

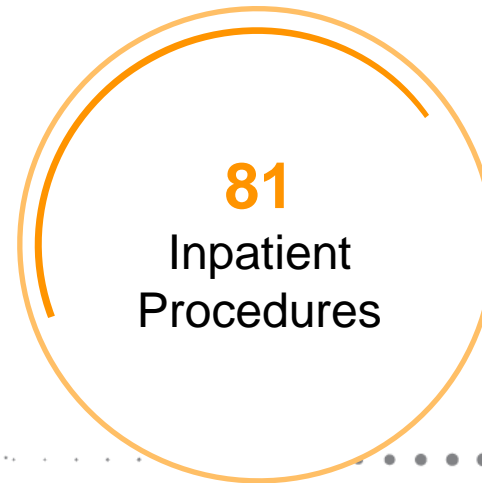
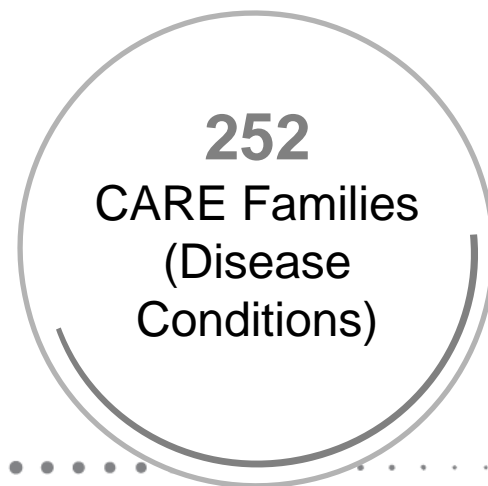
2024 Impact of Change[®] Forecast Highlights

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Categorize Your Data Across **27,000+** Unique CARE Group Combinations, Including...



Methodology

THE POWER OF DISEASE-BASED FORECASTING

By starting with trends in the prevalence and incidence of underlying health conditions, the disease-based Impact of Change model analyzes patient-level data and local market trends to project demand across inpatient and outpatient services. Each year, Sg2's experts evaluate and update a series of impact factors to forecast how each of these variables will influence volumes. Each impact factor reflects the trends specific to disease groupings and procedures within the population.

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.

The Forecast Continues to Get Bigger and More Complex

2023

2020

2018

BALANCING ACT

FINDING YOUR FUTURE FOOTING

TOMORROW IS HERE

Strategy for the New Clinical Enterprise

BREAKING

BOUNDARIES

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2023 Year in Review: ED and IP Utilization Rise Across Most Service Lines

ED Utilization Change From 2022 vs 2023

ED Volume

+4%

% Emergent: **67%**

+2%

% IP
Admissions: **19%**



IP Utilization Change From 2022 vs 2023

Discharges

+5%

ALOS

-2%

Days

+3%

Note: Analysis excludes 0–17 age group. Emergent visits defined as CPT codes 99284, 99285 and 99291. **Sources:** Data from the Vizient® Clinical Data Base/Resource Manager™ used by permission of Vizient, Inc. All rights reserved.
Q1 2022–Q4 2023; Sg2 Analysis, 2024.

Inpatient Growth Stems From Days, Not Discharges



2024 Inpatient 10-Year Forecast

 Discharges: **+3%**

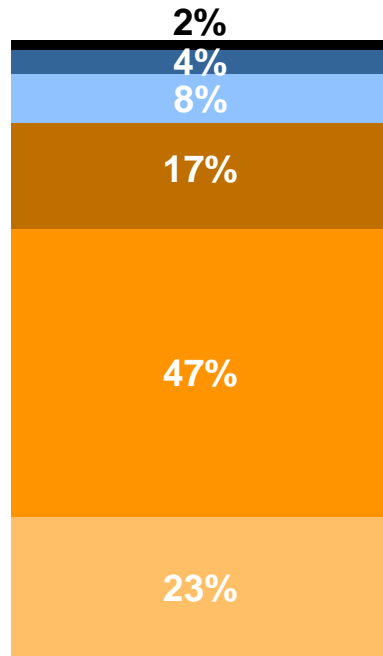
 Days: **+9%**

Note: Analysis excludes 0–17 age group. **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; Claritas Pop-Facts®, 2024; Sg2 Analysis, 2024.



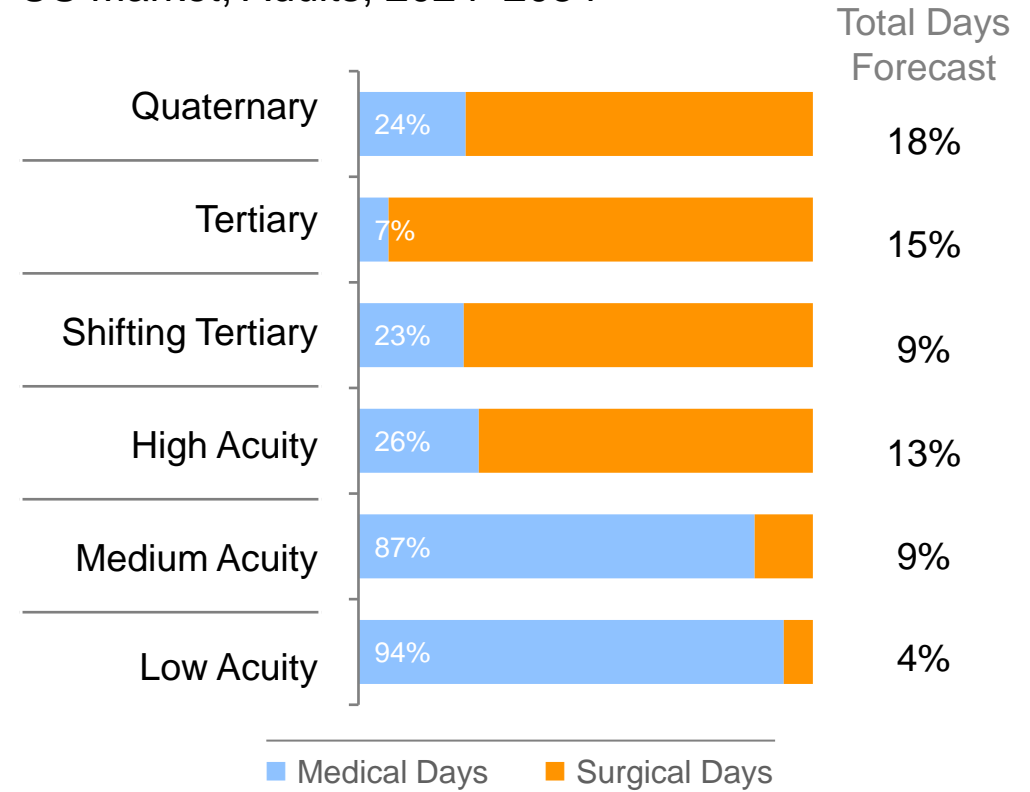
Balance Inpatient Portfolio for Strategic Capacity Management

Inpatient Portfolio Days Distribution
US Market, Adults, 2024



Quaternary
 Tertiary
 Shifting Tertiary
 High Acuity
 Medium Acuity
 Low Acuity

Inpatient Portfolio Days Forecast
US Market, Adults, 2024–2034



Note: Analysis excludes 0–17 age group. Percentages may not add to 100% due to rounding. Quaternary is Sg2 2024 Quaternary DRG list. Tertiary at risk of shifting = DRGs removed from Sg2 Tertiary List from 2017 to 2024. High Acuity: CMS weighted DRGs > 2.0; Medium Acuity: CMS weighted DRGs 1.0 to 2.0; Low Acuity: CMS weighted DRGs < 1.0. **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; Claritas Pop-Facts®, 2024; Sg2 Analysis, 2024.

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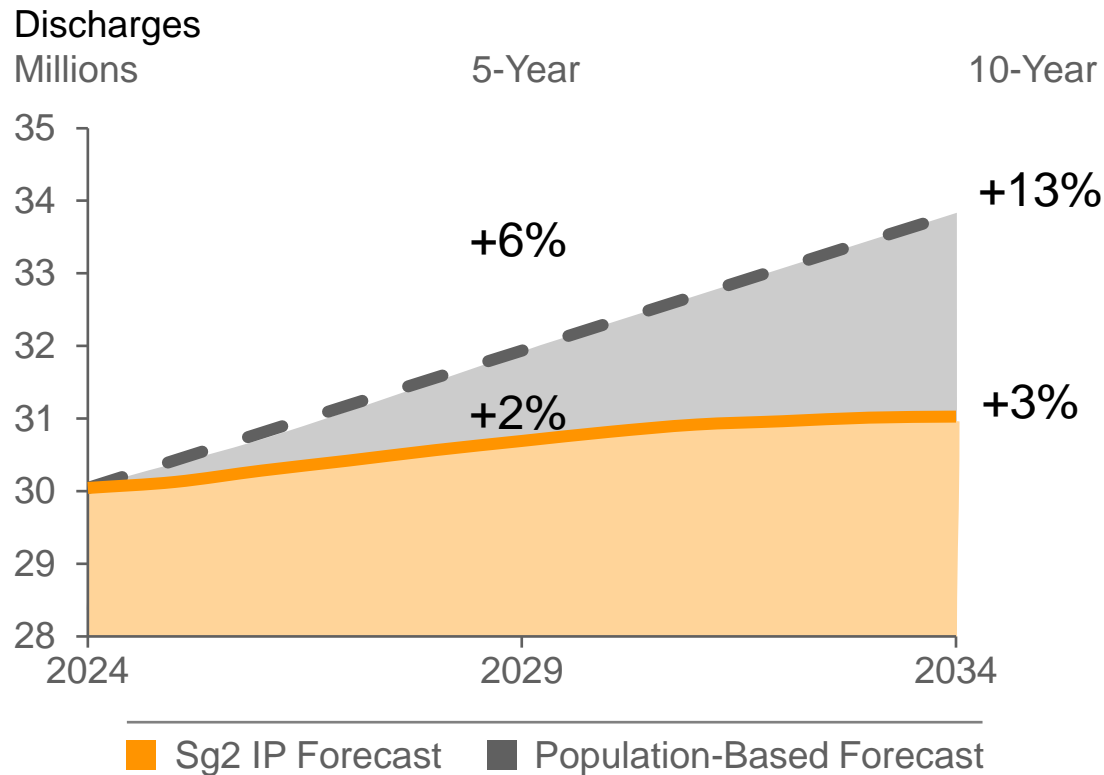
A stylized sunburst graphic with multiple layers of semi-circles, rendered in white and orange tones.

2020

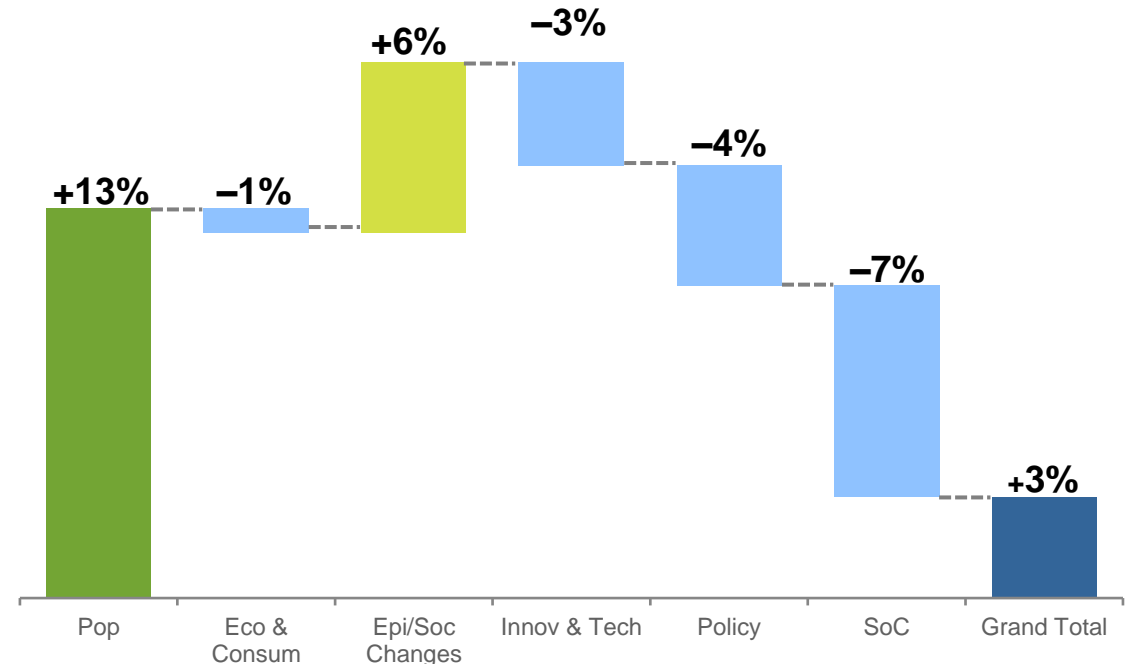


Modest Rises in Inpatient Volumes Expected Due to Rising Patient Acuity

Adult Inpatient Forecast US Market, 2024–2034



Adult Inpatient Forecast Impact Factors US Market, 2024–2034

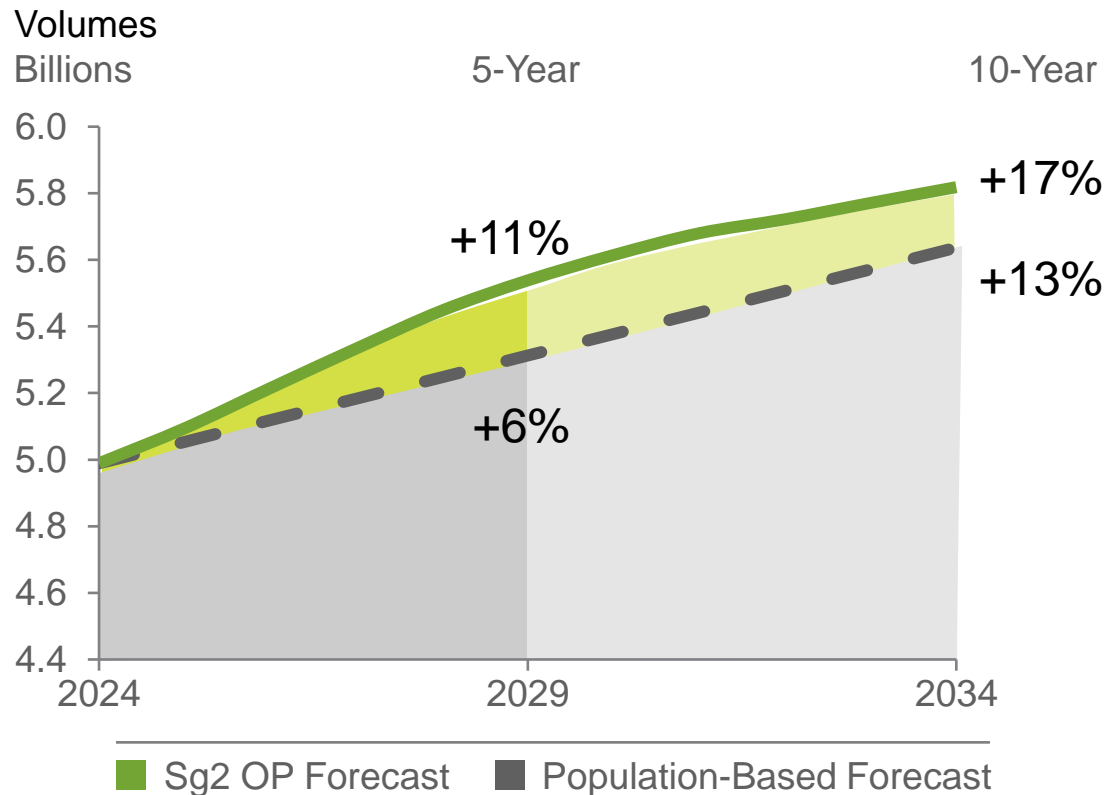


Note: Analysis excludes 0–17 age group. Eco & consum = economy and consumerism; epi/soc = epidemiology/sociocultural changes; innov & tech = innovation and technology; pop = population; SoC = System of CARE. **Sources:** Impact of Change®, 2024; HCUP National Inpatient Sample (NIS). Healthcare Cost and Utilization Project (HCUP) 2019. Agency for Healthcare Research and Quality, Rockville, MD; Claritas Pop-Facts®, 2024; Sg2 Analysis, 2024.

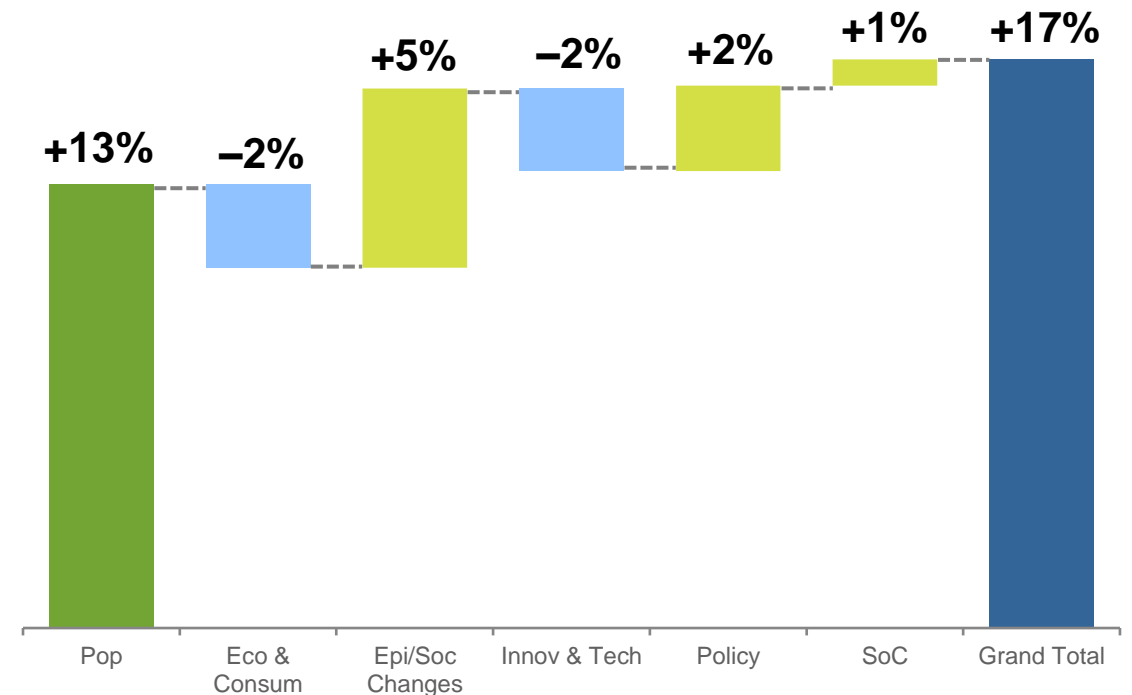


Outpatient Demand Outpaces Population-Based Demand Projections

Adult Outpatient Forecast US Market, 2024–2034



Adult Outpatient Forecast Impact Factors US Market, 2024–2034

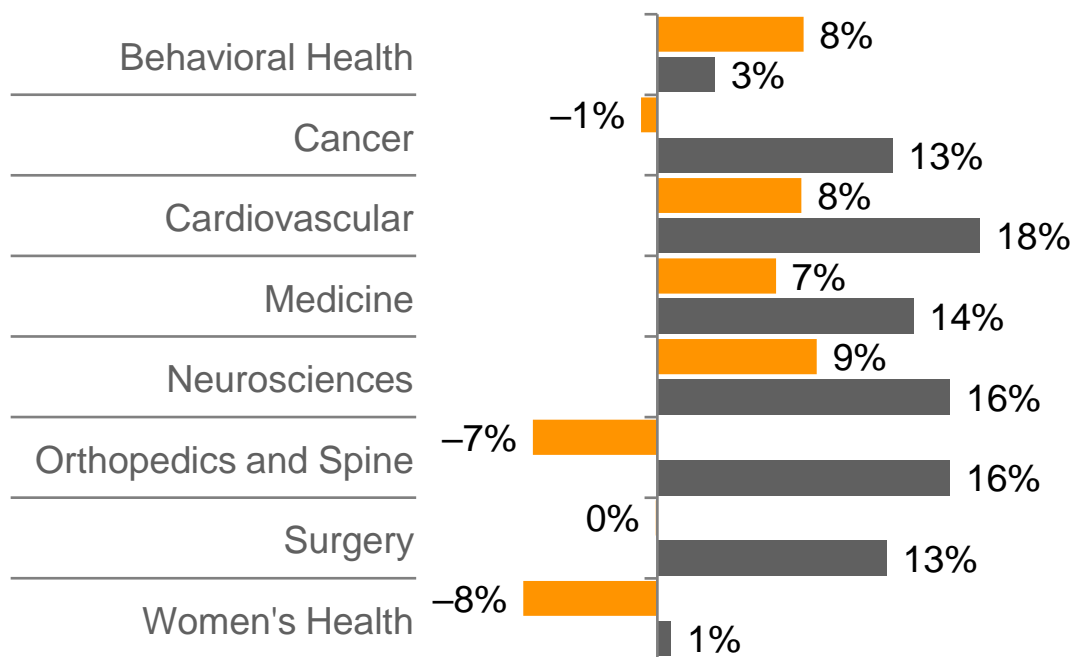


Note: Analysis excludes 0–17 age group. **Sources:** Impact of Change®, 2024; Proprietary Sg2 All-Payer Claims Data Set, 2022; The following 2022 CMS Limited Data Sets (LDS): Carrier, Denominator, Home Health Agency, Hospice, Outpatient, Skilled Nursing Facility; Claritas Pop-Facts®, 2024; Sg2 Analysis, 2024.

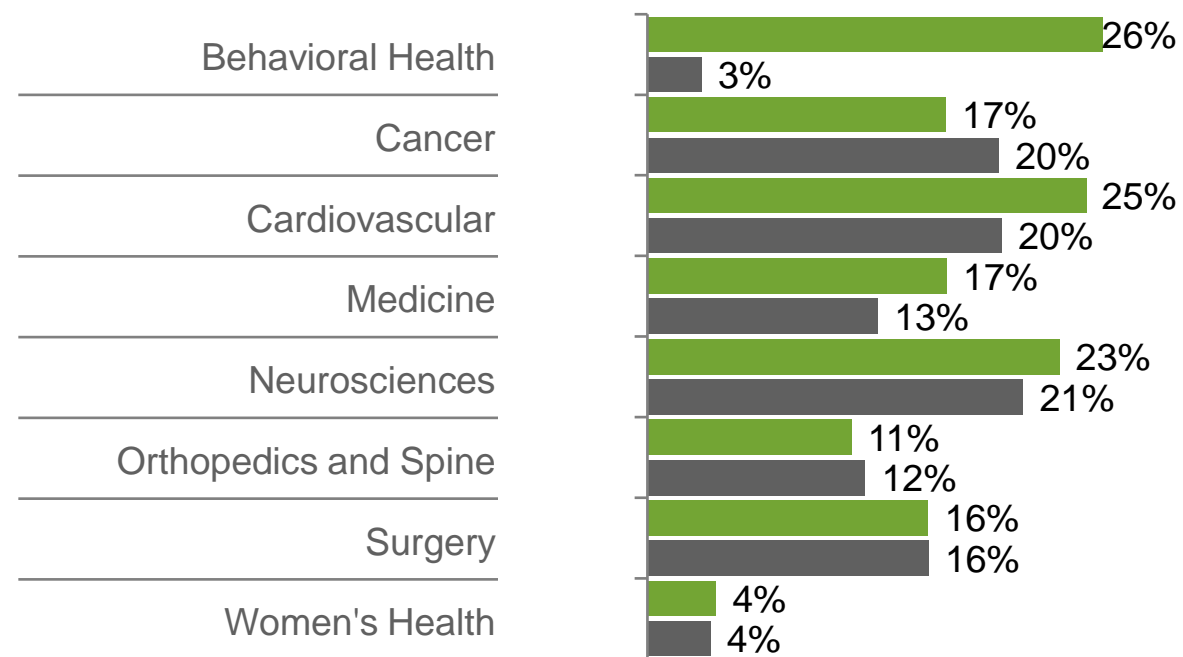


Utilization Trends Vary Across Service Lines

Inpatient Service Line Growth US Market, Adults, 2024–2034



Outpatient Service Line Growth US Market, Adults, 2024–2034



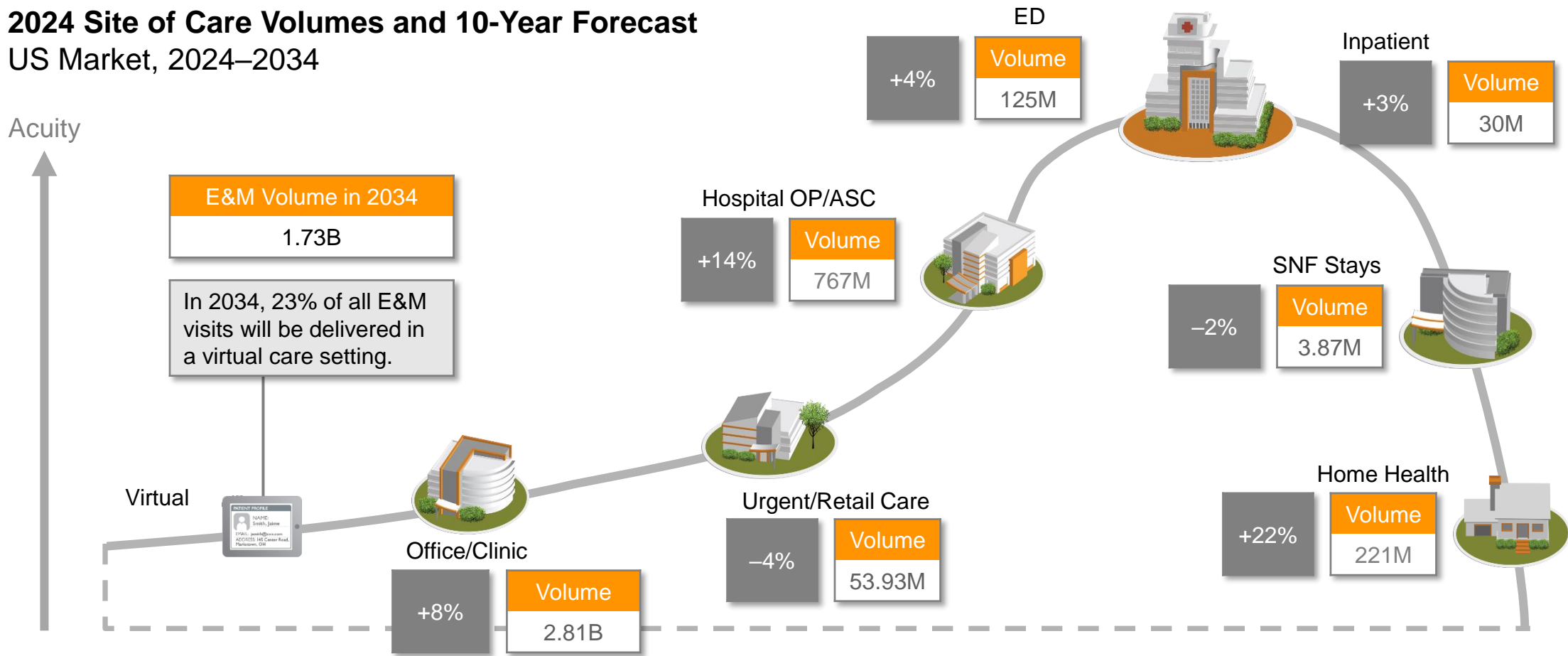
■ Sg2 IP Forecast
 ■ Population-Based Forecast
 ■ Sg2 OP Forecast

Note: Analysis excludes 0–17 age group. 0% indicates the forecast is flat (less than ±1%). Behavioral Health includes behavioral health service line and Poisonings—Commonly Abused Drugs CARE Family. 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®, 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.



Site of Care Forecast Driven by Rising Acuity and Emerging Care Models

2024 Site of Care Volumes and 10-Year Forecast US Market, 2024–2034



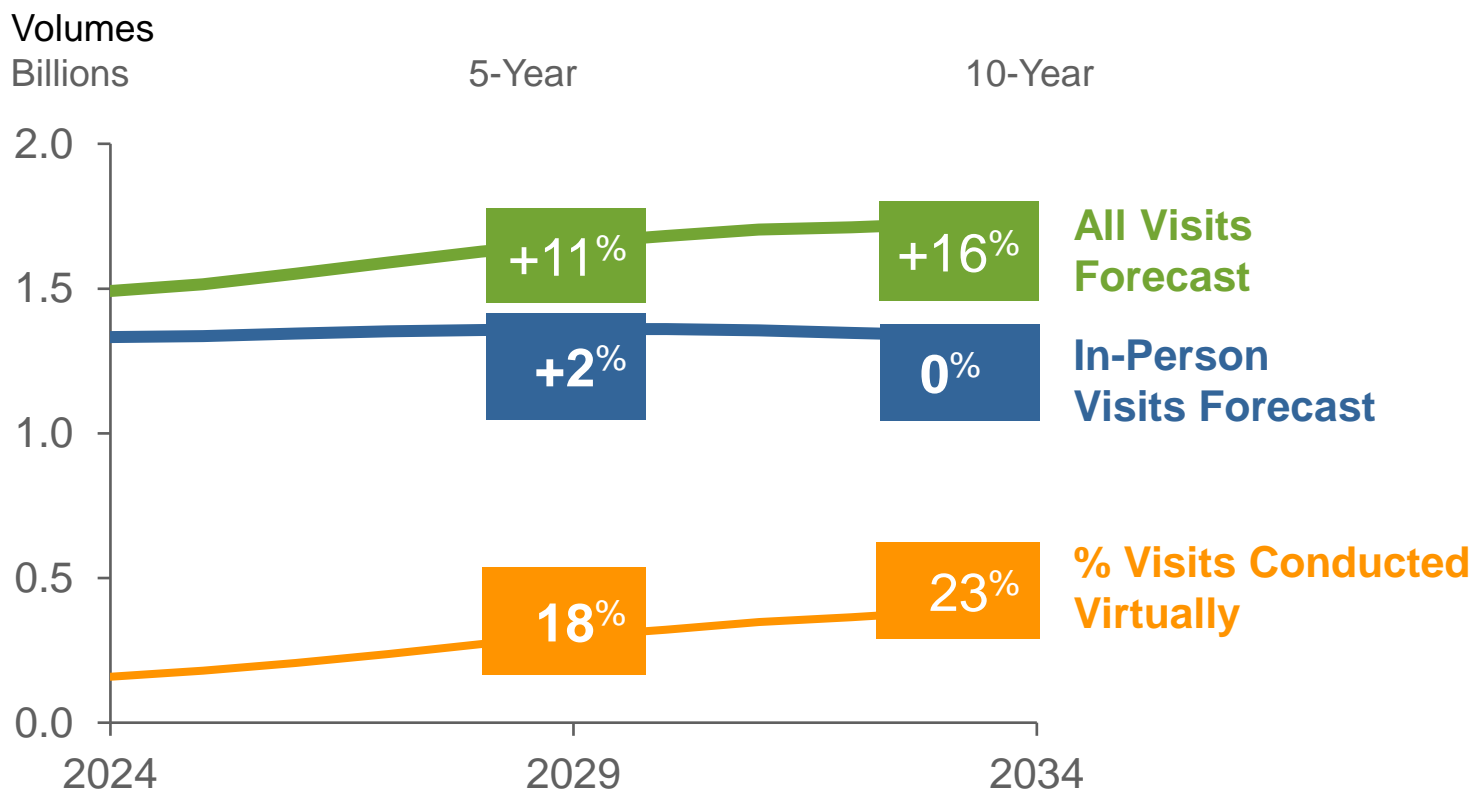
Note: ED forecast defined as urgent and emergent visits. E&M Visits defined as procedures home nurse visits and home visits other. Analysis excludes 0–17 age group. ASC = ambulatory surgery center; E&M = evaluation and management; SNF = skilled nursing facility.
Sources: Impact of Change®, 2024; HCUP 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.



Shift to Virtual Continues Despite Adoption Headwinds

E&M Visits 10-Year Forecast

US Market, 2024–2034



In-Person Visits 10-Year Forecast	
6%	-2%
New Patient Visits	Established Patient Visits

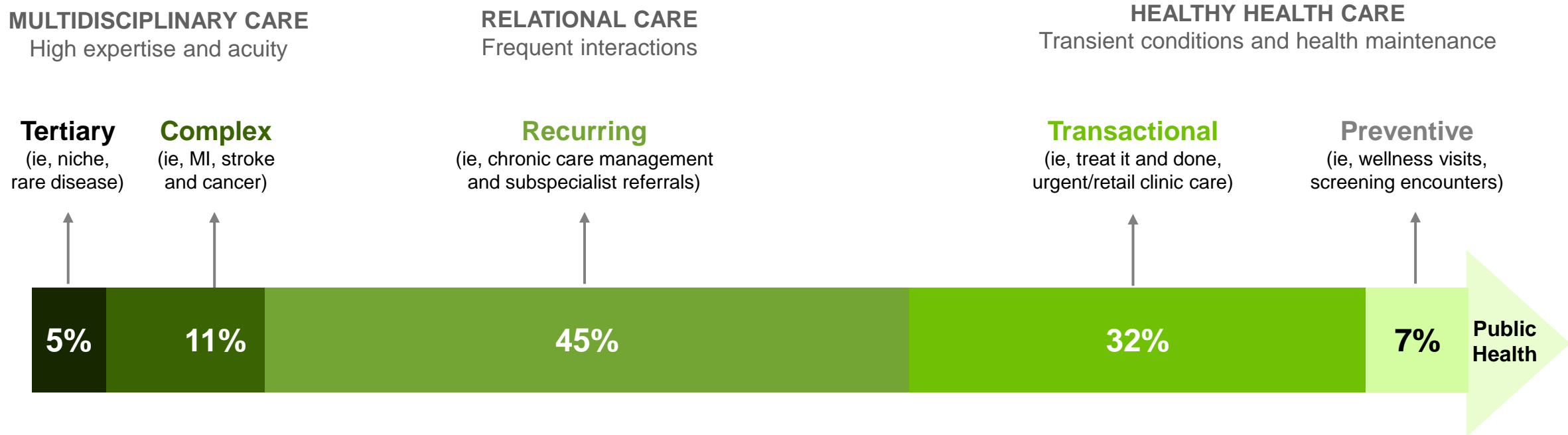
E&M Visits % Virtual by 2034	
15%*	26%*
New Patient Visits	Established Patient Visits

*Percentage of E&M visits occurring virtually. **Note:** Analysis excludes 0–17 age group. 0% indicates the forecast is flat (less than ±1%). E&M visits defined as procedures visits—evaluation and management, established patient visits—in person, established patient visits—virtual, new patient visits—in person, new patient visits—virtual. **Sources:** Impact of Change®, 2024; 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.



Ambulatory Growth Will Require Segmented Approach

Outpatient Volumes by Portfolio Subtype US Market, 2024

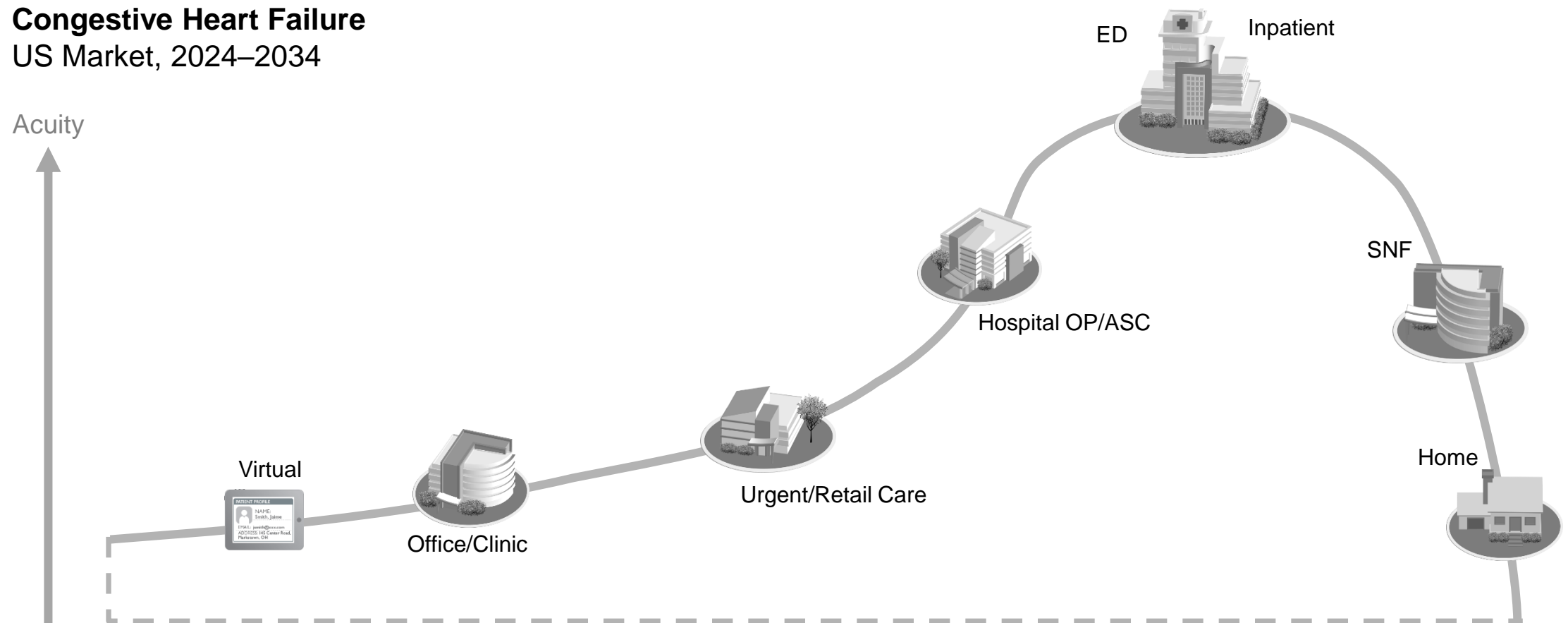


Note: Analysis excludes 0–17 age group. MI = myocardial infarction. **Sources:** Impact of Change®, 2024; Proprietary Sg2 All-Payer Claims Data Set, 2022; The following 2022 CMS Limited Data Sets (LDS): Carrier, Denominator, Home Health Agency, Hospice, Outpatient, Skilled Nursing Facility; Claritas Pop-Facts®, 2024; Sg2 Analysis, 2024.



Treatment of Acute Patients Requires Programmatic Approach

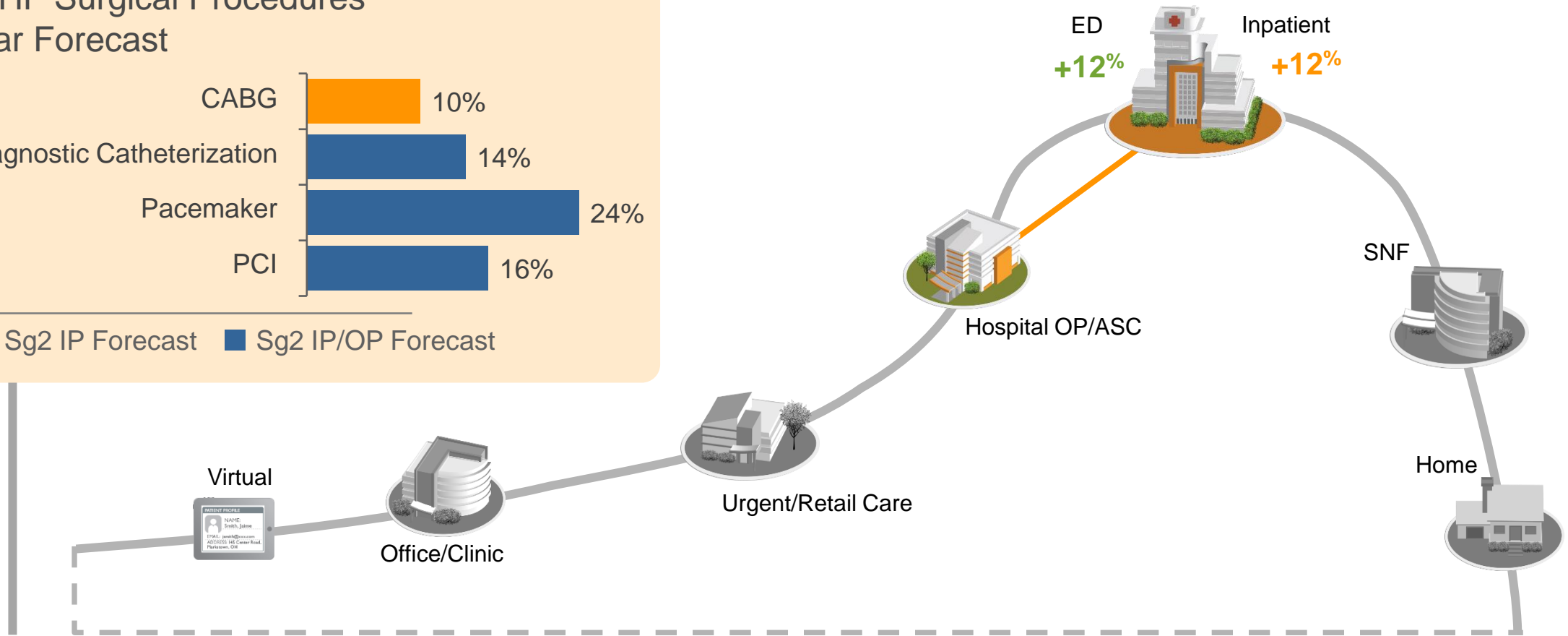
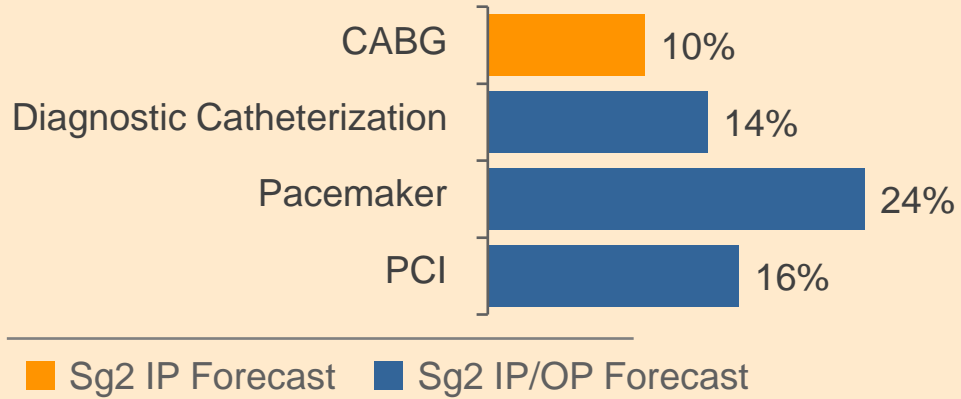
Congestive Heart Failure US Market, 2024–2034





Treatment of Acute Patients Requires Programmatic Approach

Key CHF Surgical Procedures 10-Year Forecast

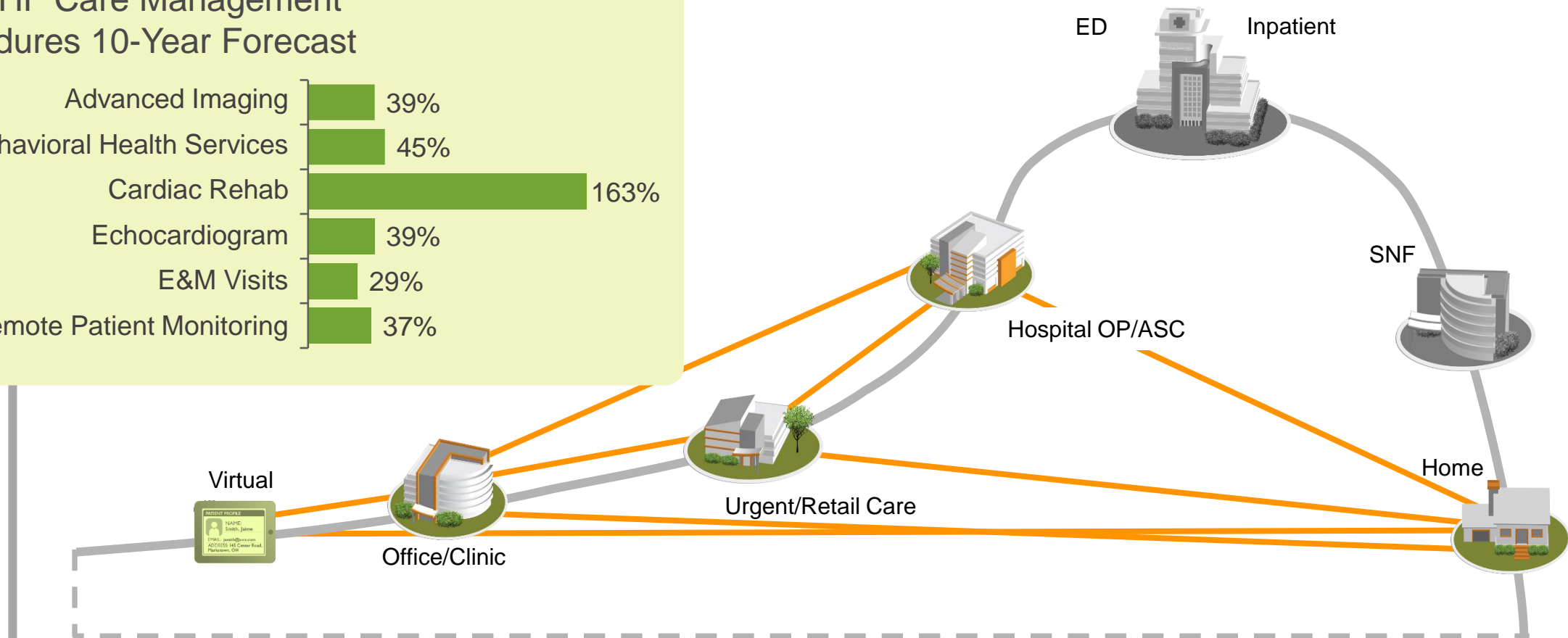
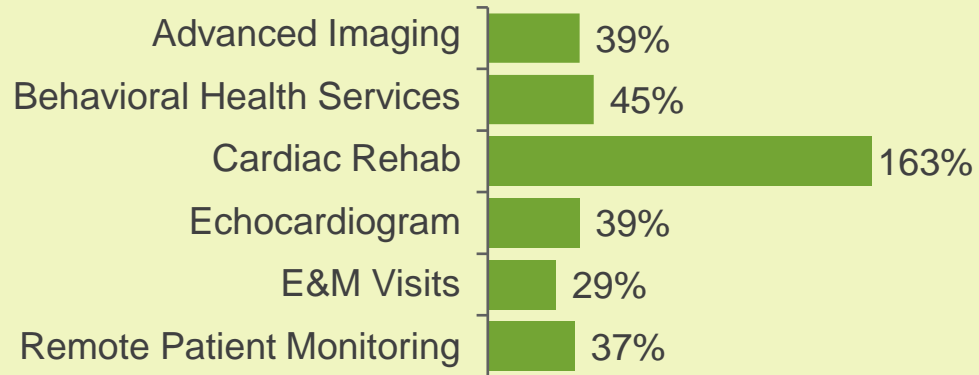


Note: Analysis excludes 0–17 age group. CABG = coronary artery bypass graft; CHF = congestive heart failure; PCI = percutaneous coronary intervention. **Sources:** Impact of Change®, 2024; HCUP National Inpatient Sample (NIS). Healthcare Cost and Utilization Project (HCUP) 2019. Agency for Healthcare 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.



Treatment of Acute Patients Requires Programmatic Approach

Key CHF Care Management Procedures 10-Year Forecast

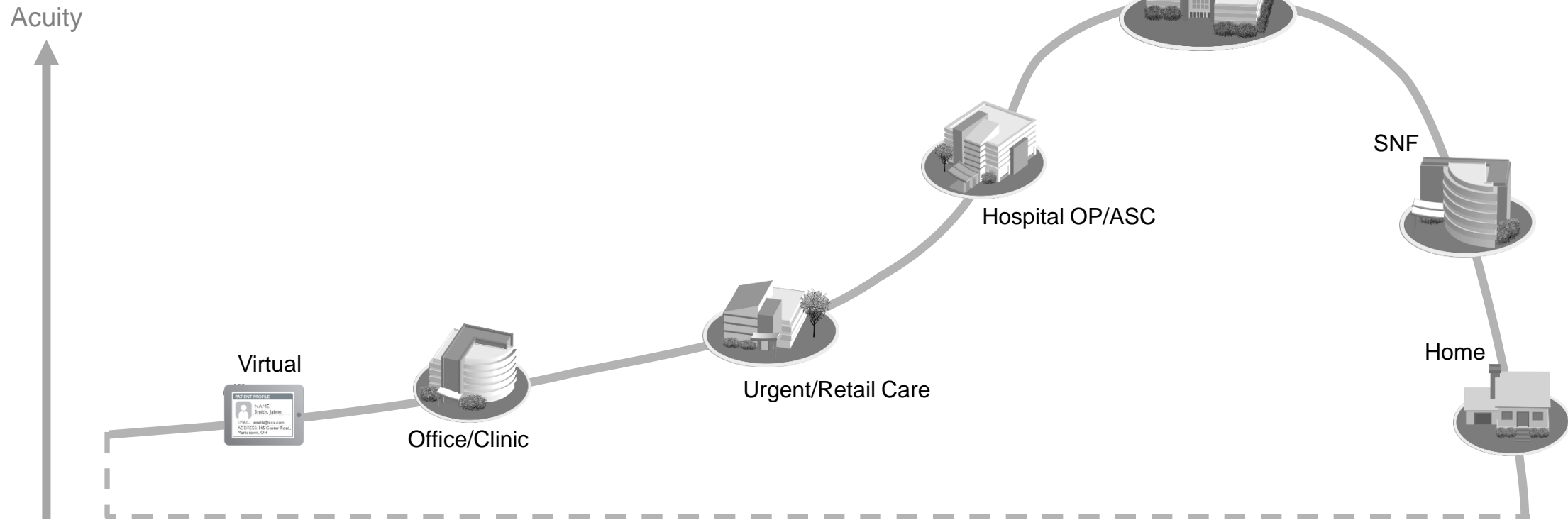


Note: Analysis excludes 0–17 age group. E&M visits defined as procedures visits—evaluation and management, established patient visits—in person, established patient visits—virtual, new patient visits—in person, new patient visits—virtual. **Sources:** Impact of Change®, 2024; HCUP National Inpatient 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.



Patients Seeking Transactional Services Prioritize Access

Musculoskeletal Injury—Lower Leg/Foot/Ankle US Market, 2024–2034

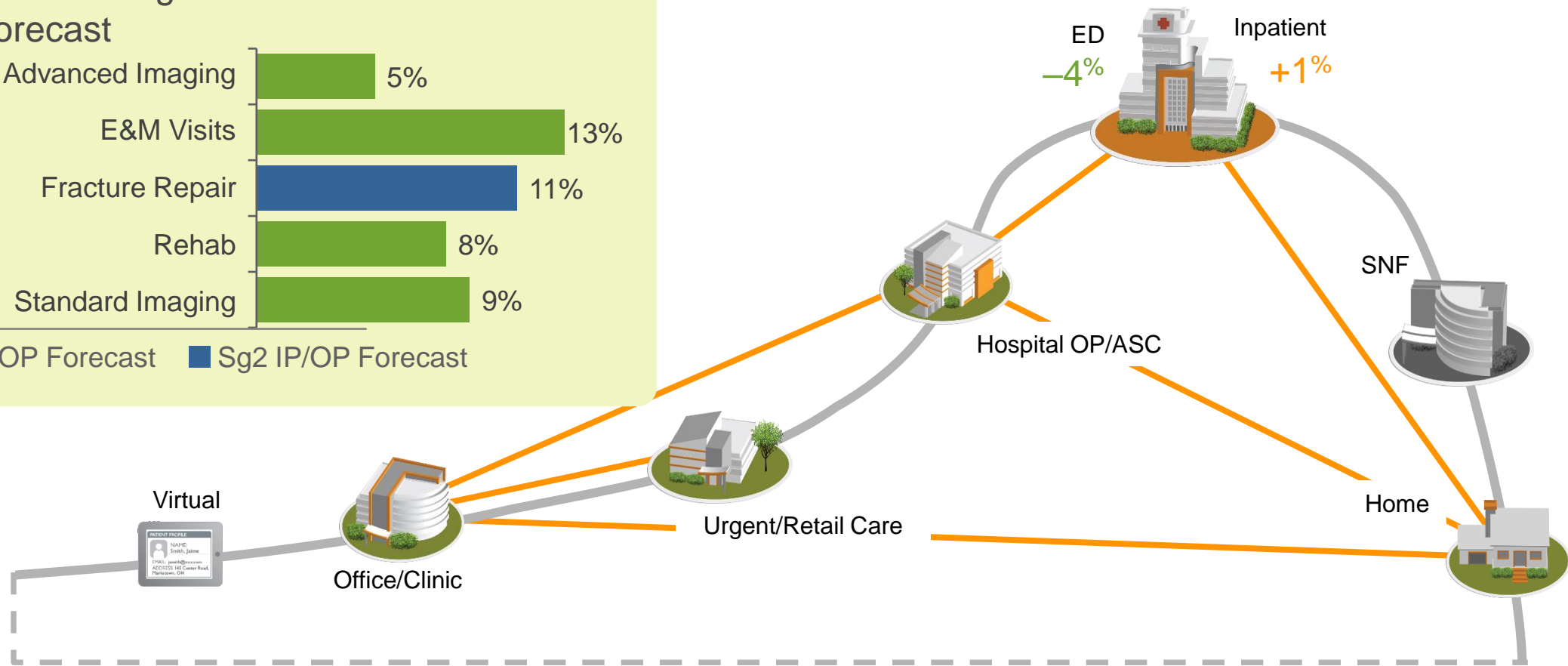
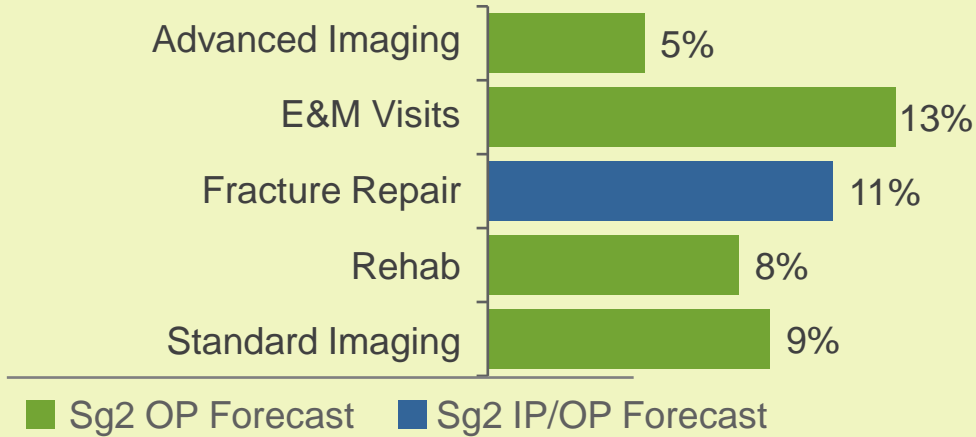


Note: Analysis excludes 0–17 age group. ED forecast defined as urgent and emergent visits. **Sources:** Impact of Change®, 2024; HCUP National Inpatient Sample (NIS), Healthcare Cost and Utilization Project (HCUP) 2019. Agency for Healthcare Research and Quality, Rockville, MD; Proprietary Sg2 All-Payer 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.



Patients Seeking Transactional Services Prioritize Access

Key MSKI Lower Leg/Foot/Ankle Procedures 10-Year Forecast



Note: Analysis excludes 0–17 age group. E&M visits defined as procedures visits—evaluation and management, established patient visits—in person, established patient visits—virtual, new patient visits—in person, new patient visits—virtual. MSKI = musculoskeletal injury. **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.

Balancing
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Breaking
Boundaries

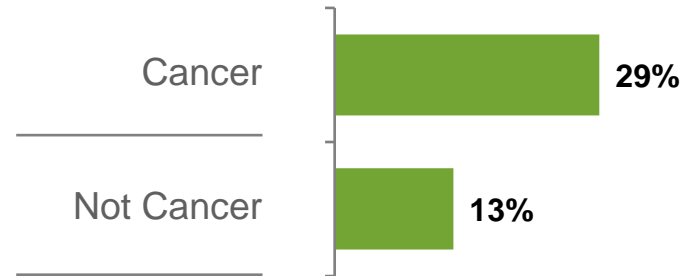


A graphic with a white background and a dark grey footer. The text 'BREAKING BOUNDARIES' is written in orange, with 'BREAKING' on the top line and 'BOUNDARIES' on the bottom line. The text is surrounded by several overlapping, semi-transparent rectangular outlines in grey and orange. The year '2018' is written in white in the dark grey footer.



Innovation Will Catalyze How Care Is Delivered Across the System of CARE

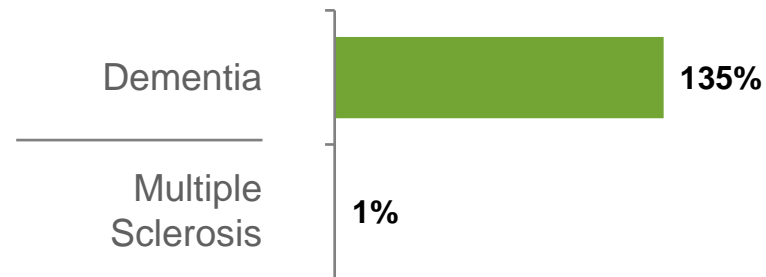
Immune Effector Cell Therapy Forecast US Market, 2024–2034



Intracardiac Catheter Ablation Forecast US Market, 2024–2034



Infusion—Chemotherapy Forecast, US Market, 2024–2034



Therapeutic advances disrupt infusion volumes for some conditions while driving growth for others.

Percutaneous Ablation and Embolization for Abnormal Gait and Movement Disorders Forecast, US Market, 2024–2034



Focused ultrasound gains traction for essential tremor.

Note: Analysis excludes 0–17 age group. **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.



Behavioral Health: Demand for Behavioral Health Creates Opportunity to Improve Population Health

IP Rising Tide of Acuity and Volume		65+
IP Discharges	+8%	+30%
ALOS	+3%	+3%
Bed Days	+12%	+34%

An increasing need for services treating comorbid conditions will challenge IP services.

Focusing on upstream care for Medicare- and MA-aged population (65+) will mitigate strong bed demand.

OP Visits and Procedures Are Growing		65+
OP Volumes Overall	+26%	+46%
E&M Visits	+17%	+42%
IOP and PHP	+38%	+56%
ECT and TMS	+60%	+83%

BH virtual health visits will see strong growth and make up a larger portion of psychotherapy visits over the next decade.

23%
In-person
psychotherapy
growth

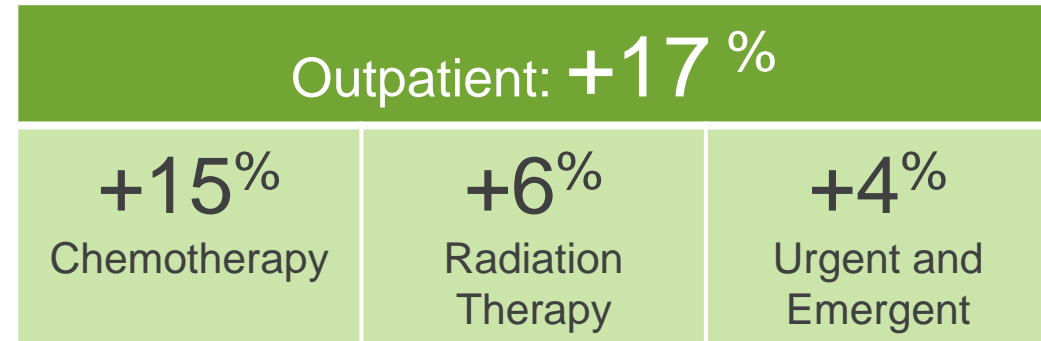
50%
of **psychotherapy** visits will
be delivered virtually in
2034 (vs **49%** in 2024).

Note: Analysis excludes 0–17 age group. Behavioral Health includes behavioral health service line and Poisonings—Commonly Abused Drugs CARE Family. E&M visits defined as procedures visits—evaluation and management, established patient visits—in person, established patient visits—virtual, new patient visits—in person, new patient visits—virtual. Percentages represent Sg2’s 10-year growth forecast. BH = behavioral health; ECT = electroconvulsive therapy; IOP = intensive outpatient program; MA = Medicare Advantage; PHP = partial hospital program; TMS = transcranial magnetic stimulation. **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.

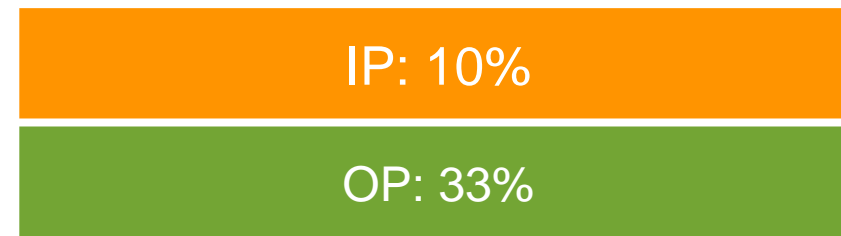
Cancer: Complex Surgical and Medical Admissions Contribute to IP Utilization; Steady Innovation in Therapeutics Drives OP Volumes

Inpatient Distribution and 10-Year Forecast by Subspecialty, US Market, Adults, 2024–2034

	% Medical vs Surgical		10-Year Forecast
	SURGICAL	MEDICAL	
Overall	52%	48%	-1%
Breast	75%	25%	-4%
Hematologic	16%	84%	0%
Lung	51%	49%	+4%



Growing utilization and shift to OP drives growth in immune effector cell therapies and stem cell transplants in hematologic cancers.

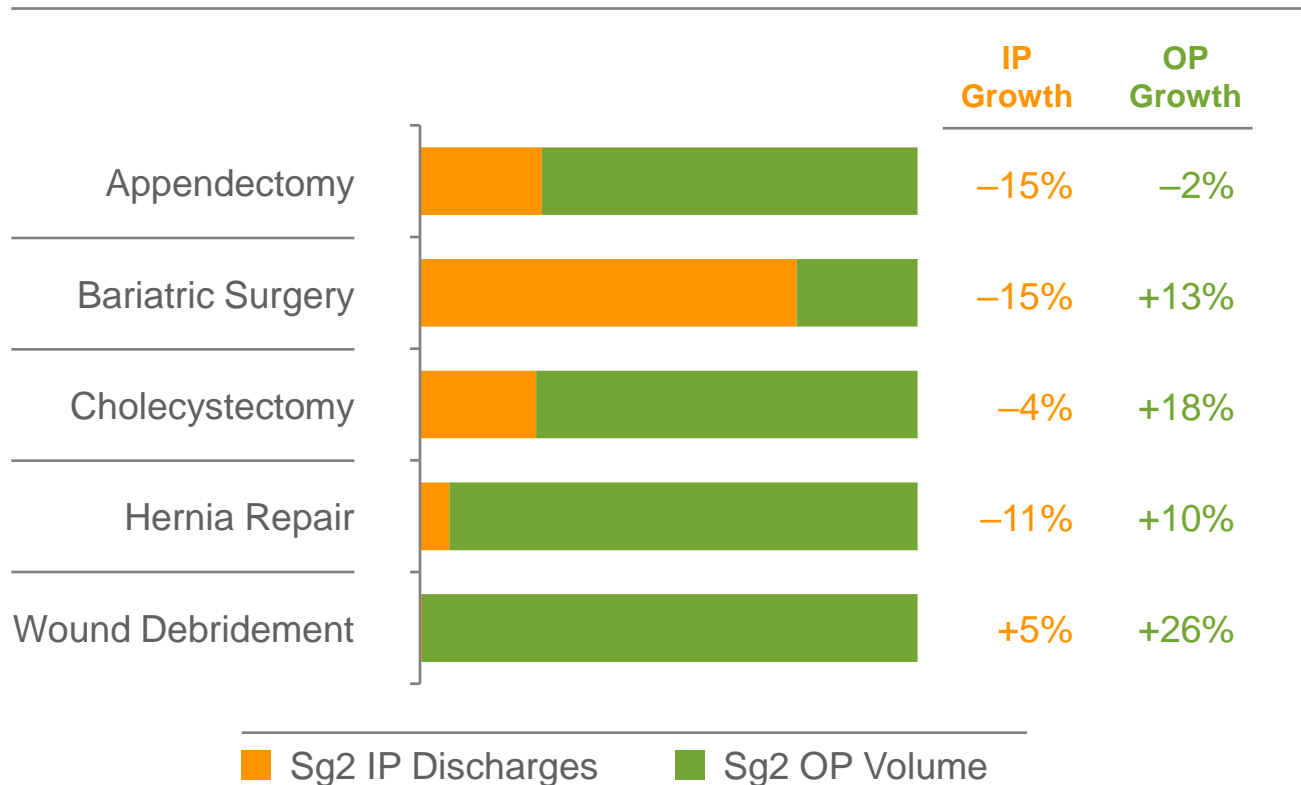


Note: Analysis excludes 0–17 age group. 0% indicates the forecast is flat (less than ±1%). **Sources:** Impact of Change®, 2024; HCUP National Inpatient Sample (NIS). Healthcare Cost and Utilization Project (HCUP) 2019. Agency for Healthcare Research and Quality, Rockville, MD; Proprietary Sg2 All-Payer 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.



Surgery: Nonoperative Treatment Options and Population Drive Trends, Acuity Determines Site-of-Care Shifts

Surgery Volume IP/OP Proportions and Forecast Select Procedures, US Market, 2024–2034



PROCEDURE HIGHLIGHTS

- ▶ **Appendectomy:** Adoption of medical management approach causes decline in both IP and OP settings.
- ▶ **Bariatric Surgery and Cholecystectomy:** Alternative approaches stifle surgery growth; IP cases are reserved for higher acuity while others continue to shift OP.
- ▶ **Hernia Repair:** OP shift is complete in most markets, and growth is driven by population.
- ▶ **Wound Debridement:** Although GLP-1 agonists will slightly reduce the need for wound debridement, a persistent rise in chronic care will drive overall growth

Note: Analysis excludes 0–17 age group. Wound debridement includes discharges for the following DRGs: 463, 464, 465, 570, 571, 572, 622, 623, 624, 901, 902, 903. **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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