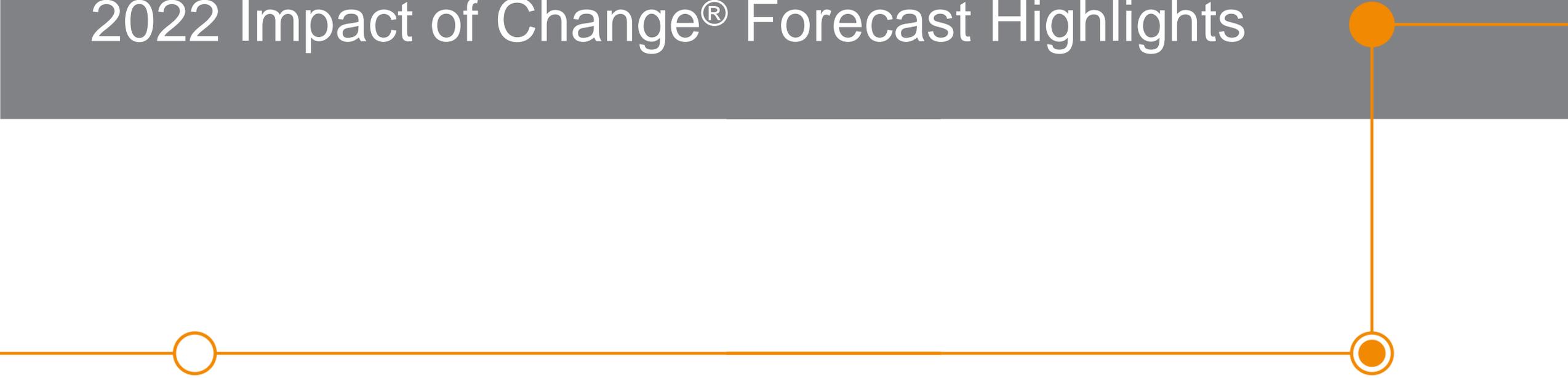


2022 Impact of Change[®] Forecast Highlights

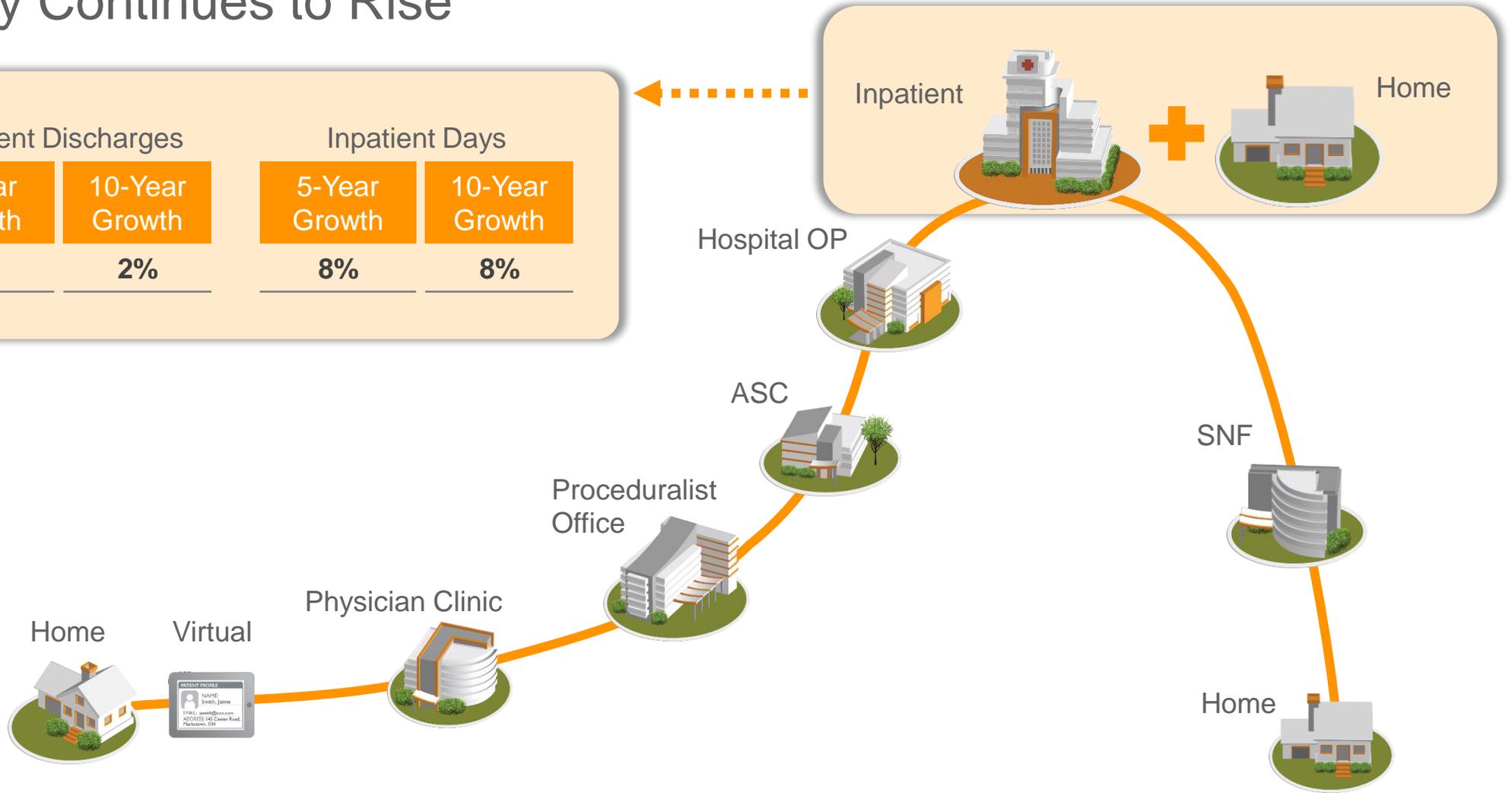
A decorative orange line with three circles. One solid orange circle is at the top right, connected to the title. A horizontal line extends from the left edge to a hollow orange circle. From this hollow circle, a vertical line goes up to another hollow orange circle, which is connected to the solid orange circle at the top right.

Key takeaways: Patient acuity rising as inpatient volume declines

- Hospital inpatient volume will recover but slow its growth over the next decade to 2% rate.
- At the same time, fueled by chronic disease, hospital inpatient days is expected to increase at 8% growth.
- Tertiary and redesigned care model patients will also grow at 17% and 8% respectively.
- Outpatient volumes will grow 16% over the next decade, outpacing estimated population growth by 3%.
- Shifts in sites of care continues with ASC growth projected at 25% by 2032, physician office and HOPD at 18% each.
- Emergency department declines will soften to -2% in the next decade as transition of low-acuity patients begins to hit a floor
- As pandemic-era protocols decline, infectious disease will grow 3% next year before declining over the decade.
- Home care will grow in several areas, including evaluation and management (19%), home hospice (13%) and home physical and occupational therapy (10%).
- Telehealth will become more defined by service line as it increases over the next decade.

Inpatient Discharges and Days Increase as Acuity Continues to Rise

Inpatient Discharges		Inpatient Days	
5-Year Growth	10-Year Growth	5-Year Growth	10-Year Growth
2%	2%	8%	8%

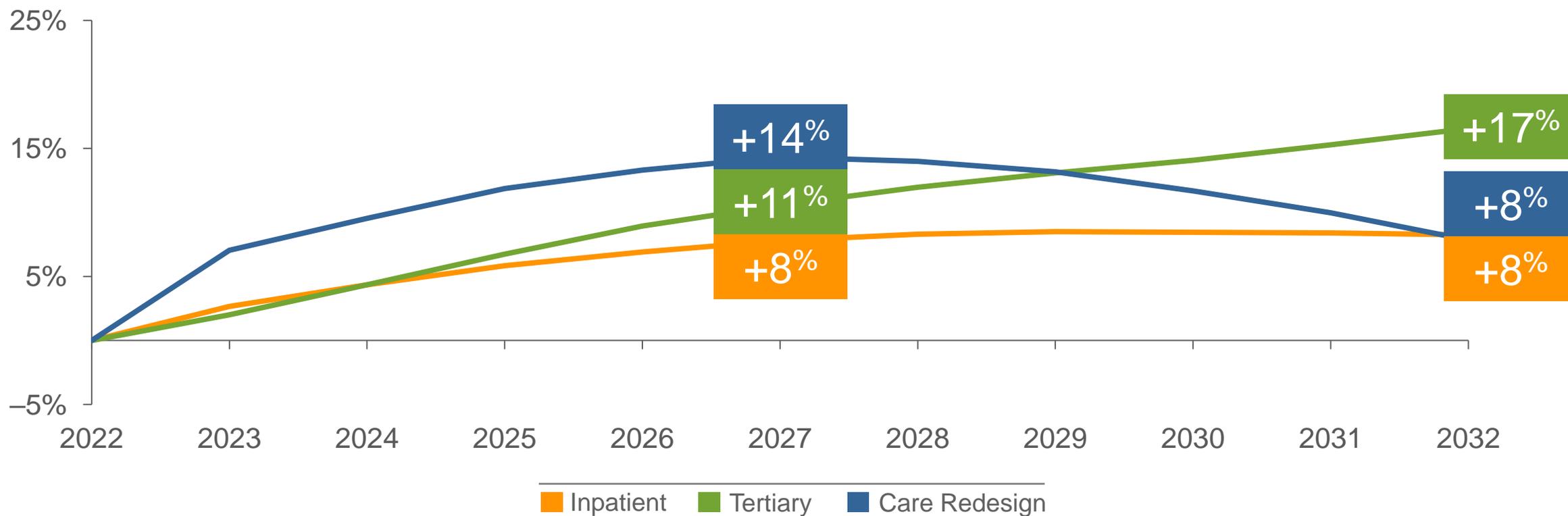


Note: Analysis excludes 0–17 age group. **Sources:** Impact of Change®, 2022; HCUP National Inpatient Sample (NIS). Healthcare Cost and Utilization Project (HCUP) 2019. Agency for Healthcare Research and Quality, Rockville, MD; Claritas Pop-Facts®, 2022; Sg2 Analysis, 2022.



Care Redesign Efforts Necessary to Dampen the Effects of Rising Acuity on Bed Days

Adult Inpatient Days Forecast US Market, 2022–2032

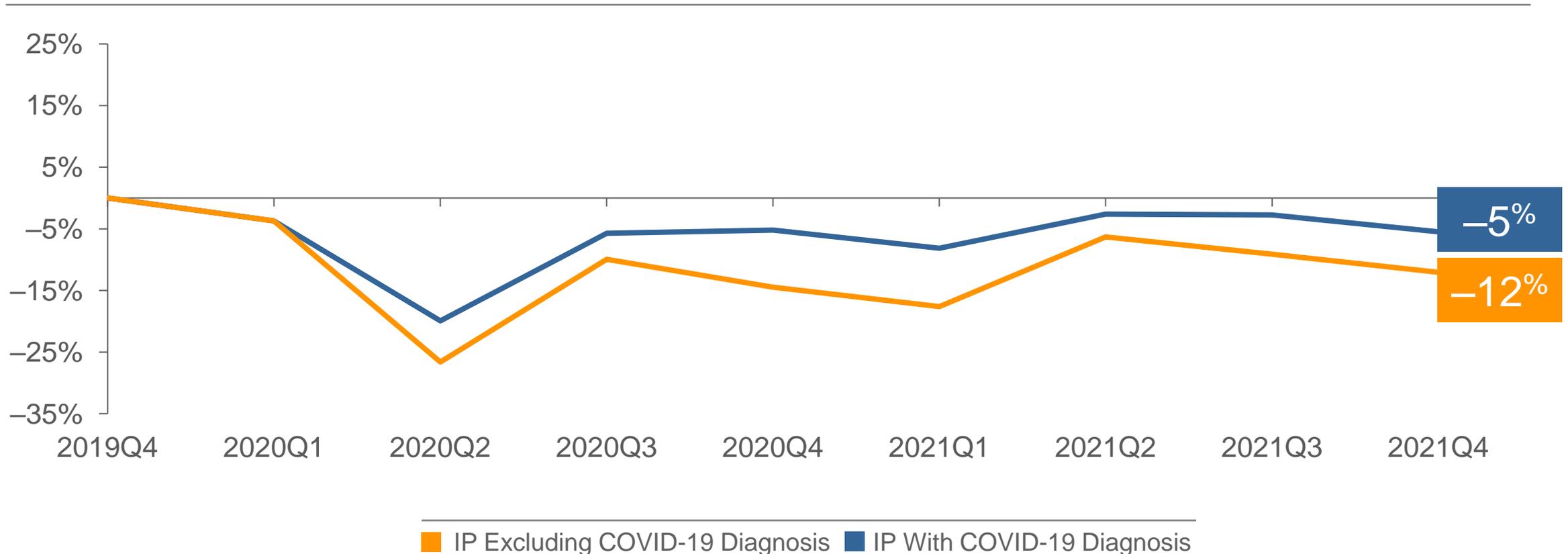


Sources: Impact of Change®, 2022; HCUP National Inpatient Sample (NIS). Healthcare Cost and Utilization Project (HCUP) 2019. Agency for Healthcare Research and Quality, Rockville, MD; Claritas Pop-Facts®, 2022; Sg2 Analysis, 2022.



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

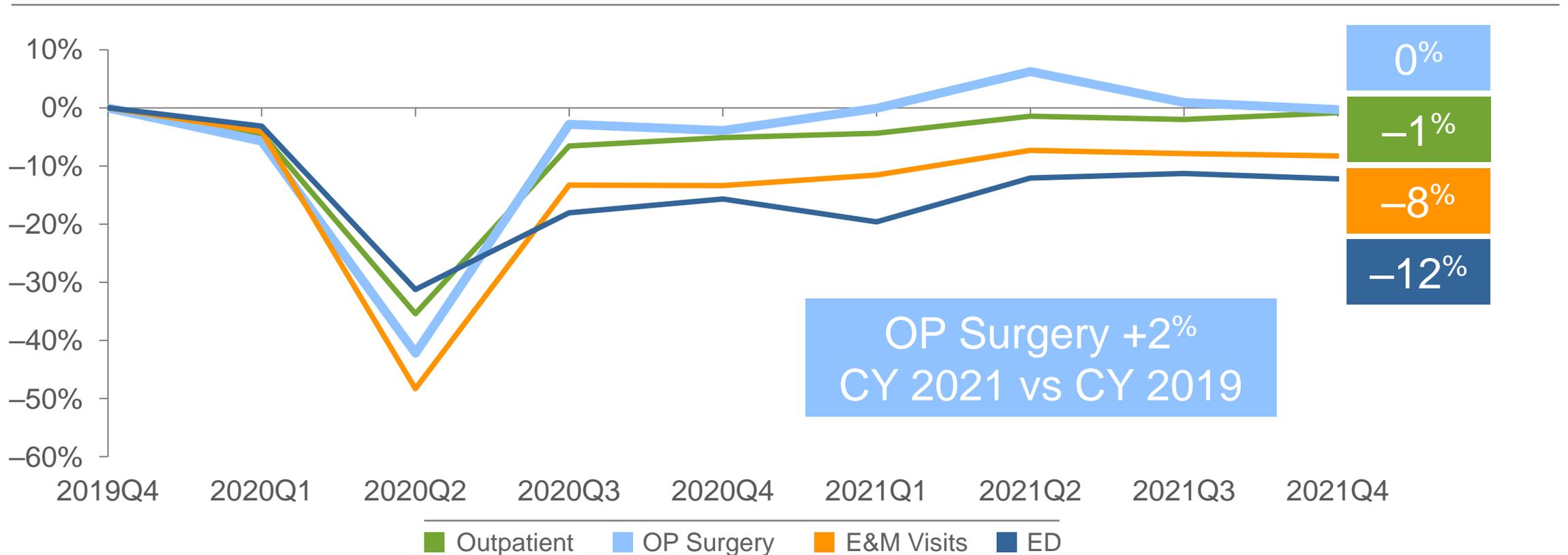


Sources: Data from the Vizient Clinical Data Base/Resource Manager™ used with permission of Vizient, Inc. All rights reserved. Q1 2019–Q4 2021; Sg2 Analysis, 2022.
Confidential and Proprietary © 2022 Sg2



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

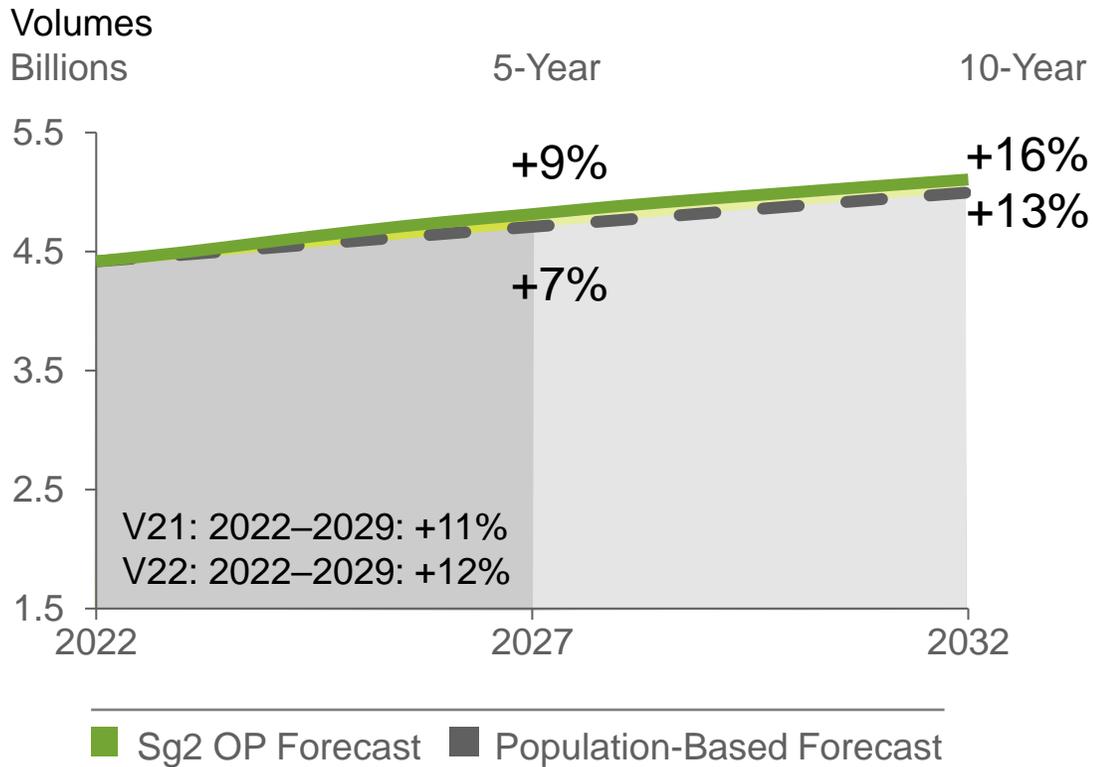


Note: Analysis includes volumes for ICD-10 diagnosis code U07.1, COVID-19 infection and virtual visits. OP surgery defined as outpatient procedures—major and endoscopy. E&M = evaluation and management.
Sources: Strata Decision Technology National Patient and Procedure Volume Tracker (2019–2021); Sg2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

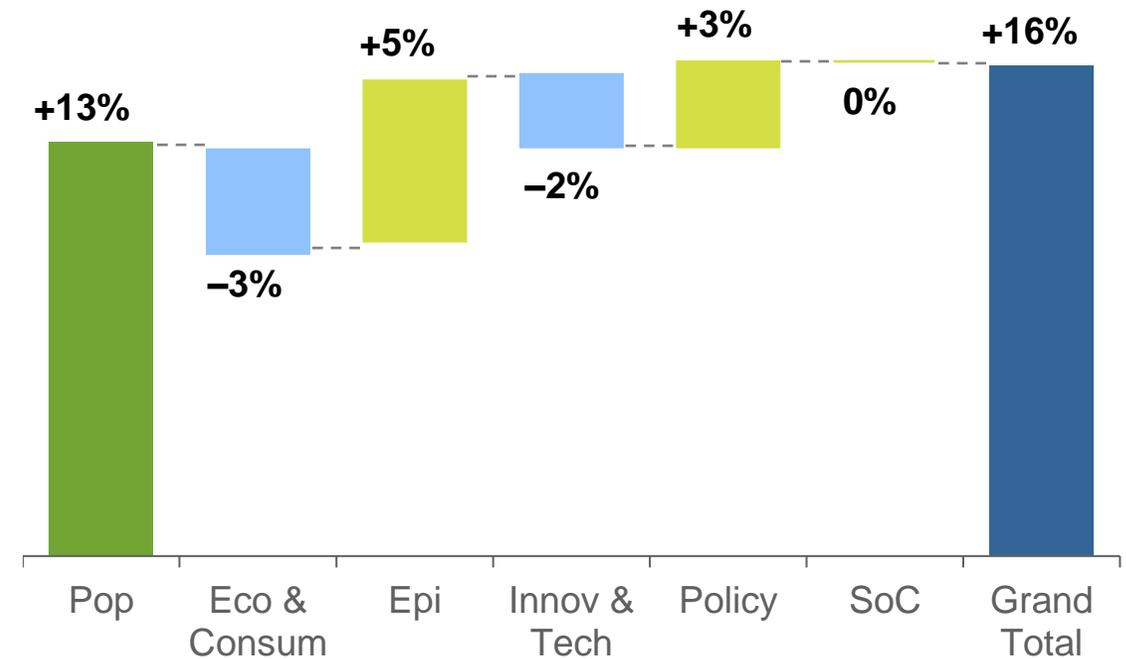


Increased Demand for Outpatient Services Driven by Epidemiological and Policy Tailwinds

Adult Outpatient Forecast Impact of Change® 2022

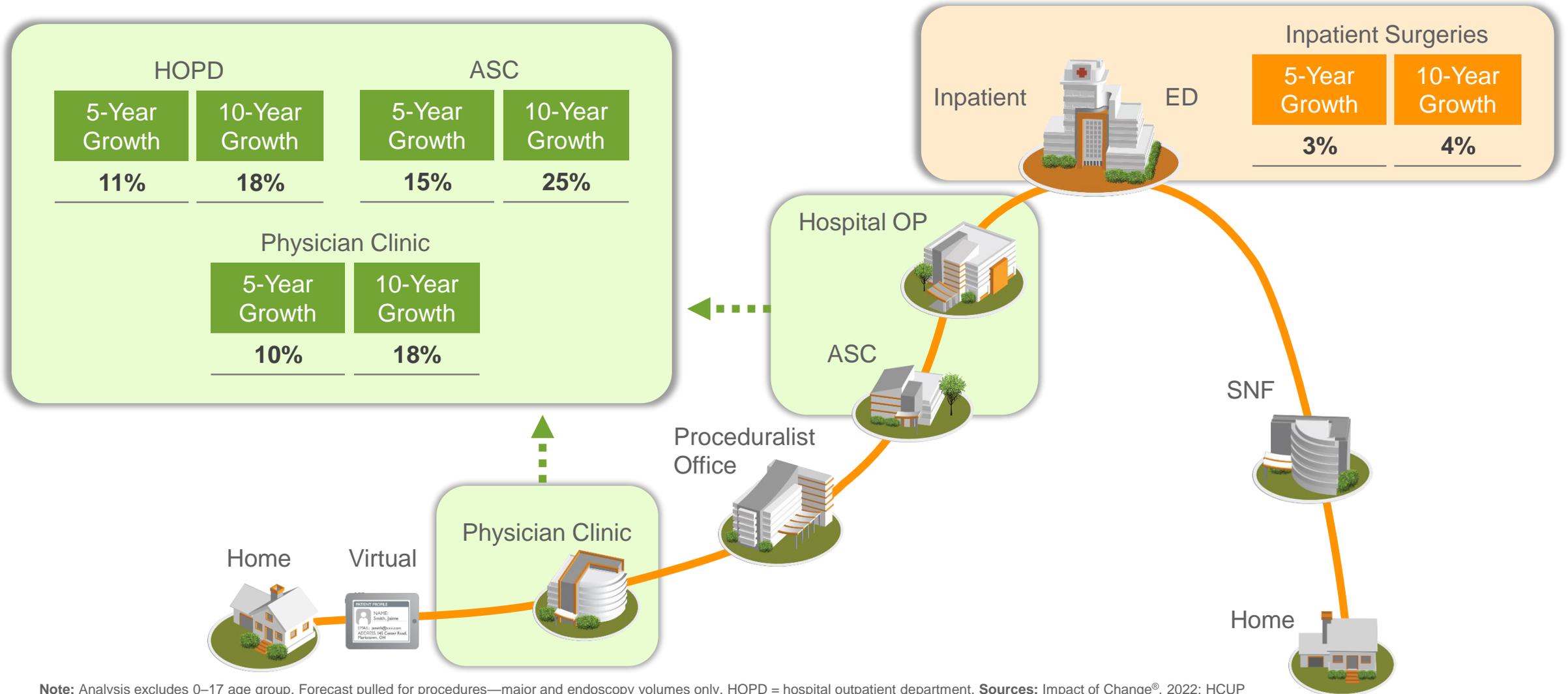


Adult Outpatient Forecast Impact Factors Impact of Change® 2022



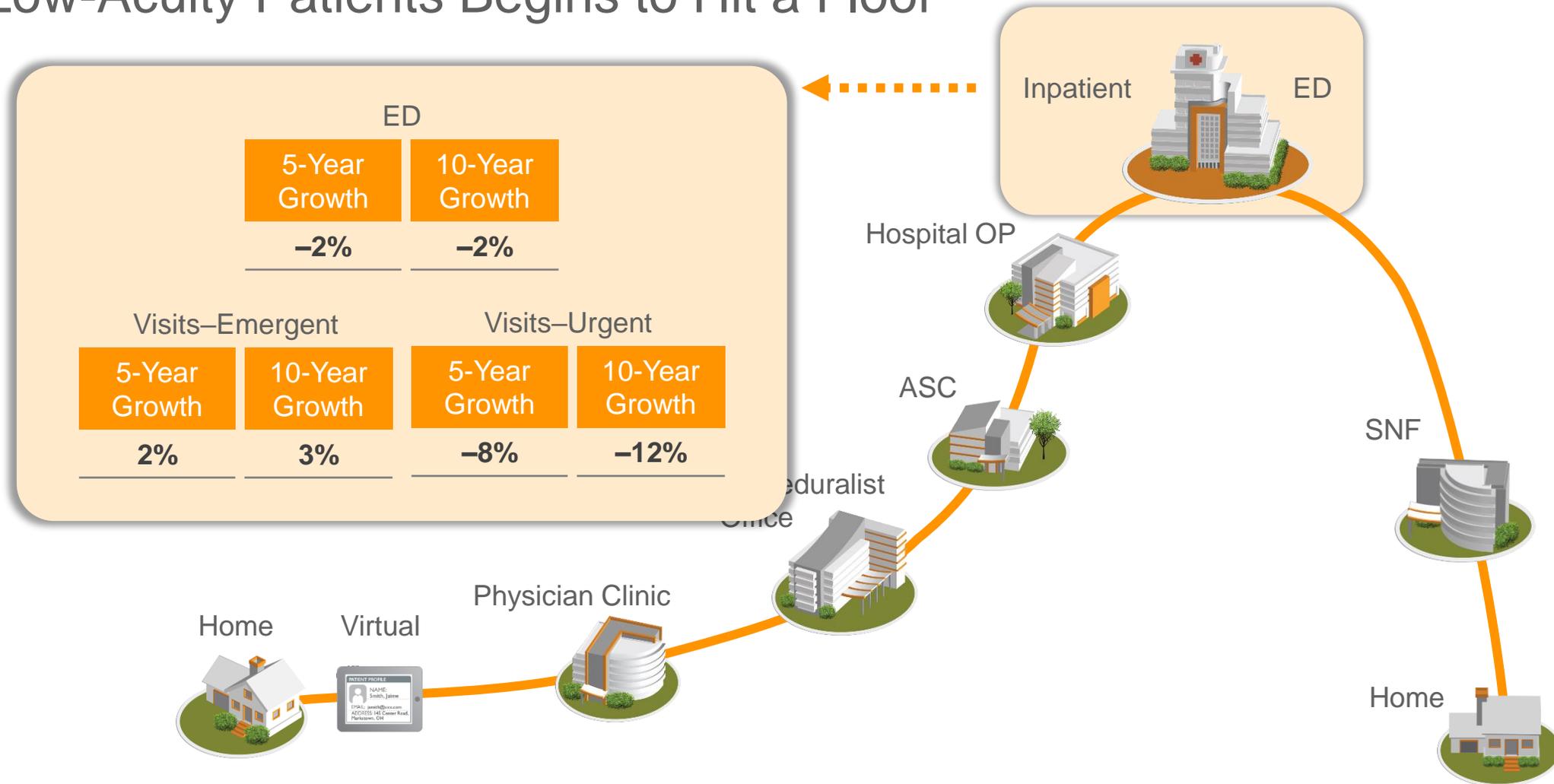
Note: Forecast excludes 0–17 age group. **Sources:** Impact of Change®, 2022; Proprietary Sg2 All-Payer Claims Data Set, 2019; The following 2019 CMS Limited Data Sets (LDS): Carrier, Denominator, Home Health Agency, Hospice, Outpatient, Skilled Nursing Facility; Claritas Pop-Facts®, 2022; Sg2 Analysis, 2022. Eco & consum = economy and consumerism; epi = epidemiology; innov & tech - innovation and technology; pop = population; SoC = System of Care.

Surgical Shift From Inpatient Setting Slows in Latter Half of the Decade



Note: Analysis excludes 0–17 age group. Forecast pulled for procedures—major and endoscopy volumes only. 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.

ED Declines Soften as Transition of Low-Acuity Patients Begins to Hit a Floor



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.

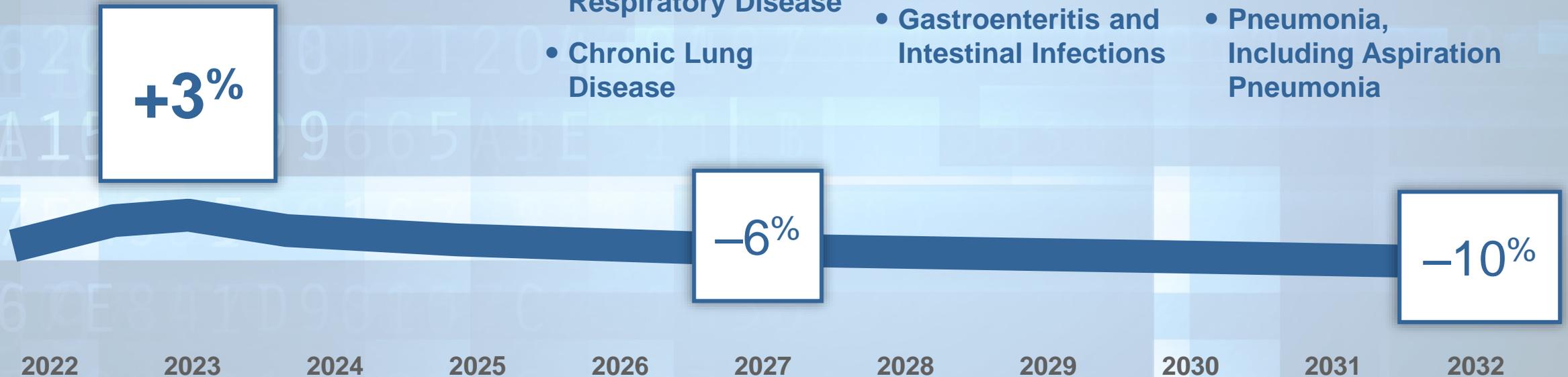
Infectious Disease ED Forecast

Adult ED Forecast, Select CARE Families

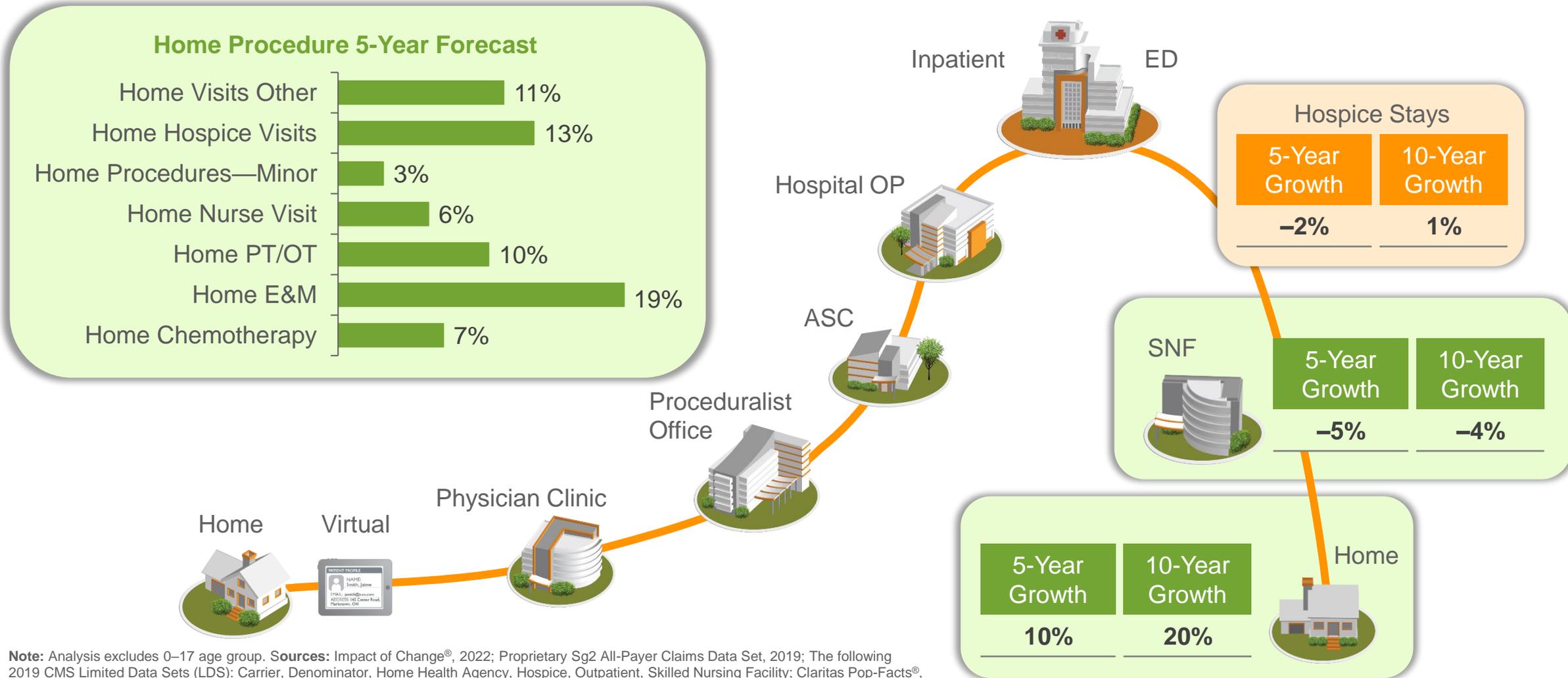
US Market, 2022–2032

Short-term bump in volumes for...

- Asthma
- Chronic Obstructive Pulmonary Disease
- Influenza
- Bronchitis and Other Upper Respiratory Disease
- Cystic Fibrosis
- Other Infectious and Parasitic Diseases
- Chronic Lung Disease
- Gastroenteritis and Intestinal Infections
- Pneumonia, Including Aspiration Pneumonia



Shift of Medical Volumes to Home Gains Speed



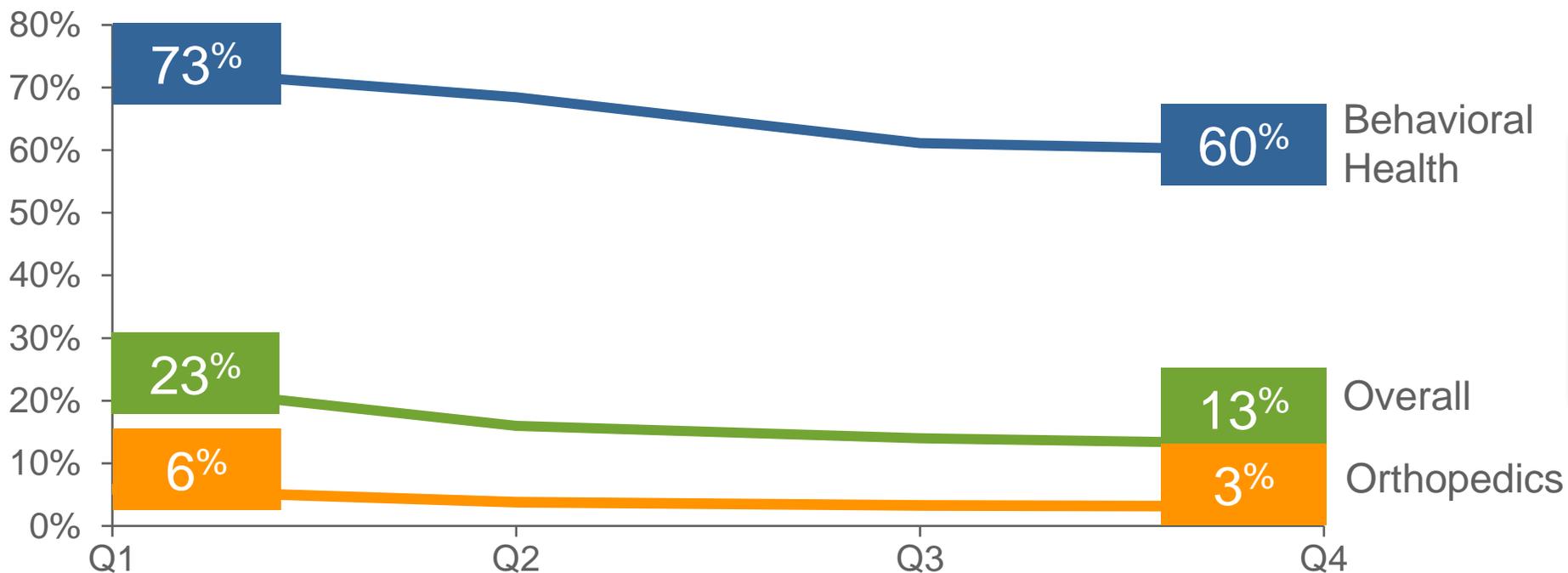
Note: Analysis excludes 0–17 age group. **Sources:** Impact of Change®, 2022; Proprietary Sg2 All-Payer Claims Data Set, 2019; The following 2019 CMS Limited Data Sets (LDS): Carrier, Denominator, Home Health Agency, Hospice, Outpatient, Skilled Nursing Facility; Claritas Pop-Facts®, 2022; Sg2 Analysis,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



Strong Path Forward for the Shift Virtual Despite Reversion to In-person Visits in 2021

Percentage of Visits Conducted via Telehealth Vizient CPSC, January 2021–December 2021

% Telehealth



27%
of E&M visits
to occur virtually
by 2032

Note: Analysis excludes 0–19 age group. CPSC = Clinical Practice Solutions Center. **Sources:** Association of American Medical Colleges-Vizient Clinical Practice Solutions Center®, 2022; 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. E&M=evaluation & management.

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[®], 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.

Sg2, a Vizient company, is the health care industry's premier authority on health care trends, insights and market analytics.

Our analytics and expertise help hospitals and health systems achieve sustainable growth and ensure ongoing market relevance through the development of an effective System of CARE.



Sg2.com
847.779.5300