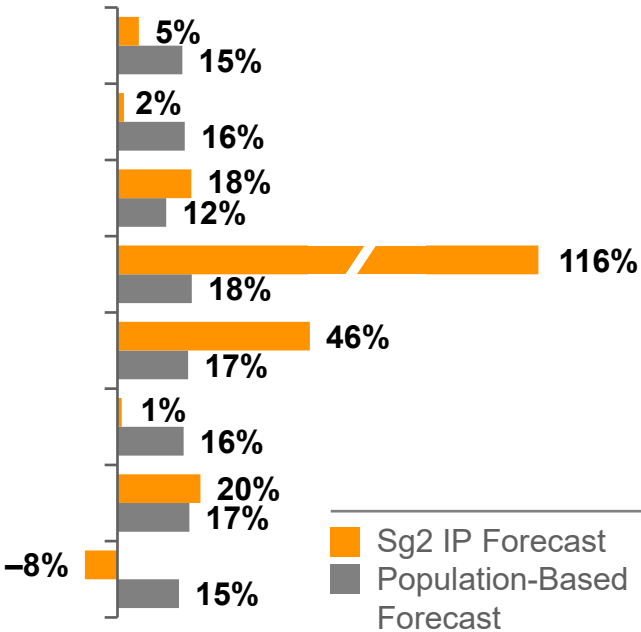
Inpatient Neurosciences and Spine Discharges US Market, 2022; Total Volume: 3 Million

29% Major Therapeutic



Inpatient Neurosciences and Spine Forecast Select Procedures, US Market, 2022–2032

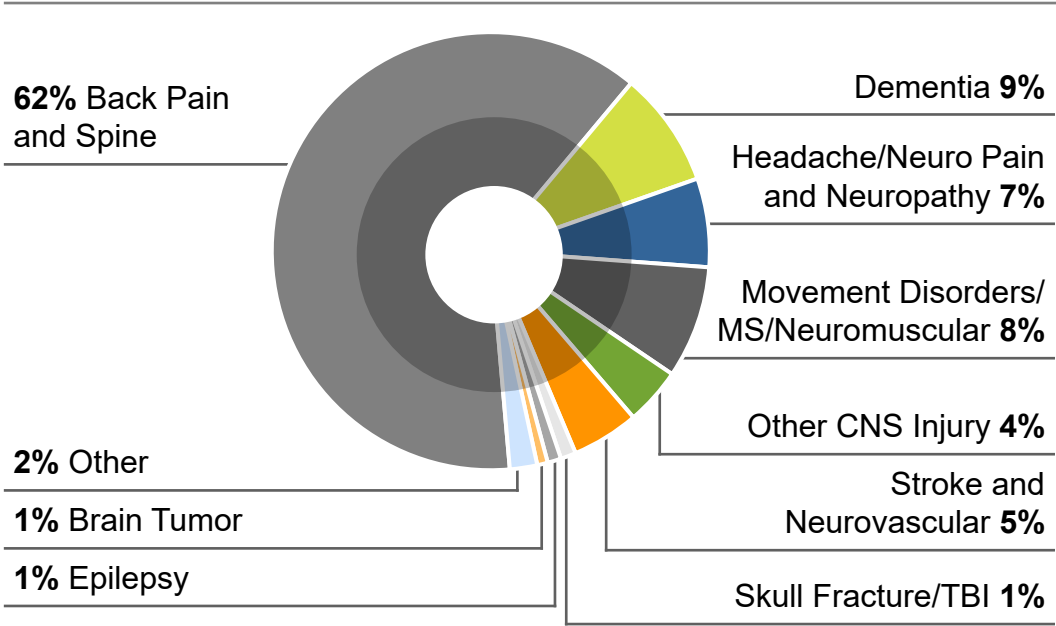
Overall IP
No Procedure
Neurodiagnostics
Cerebral Thrombectomy
Other Endovascular Cerebral
Cranial
Neurostimulator
Spine Surgery



Note: Analysis excludes 0–17 age group and includes neurosciences and spine service lines and Brain/CNS Cancer CARE Family. Skull fracture/TBI = concussion, skull fracture and major brain injury/traumatic brain injury. Other CNS injury = cerebral palsy and paralysis, CNS infections, late effects of neuro trauma, nontraumatic brain injury and encephalopathy, and transient mental status change. Movement disorders/MS/neuromuscular = abnormal gait and movement disorders, Parkinson disease, multiple sclerosis (MS) and demyelinating diseases, and neuromuscular diseases. Other = complications of surgery, device, implant or graft—neuro, hydrocephalus and spina bifida, neurologic disease—other, and sleep disorders. Stroke and neurovascular include hemorrhagic stroke (subarachnoid, intracerebral and subdural hemorrhage), ischemic stroke, neurovascular diseases and transient ischemic attack. Cranial = brain/skull surgery including resection; brain biopsy; open vascular procedure—cerebral; open vascular procedure—cerebral angioplasty; shunt surgery/hydrocephalus surgery. Other endovascular cerebral = endovascular procedures—cerebral and endovascular procedures—cerebral angioplasty. Spine surgery = cervical spinal fusion, lumbar/thoracic spinal fusion, motion preservation procedures, spinal decompression/laminectomy, vertebral augmentation procedures. Percentages in the pie chart may not add to 100% due to rounding. CNS = central nervous system. **Sources:** Impact of Change®, 2022; HCUP National Inpatient Sample (NIS). Healthcare Cost and Utilization Project (HCUP) 2019. Agency for Healthcare Research and Quality, Rockville, MD; Claritas Pop-Facts®, 2022; Sg2 Analysis, 2022.

Rehab and Post-Acute Services Significantly Influence OP Growth

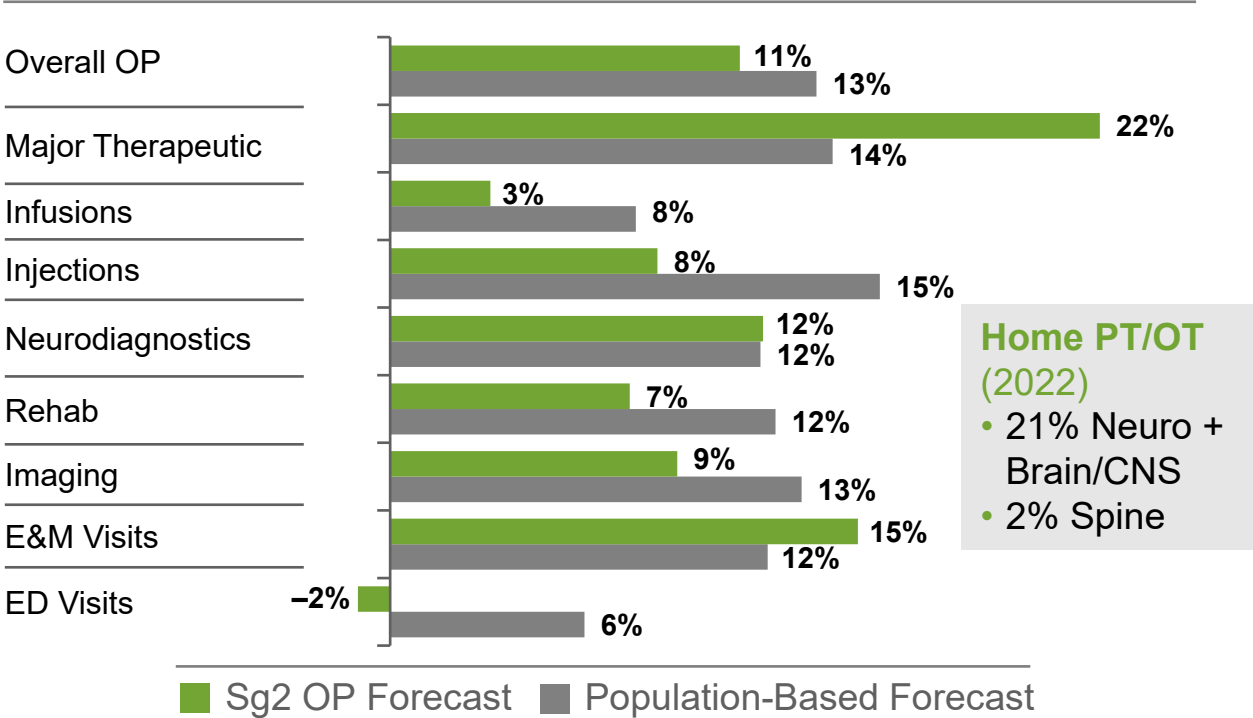
Outpatient Neurosciences and Spine Volumes
US Market, 2022; Total Volume: 810 Million



3% Major/Minor Procedures; 55% OP Rehab; 15% Post-Acute

Note: Analysis excludes 0–17 age group and includes neurosciences and spine service lines and Brain/CNS Cancer CARE Family. Skull fracture/TBI = concussion, skull fracture and major brain injury/traumatic brain injury. Other CNS injury = cerebral palsy and paralysis, CNS infections, late effects of neuro trauma, nontraumatic brain injury and encephalopathy, and transient mental status change. Movement disorders/MS/neuromuscular = abnormal gait and movement disorders, Parkinson disease, multiple sclerosis and demyelinating diseases, and neuromuscular diseases. Other = complications of surgery, device, implant or graft—neuro, hydrocephalus and spina bifida, neurologic disease—other, and sleep disorders. Stroke and neurovascular include hemorrhagic stroke (subarachnoid, intracerebral and subdural hemorrhage), ischemic stroke, neurovascular diseases and transient ischemic attack. Imaging = standard and advanced imaging. Major therapeutic = all major procedures. Neurodiagnostics = ambulatory electroencephalogram (EEG), neurodiagnostics, and neurodiagnostics—EEG. ED visits = urgent and emergent visits. Infusions = chemotherapy procedure group. **Sources:** Impact of Change®, 2022; Proprietary Sg2 All-Payer Claims Data Set, 2019; The following 2019 CMS Limited Data Sets (LDS): Carrier, Denominator, Home Health Agency, Hospice, Outpatient, Skilled Nursing Facility; Claritas Pop-Facts®, 2022; Sg2 Analysis, 2022.

Outpatient Neurosciences and Spine Forecast
Select Procedures, US Market, 2022–2032



Unlocking Sustainable Growth: Align Stroke Programs With Market Demand and Resource Availability

Volume-Quality Relationship for Complex Stroke Cases Warrants Cautious Approach to Stroke Distribution

Intracranial Vascular Procedures for Primary Diagnosis of Hemorrhage With MCC (MS-DRG 20), CY 2021

MS-DRG 20 Average Annual Volume Range	Number of Hospitals in Cohort	% Admitted via ED	Complication %	Observed Mortality %	Mortality Index	Median DRG Triplet Volume (MS-DRG 20–22)
<10	54	79.05%	28.06%	22.53%	1.97	8
10–24	64	65.16%	23.98%	16.71%	1.34	23
25–49	56	61.04%	21.72%	14.24%	1.10	49
50+	20	55.02%	19.90%	11.49%	1.00	83

As volumes increase:

- Percent admitted via ED declines, hinting that these may be larger referral centers or “hubs.”
- Mortality, complications markedly decline; mortality index (observed vs expected mortality) approaches 1.00.

Note: Analyses include adults only; transfers out to a different hospital have been excluded due to inability to track outcomes. MS-DRG 20–22 analysis limited to CY 2021. ED cases are defined as presence of UB92 revenue codes 450–459. Complications include complication diagnoses not present upon admission. MCC = major complication or comorbidity. **Source:** Data from Vizient® Clinical Data Base used with permission of Vizient, Inc. All rights reserved.

Unlocking Sustainable Growth: Align Stroke Programs With Market Demand and Resource Availability

Volume-Quality Relationship for Complex Stroke Cases Warrants Cautious Approach to Stroke Distribution

Intracranial Vascular Procedures for Primary Diagnosis of Hemorrhage With MCC (MS-DRG 20), CY 2021

Assess market demand and current penetration of advanced interventions to understand the runway for growth.	Evaluate the appropriate stroke network model (eg, partnerships, rationalization of services).	Understand upstream channel strength. Emergency medical services and transfers drive emergent stroke volumes.	Enhance collaboration with continuing care providers to plan for changing post-acute needs.
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As volumes increase:

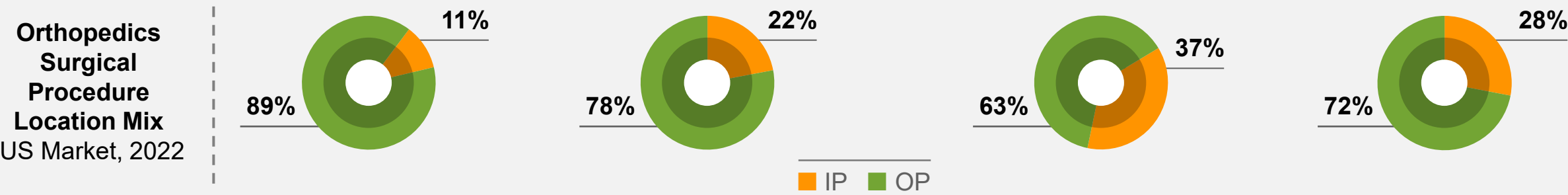
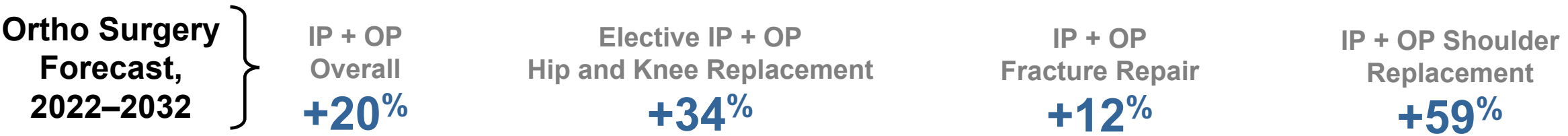
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Orthopedics & Spine

Orthopedics Surgical Forecast: Sustaining Growth and Relevance Amid Ambulatory Shift



Growth is slowing for **elective hip and knee replacement**, as underlying macro-level trends (obesity, expanded patient eligibility and utilization) are realized in baseline utilization.

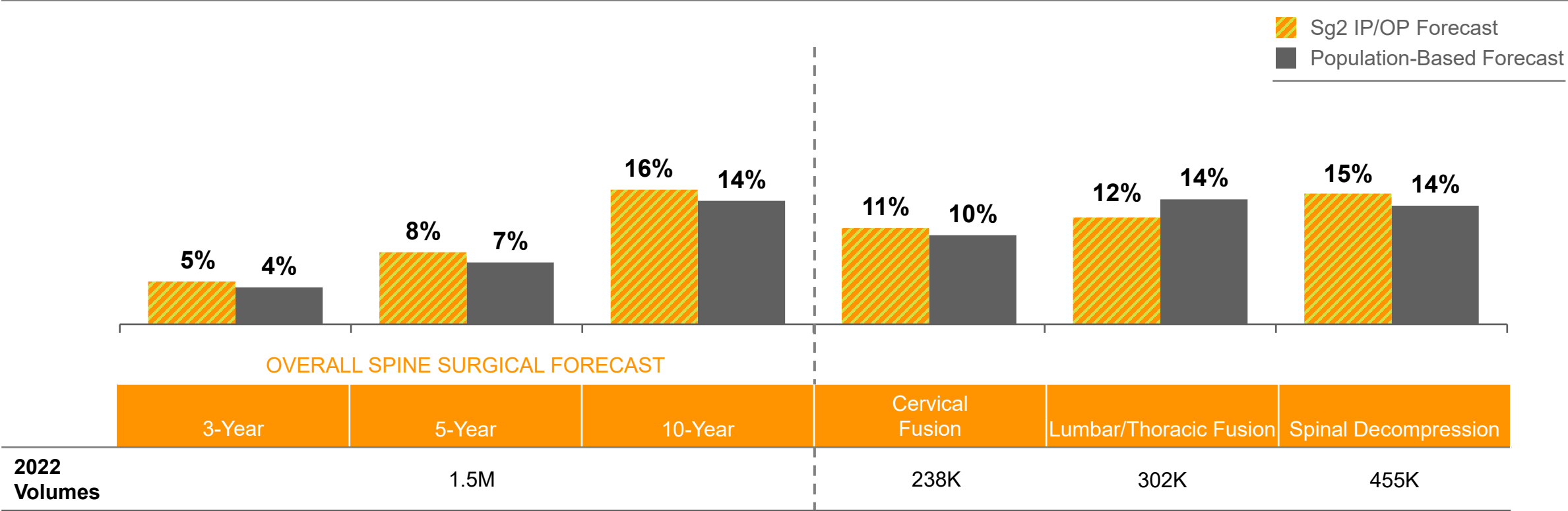
Fracture repair growth opportunity varies by setting, as trauma, hip fractures and fragility fractures drive hospital-based growth and lower-complexity extremity fracture cases continue ambulatory shift.

Robust **shoulder replacement** growth, fueled in part by improved implant design and outcomes, is beginning to slow down.

Note: Analysis excludes 0–17 age group and includes the orthopedics service line only. Overall 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 Musculoskeletal Injury—Shoulder/Elbow/Upper Arm CARE Families only. 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). **Sources:** Impact of Change®, 2022; 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, 2019; The following 2019 CMS Limited Data Sets (LDS): Carrier, Denominator, Home Health Agency, Hospice, Outpatient, Skilled Nursing Facility; Claritas Pop-Facts®, 2022; Sg2 Analysis, 2022.

Acuity, Site of Care and Clinical Advancements—All Factors Driving Spine Surgical Procedures Forecast

Select Inpatient/Outpatient Spine Surgical Procedures Forecast, US Market, 2022–2032

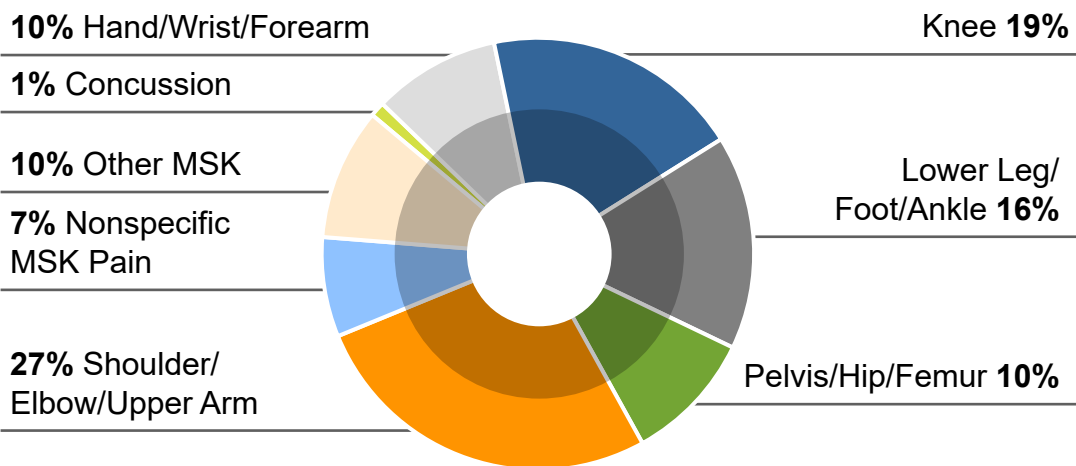


Note: Analysis excludes 0–17 age group and includes the spine service line only. Overall spine surgical forecast includes IP major therapeutic and OP major procedures groups. **Sources:** Impact of Change®, 2022; HCUP National Inpatient Sample (NIS). Healthcare Cost and Utilization Project (HCUP) 2019. Agency for Healthcare Research and Quality, Rockville, MD; Proprietary Sg2 All-Payer Claims Data Set, 2019; The following 2019 CMS Limited Data Sets (LDS): Carrier, Denominator, Home Health Agency, Hospice, Outpatient, Skilled Nursing Facility; Claritas Pop-Facts®, 2022; Sg2 Analysis, 2022.

Sports Medicine and Extremity—Reconsider Ambulatory Footprint and Sports Medicine Investments

OP Sports Medicine and Extremity Volumes

US Market, 2022; Total Volume: 483 Million



KEY AREAS OF OPPORTUNITY

- Shoulder/elbow/upper arm services
- Joint preservation and injury prevention
- Sports performance services

KEY TACTICAL CONSIDERATIONS

- Establish a one-stop treatment center.
- Augment workforce with sports medicine.
- Codesign orthopedic urgent care locations and services.

Note: Analysis excludes 0–17 age group and includes the following Sg2 CARE Families: Concussion and Unspecified Head Injury, Musculoskeletal (MSK) Injury—Hand/Wrist/Forearm, MSK Injury—Knee, MSK Injury—Lower Leg/Foot/Ankle, MSK Injury—Pelvis/Hip/Femur, MSK Injury—Shoulder/Elbow/Upper Arm, Other MSK Injuries and Conditions, Nonspecific MSK Pain. **Sources:** Impact of Change®, 2022; Proprietary Sg2 All-Payer Claims Data Set, 2019; The following 2019 CMS Limited Data Sets (LDS): Carrier, Denominator, Home Health Agency, Hospice, Outpatient, Skilled Nursing Facility; Claritas Pop-Facts®, 2022; Sg2 Analysis, 2022.

Programmatic Initiatives Capture Orthopedic Growth



Build a comprehensive and integrated portfolio of services to capture increasingly competitive growth opportunities.



- Consider offering subspecialized and co-located niche services (eg, sports medicine).
- Invest in workforce, processes and technology that enhance patient rehabilitation access and outcome.



- Standardize best practices to optimize efficiency and ensure quality outcomes.
- Establish care pathways with a focus on patient-centered health.



- Assess market and organizational brakes and accelerators impacting transition to ambulatory surgery centers.
- Evaluate service distribution for hospital-based and ambulatory sites of care.



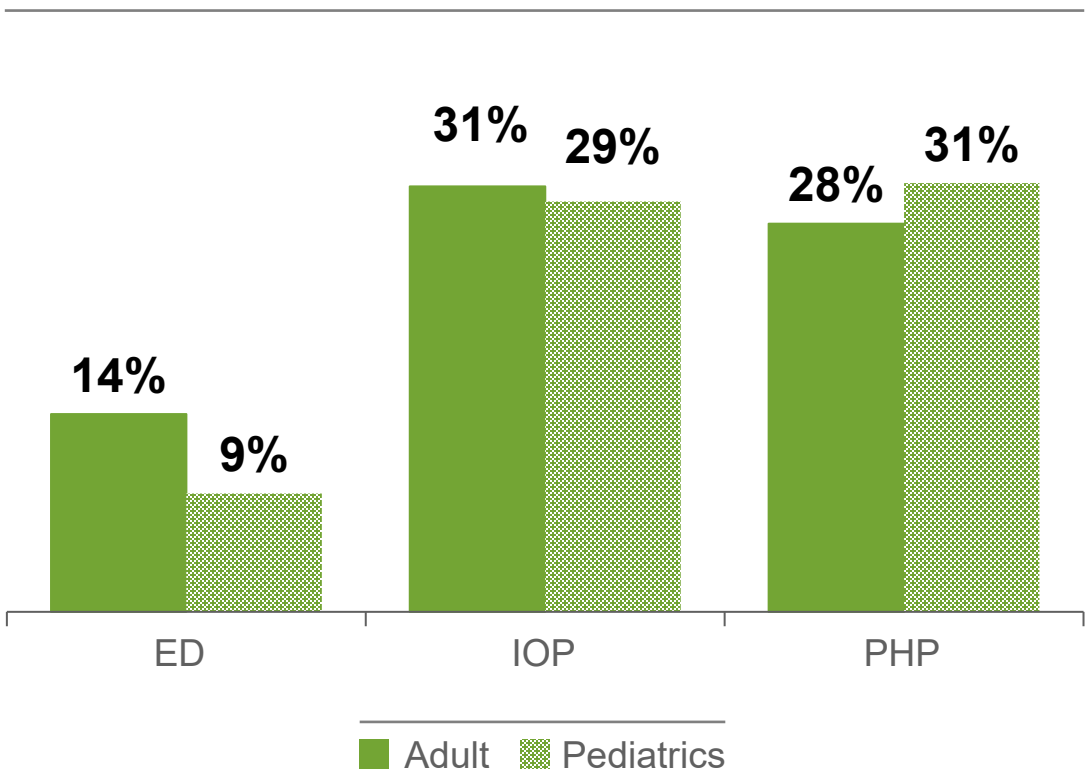
Develop a plan to address inequities and disparities proactively through outreach interventions and expanded access.



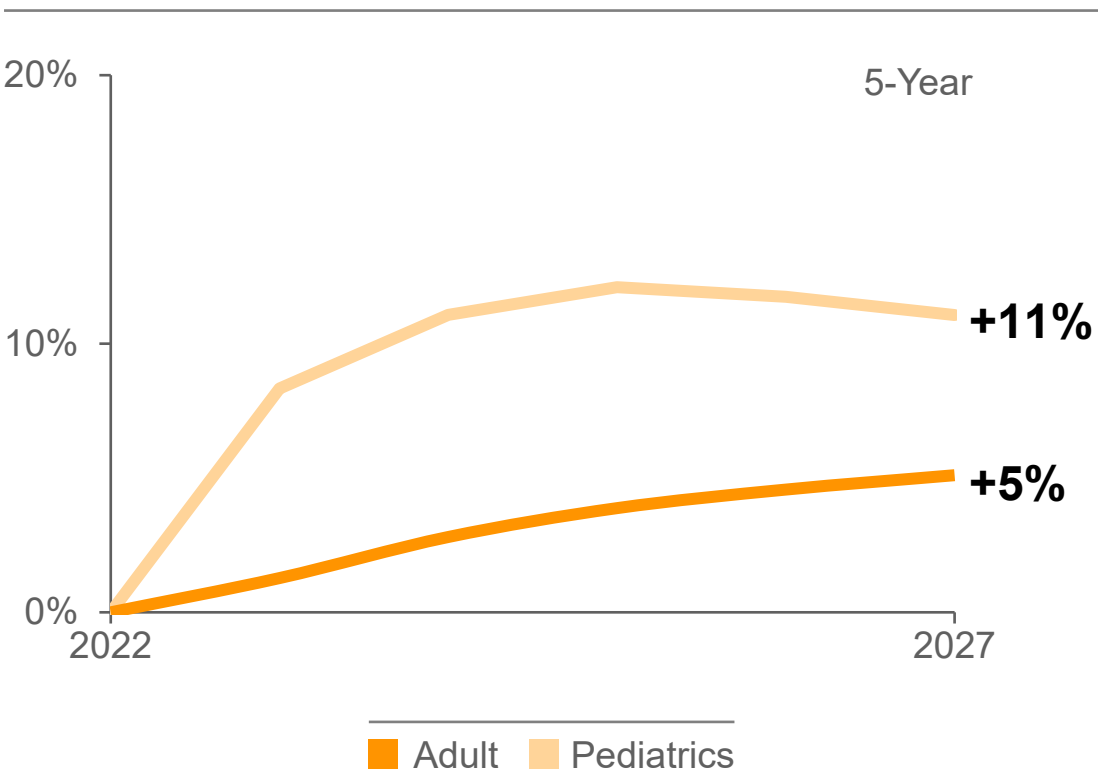
Behavioral Health

Rising Prevalence in Mental Health Conditions Drives Demand Across Care Sites and Age Cohorts

Behavioral Health OP Forecast, US Market, 2022–2027



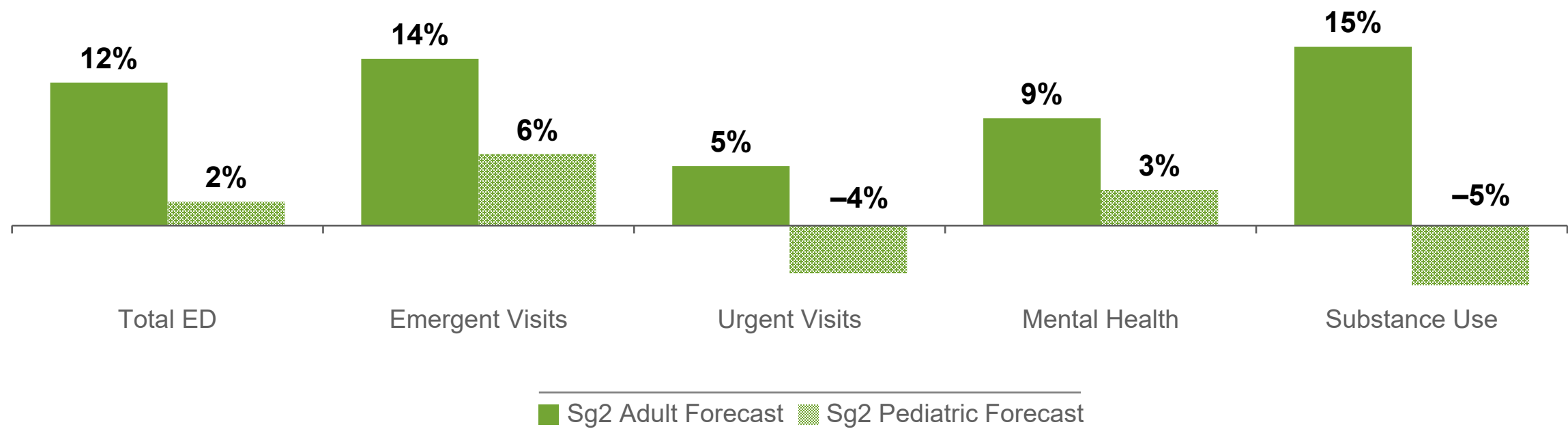
Behavioral Health IP Forecast, US Market, 2022–2027



IOP = intensive outpatient program; PHP = partial hospitalization program. **Sources:** Impact of Change®, 2022; 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, 2019; The following 2019 CMS Limited Data Sets (LDS): Carrier, Denominator, Home Health Agency, Hospice, Outpatient, Skilled Nursing Facility; Claritas Pop-Facts®, 2022; Sg2 Analysis, 2022.

Proactive Planning Is Required to Handle Increasing ED Volume

ED Forecast, Behavioral Health, US Market, 2022–2032



Note: Total ED includes emergent and urgent visits. Mental health includes adjustment disorders, anxiety and personality disorders, bipolar disorders, eating disorders, episodic and persistent mood disorders, psychosis, and trauma-related disorders. Substance use includes substance use disorders and poisonings—commonly abused drugs. Adult analysis includes 18+ age group. Pediatric analysis includes 0–17 age group. **Sources:** Impact of Change®, 2022; Proprietary Sg2 All-Payer Claims Data Set, 2019; The following 2019 CMS Limited Data Sets (LDS): Carrier, Denominator, Home Health Agency, Hospice, Outpatient, Skilled Nursing Facility; Claritas Pop-Facts®, 2022; Sg2 Analysis, 2022.

Aligning Crisis Services Creates Optimal Care for Patient, as Well as Community and Health System Benefits

Availability of crisis services reduces use of emergency department, inpatient beds, jails.



COMMUNITY BENEFITS

- Law enforcement has easy access to mobile crisis team and crisis facilities.
- Patients receive access to treatment instead of arrest.

OUTCOMES

- 80% of calls are resolved over the phone.
- 70% of mobile crisis team calls are resolved in the field.
- 60% to 70% of visits to crisis facilities are discharged back to the community.
- 85% of patients remain stable with community-based wraparound services >45 days.

Source: Balfour ME et al. *Psychiatr Serv.* 2022;73(6):658–669.

Availability of Crisis Services Reduces Use of Emergency Department, Inpatient Beds, Jails

Maricopa and Pima Counties, Arizona

SOLUTION

- \$100 million investment in crisis care led to the nationally recognized “Arizona Model.”
- Suicide hotlines, mobile crisis units and crisis facilities are electronically linked.
- Quick, easy access for law enforcement means being the preferred alternative to jail or ED.
- 100% patient acceptance with a “never reject” approach.
- Patients receive access to treatment instead of arrest.

OUTCOMES

- **\$260 million** in psychiatric inpatient spending saved
- **\$37 million** in ED costs saved
- **63 years** of psychiatric ED boarding hours saved
- 30,500 police drop-offs in a 12-month period led to **37 FTEs** of police officer time and salary saved.



Person
in Crisis



Crisis
Line



Mobile
Crisis
Team



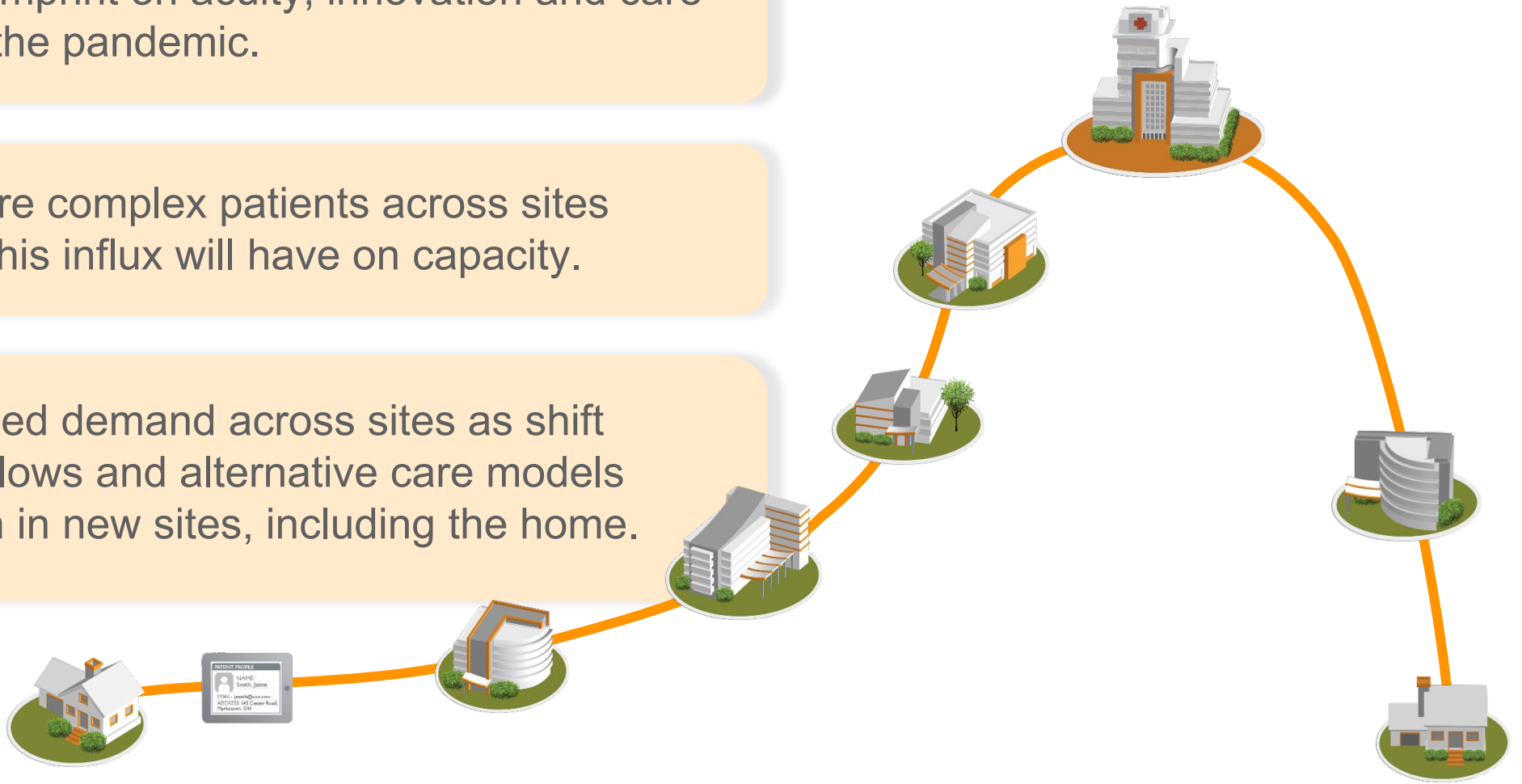
Crisis
Facilities



Wrap-
around
Services

FTE = full-time equivalent. **Sources:** Balfour ME et al. *Psychiatr Serv.* 2022;73(6):658–669; Connections Health Solutions. The Arizona Model of Crisis Receiving Center [PowerPoint presentation]. Accessed August 2022.

1. Recognize the imprint on acuity, innovation and care delivery left by the pandemic.
2. Prepare for more complex patients across sites and the effect this influx will have on capacity.
3. Plan for increased demand across sites as shift from inpatient slows and alternative care models allow for growth in new sites, including the home.



Questions?



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