



The State of the Healthcare Industry Heading Into 2024

How to prepare for the future of longstanding paradigm shifts

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Vice President, Advisory Board

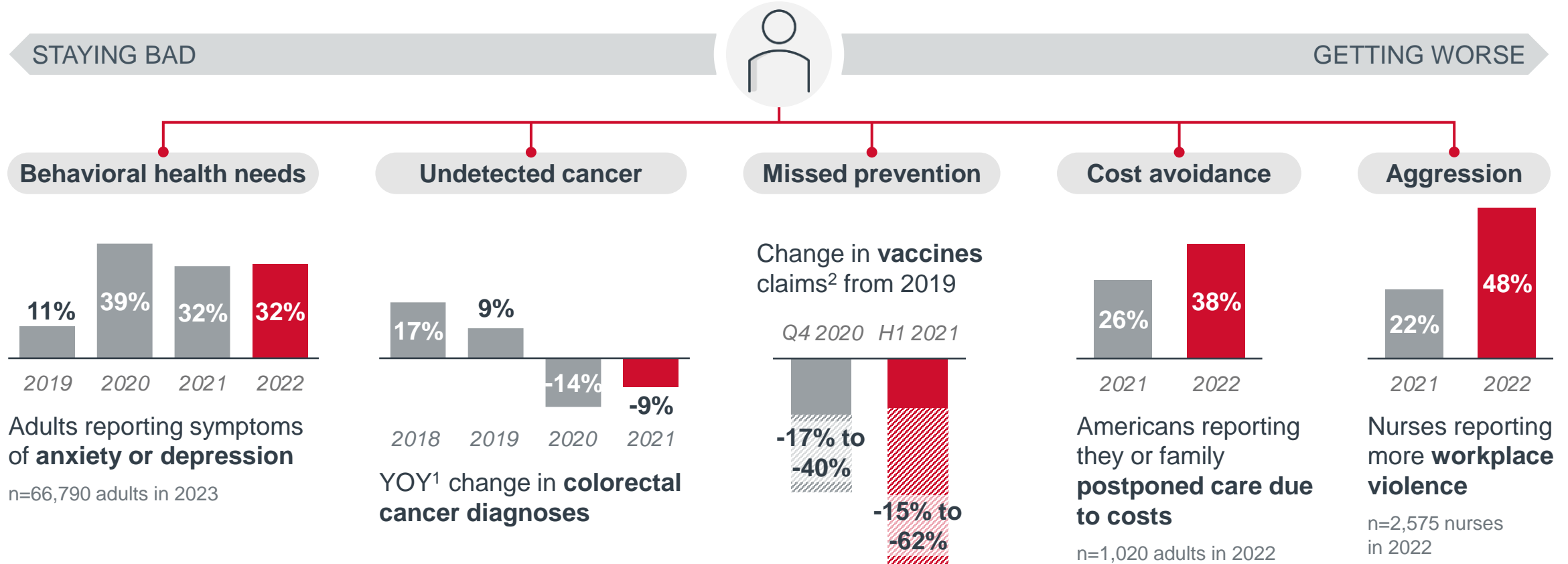
Seismic changes happening below the surface

Your Key Takeaways

1. **Instability everywhere you look, and we're in the crosshairs.** Poor performance across patient health, quality, spending, and impending disruptors mean health leaders are anxious about the pressures ahead.
2. **Ecosystems—not hospitals—are now the pillars of American healthcare.** But to be successful long-term, these ecosystems must balance national influence with local feel. Big or small, the stakeholders that are the best *partners* stand to win in this new paradigm.
3. **Technology is now a member of the care team.** Workforce challenges persist as AI booms. The combination of these two forces is already redefining what a care team is. A tech-enabled care team requires mastering the essentials and resisting both entrenched thinking and magical thinking at the same time.
4. **Welcome to the age of drugs.** Procedures have been the linchpin of treatment—until now. We are entering a new era of care defined by high and ultra-high cost drugs. These breakthrough treatments represent miracles for patients, but potential disaster for financing models.

The patients are not alright

Characteristics of the patient emerging from the pandemic era



1. Year-over-year.

2. As a percent of claims in corresponding month of 2019 for recommended vaccines.

Source: "Declines in Routine Adult and Teen Vaccinations Continued in 2021," Avalere Health, January 2022; "Updated Analysis Finds Sustained Drop in Routine Vaccines Through 2020," Avalere Health, June 2021; "Record High in U.S. Put Off Medical Care Due to Cost in 2022," Gallup, January 2023; "Adults Reporting Symptoms of Anxiety or Depressive Disorder During COVID-19 Pandemic," KFF, 2023; "National nurse survey reveals significant increases in unsafe staffing, workplace violence, and moral distress," National Nurses United, April 2022; "Declining Cancer Screenings Suggest Increased Burden of Disease," Trilliant Health, April 2022.

A poor report card for our overall performance

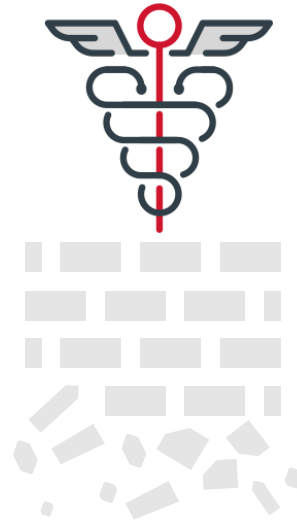
Declining quality outlook

19%
2021 to 2022
Increase in **adverse events** resulting in permanent/severe harm or death

38%
2020 to 2021
Increase in **maternal mortality** deaths per 100,000 live births

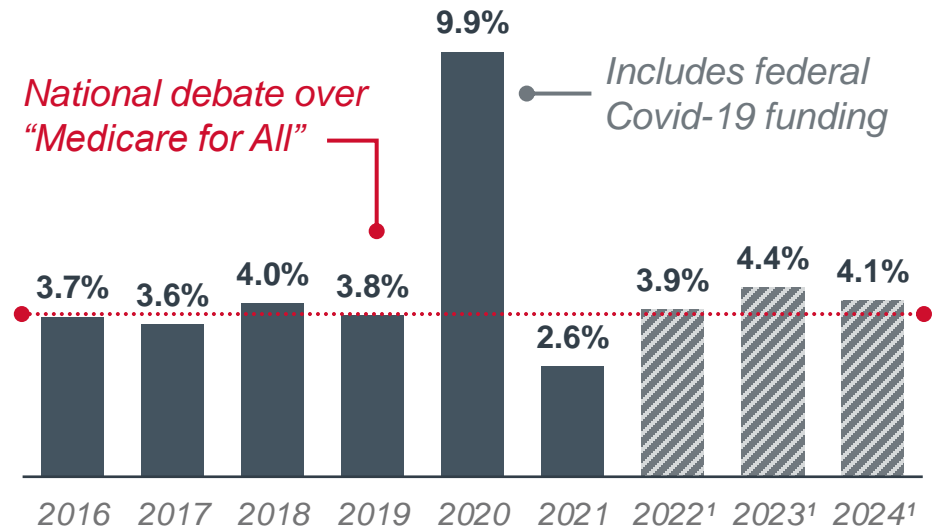
11PT
2021 to 2022
Increase in percent of nurses who are not satisfied with the **quality of care** they can provide in their current job
n=18,226 RNs in January 2023

73%
Adults believe the healthcare system is **not meeting their needs**
n=2,159 adults in March 2023



Looming spending pressures

Annual growth in health expenditures per capita



1. Projected.

Source: AAPA survey "The Patient Experience: Perspectives on Today's Healthcare," AAPA, April 2023; "The Pandemic's Consequences: Survey of Registered Nurses," AMN, January 2023; "Maternal Mortality Rates in the United States, 2021," CDC, 2023; "National Health Expenditure Projections," Health Affairs, June 2023; "Americans Sour on U.S. Healthcare Quality," Gallup, January 2023; "Sentinel Event Data 2022 Annual Review," The Joint Commission, 2023.

Industry snapshot: *A moment of instability*

The industry has emerged from a shared catastrophe into a time of adversarial instability. Poor patient health, declining clinical quality, and higher overall health spending form a concerning foundation that will reshape the organization of healthcare and the role played by incumbents and disruptors alike.

Purchaser and payment policy dynamics at a glance



**Medicaid coverage
whiplash**

7.4M

*Medicaid terminations
completed as of
September 2023*



**Medicare Advantage
business model squeeze**

\$4.7B

*Estimated reduction in
Medicare Advantage plan
annual revenues from 1.12%
effective rate cut for 2024*



**Pharmaceutical business
regulatory overhaul**

\$98.5B

*Expected Medicare savings
from drug price negotiation,
over the next ten years*



**Employer benefits
fiduciary pressure**

8.5%

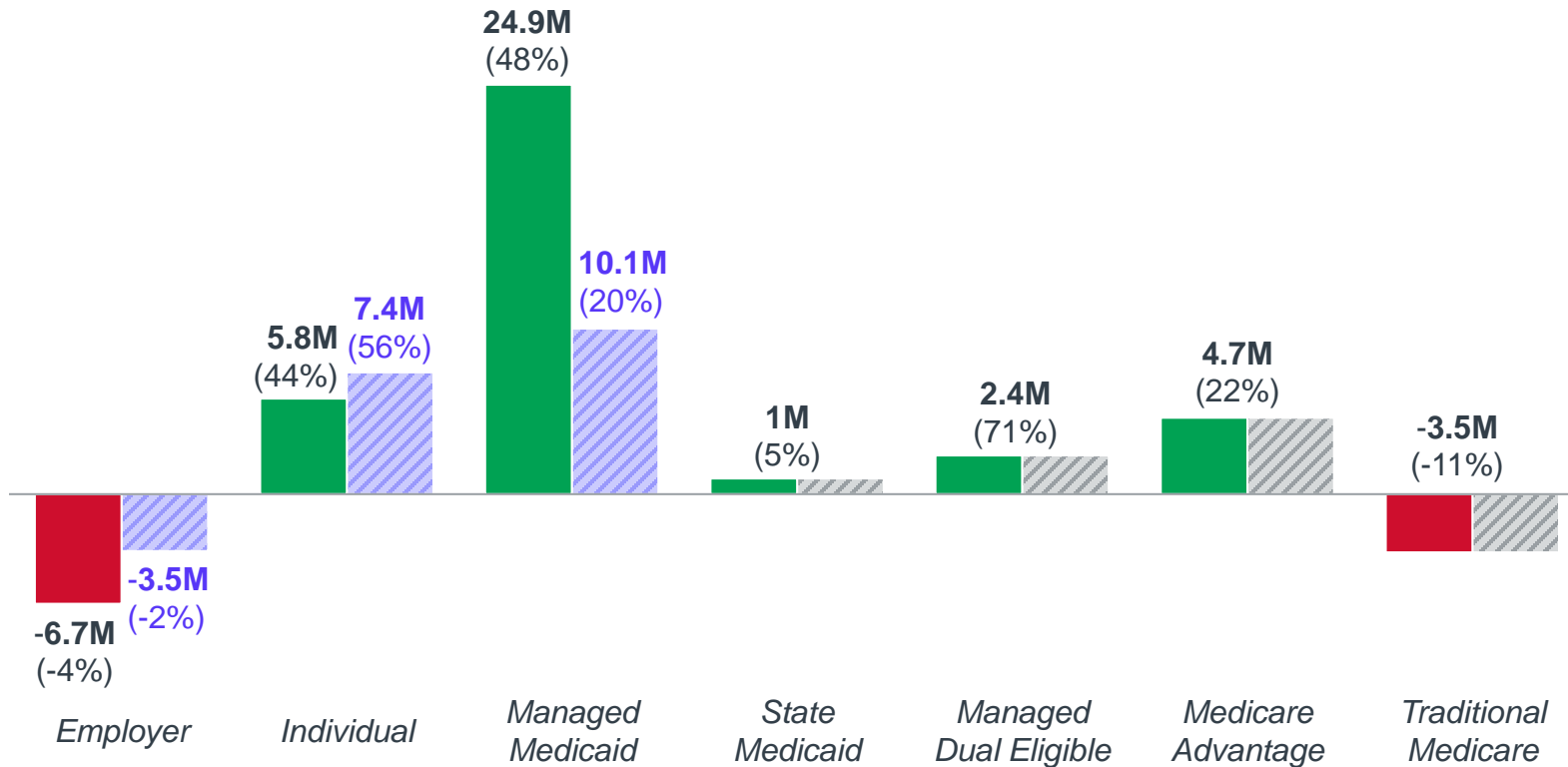
*Projected increases in
health insurance costs for
employers for 2024 benefits*

Source: "Medicaid Enrollment and Unwinding Tracker," KFF, September 2023; Isaacson G et al, "The future of Medicare Advantage," McKinsey & Company, July 2023; Cubanski J et al "Explaining the Prescription Drug Provisions in the Inflation Reduction Act," KFF, January 2023; Leo L and Mandowara K; "US employers to see biggest healthcare cost jump in a decade in 2024," Reuters, September 2023.

Coverage whiplash ahead, but not fully to pre-Covid mix

Insurance segment growth changes, historically and projected

Total change¹ (and percentage change) in enrollment, 2019 Q4 to 2023 Q1



Projected 2024 enrollment shifts after Medicaid policy changes unfold

Estimates include:

- Losses from **redeterminations**
- Shifts to **employer and individual** coverage after losing Medicaid eligibility
- Medicaid **expansion** in North Carolina and South Dakota

1. Shaded bars represent estimated shifts accounting for Medicaid eligibility changes but not population growth or economic shifts. Assumes all eligibility changes apply to managed Medicaid only.

Source: AIS Directory of Health Plans, 2019 Q4 & 2023 Q1; "NCDHHS Releases Statement on Medicaid Expansion," NCDHHS, March 2023; Norris L, "Medicaid eligibility and enrollment in South Dakota," HealthInsurance.org, March 2023; CBO, "Health Insurance For People Younger Than Age 65: Expiration Of Temporary Policies Projected To Reshuffle Coverage, 2023-33," Health Affairs, May 2023.

MA business model is still lucrative, but getting harder

In 2023, Corporate players double down on MA...

Medicare Advantage (MA) enrollment share of Medicare **51%**

2023

...despite increased scrutiny on MA business model

\$473B Estimated payments¹ to plans

SAMPLE CORPORATE MOVES

UnitedHealthGroup

- Acquires **LHC Group** for **\$5.4B**
- Acquires **Amedisys** for **\$3.3B**

CVS/Aetna

- Acquires **Oak Street Health** for **\$10.6B**

Walmart

- Adds **28** health clinics, offers co-branded **UHC** MA plans
- Considering acquisition of **ChenMed** (rumored)

Humana

- Announces exit from employer insurance by **2024**

SAMPLE PAYMENT CHANGES

Stars ratings

- CMS reduces payment rates by **1.24%** for 2024
- Increase in customer experience weighting

2024 Rate Announcement

- **1.12%** effective rate decrease represents **\$4.7B** loss in revenues
- Risk adjustment changes bring MA rates down by **2.16%** on average to align with FFS
- Health equity index replace current bonus factor for plans

RADV Final Rule

- CMS can recoup extrapolated improper payments, expected to be **\$4.7B** from 2023-2032

Part D

- Payers will lose over **\$11B** in annual revenues from eliminated DIR³ fees
- Government share of catastrophic coverage drops from 80% to **20%**

Projected MA enrollment share of Medicare **61%**

2031

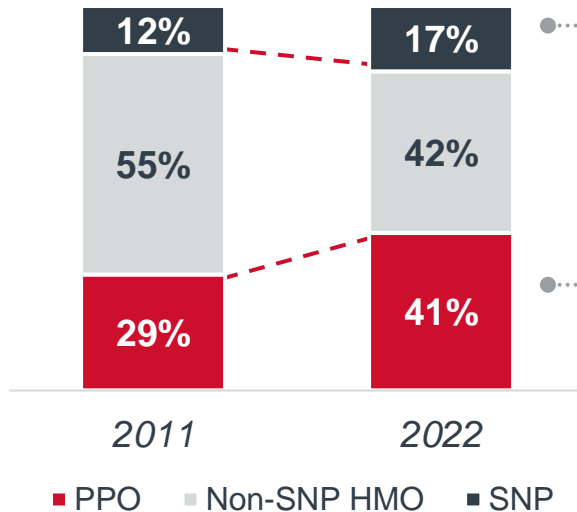
\$943B Projected payments¹ to plans

1. For Medicare Part A and Part B benefits.
2. Risk Adjustment Data Validation.
3. Direct and indirect remuneration (DIR) fees.

Source: See additional sources slide.

Margin management harder as MA products diversify

Medicare Advantage (MA) enrollment in product types
Percent of total MA enrollment



Relative to general HMO plans...

Special Needs Plans (SNPs) have higher margins, but harder to execute efficiently

- Target patients with most challenging healthcare needs, requires significant administrative resources
- Higher margins for D-SNPs compared to average MA plan margin

PPO plans are easier to sell, but harder to manage members

- Target patients who want physician choice
- Physicians less likely to take on risk



DATA SPOTLIGHT

23%

Of beneficiaries switched plans within less than one year of joining¹

Predictions for what's next

1

Control specialist spend
Attempts to financially align with specialists

2

Shifts in plan design
Enticements to shift enrollees into managed care

3

Continued asset consolidation
Acquisitions to support MA care delivery

1. Advisory Board analysis of Optum's de-identified Clinformatics® Data Mart Database (2007-2022).

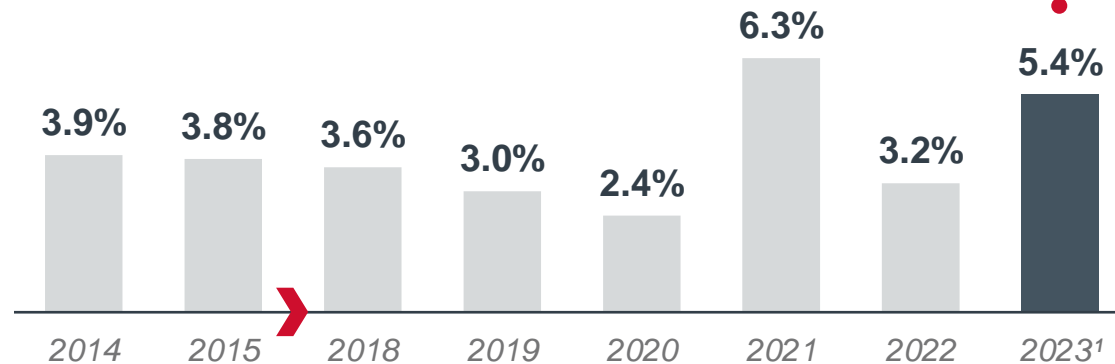
Source: "Medicare Payment Policy," MedPac, 2012 – 2023; The Optum de-identified Clinformatics® Data Mart Database (2007 — 2022).

Employers feel cost pressure and face new rules

Annual change in total health benefit cost per employee

Factors driving the cost landscape for employers:

- **Inflation:** Wage growth and looming network rate increases
- **Hospital consolidation:** Fewer options and higher spend
- **High-cost claimants:** Million-dollar claims are increasing, leading to a rise in stop-loss insurance costs
- **Innovative drugs:** New treatments needing coverage decisions



New developments may prompt employer action



Price benchmarking data

Growing number of vendors ingest newly-disclosed payer and provider rate transparency data



Expanded fiduciary obligations

With ERISA² updates, self-funded employers risk fines or class action suits if they do not ensure that they:

- Pay only “reasonable” compensation
- Receive disclosures of indirect compensation arrangements
- Can access deidentified encounters, claims, and provider data
- Report data on drug spending, rebates, and utilization

RECENT ERISA CASES DISPUTE FIDUCIARY ROLE

- **Mass. Laborers’ Fund v BCBSMA:** BCBSMA found not liable
- **Bricklayers v Elevance:** Not yet decided
- **Peters v Aetna and OptumHealth:** Lawsuit reintroduced

1. Estimated.


2. As modified by the Consolidated Appropriations Act, 2021.

Source: “Employment Cost Index,” BLS, 2023; “The gathering storm: The threat to employee healthcare benefits,” McKinsey, October 2022; “National Survey of Employer-Sponsored Health Plans,” Mercer, 2022; “Nominal Wage Tracker,” Economic Policy Institute, 2023; “Aetna, Optum to face revived ‘dummy code’ lawsuit,” Modern Healthcare, June 2023; “Unions suing Elevance Health for allegedly restricting access to claims data,” Becker’s, December 2022; “Blue Cross Blue Shield of Massachusetts prevails in First Circuit on ERISA claims brought by Massachusetts Laborers’ Health and Welfare Fund,” Jones Day, April 2023.

Drugs poised to eclipse the strategic focus on procedures

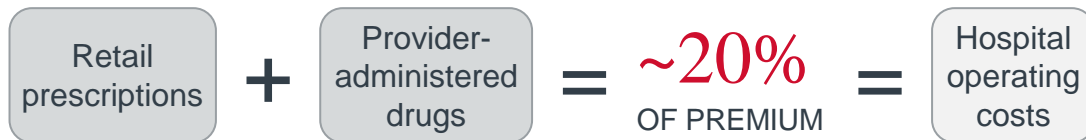


Innovation activity targets rare, untreated conditions

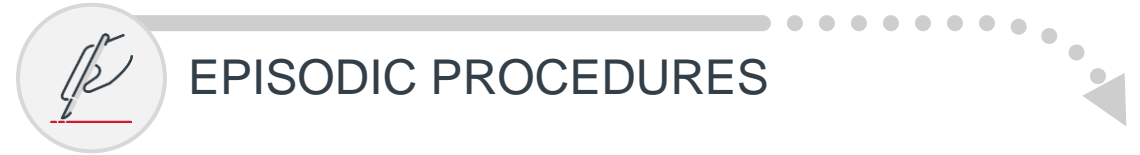
 **54-74**
New cell and gene therapies
expected in the market **by 2030**

Drug spend catching up to hospital operating costs

One provider-sponsored plan's experience with drug costs in 2022:



1. Hospital outpatient department.



Innovation activity enables lower-acuity care

Projected overall procedure utilization change
2021 to 2026

-2.8%	+7.3%
Inpatient	Outpatient

Transparency data and outpatient shift pressure rates

95% 2023	Commercially-insured lives represented by payer transparency data, for all sites	69% 2019	Average price for a procedure in an ASC relative to the same in a HOPD ¹
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Source: "Shifting Common Outpatient Procedures to ASCs "Can Save Consumers More than \$680 per Procedure," UHG, September 2021; "Impact Report - Q1," Turquoise Health, March 2023; "Toolkit Overview: Pipeline," Tufts, December 2020; Advisory Board Market Scenario Planner

Weight management drugs driving industry frenzy



Promising clinical effects

15-20%

Average **total body weight loss** on semaglutide¹

20

Cardiovascular outcome measures included in SELECT trial



Rising patient demand

111%

Increase in Ozempic **prescriptions** from February 2022 to February 2023

44%

Of surveyed people with obesity would **change jobs to gain coverage** for obesity treatment



Financial implications

\$13,618

Average **annual per capita price** of Wegovy (semaglutide)

142M

Eligible US patient population for semaglutide for weight loss according to FDA criteria²

Variable coverage in 2023



Direct-to-consumer companies Ro and WeightWatchers enter weight loss medication space



51% of surveyed **health plans** do not cover weight loss medications³



Medicaid covers select weight loss drugs in **16** states



Medicare Advantage can cover weight management drugs as an additional benefit,⁴ but not common



Medicare Modernization Act of 2003 prohibits Part D coverage of weight management drugs



1. Medication indicated for treatment of type 2 diabetes and obesity.
2. BMI >30 or BMI >27 with a pre-existing condition such as diabetes.

3. 31% are considering adding coverage in the next 1-2 years.
4. Through flexible benefits and formularies that meet CMS requirements.

See additional sources slide for sources.

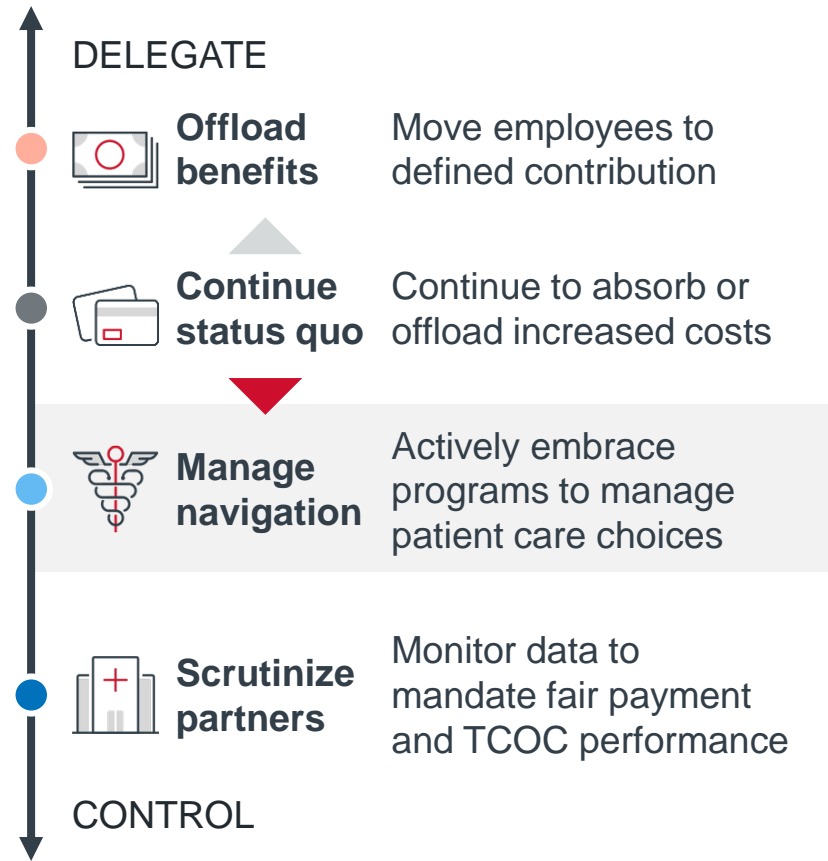
Drug categories favor different players and capabilities

Array of delivery and competitive considerations for sample emerging high-cost drugs

EXAMPLES	Capabilities needed for delivery	Business dynamics to watch	
GLP-1 agonists for weight loss	<ul style="list-style-type: none"> • Treatment planning: Prescribing support to help providers navigate demand • Care management: Coordination of behavioral and nutritional support; weight management support if patient discontinues drug 	B2C digital health vendors such as Ro and Sequence advertise coaching and ability to work with consumer's insurance for coverage	 <p>Non-traditional players circle business opportunities</p>
Leqembi (lecanemab) for Alzheimer's	<ul style="list-style-type: none"> • Care monitoring: Coordination of regular MRIs to monitor for brain swelling • Data collection: Infrastructure to collect data on drug's performance to obtain Medicare reimbursement 	Growth in private equity investment in infusion centers potentially indicative of increased competition for drug administration	
CAR T-cell therapies for blood disorders	<ul style="list-style-type: none"> • Specialized care: Acute care to manage risks and complications • Referral management: Referral pathways into specialized cancer centers 	Specialized cancer centers needed to manage complications and often serve as clinical trial sites	 <p>Scale of complexity and cost requires specialized access management</p>
Hemgenix gene therapy for hemophilia B	<ul style="list-style-type: none"> • Care management: Coordination of weekly follow-up to monitor liver enzymes and factor IX activity • Specialized care: Designation as Hemgenix administration center 	Manufacturer, payer, and provider will need to designate entity to gather data to execute outcomes-based contracts offered by manufacturer	

Managed navigation strategies offer a compromise

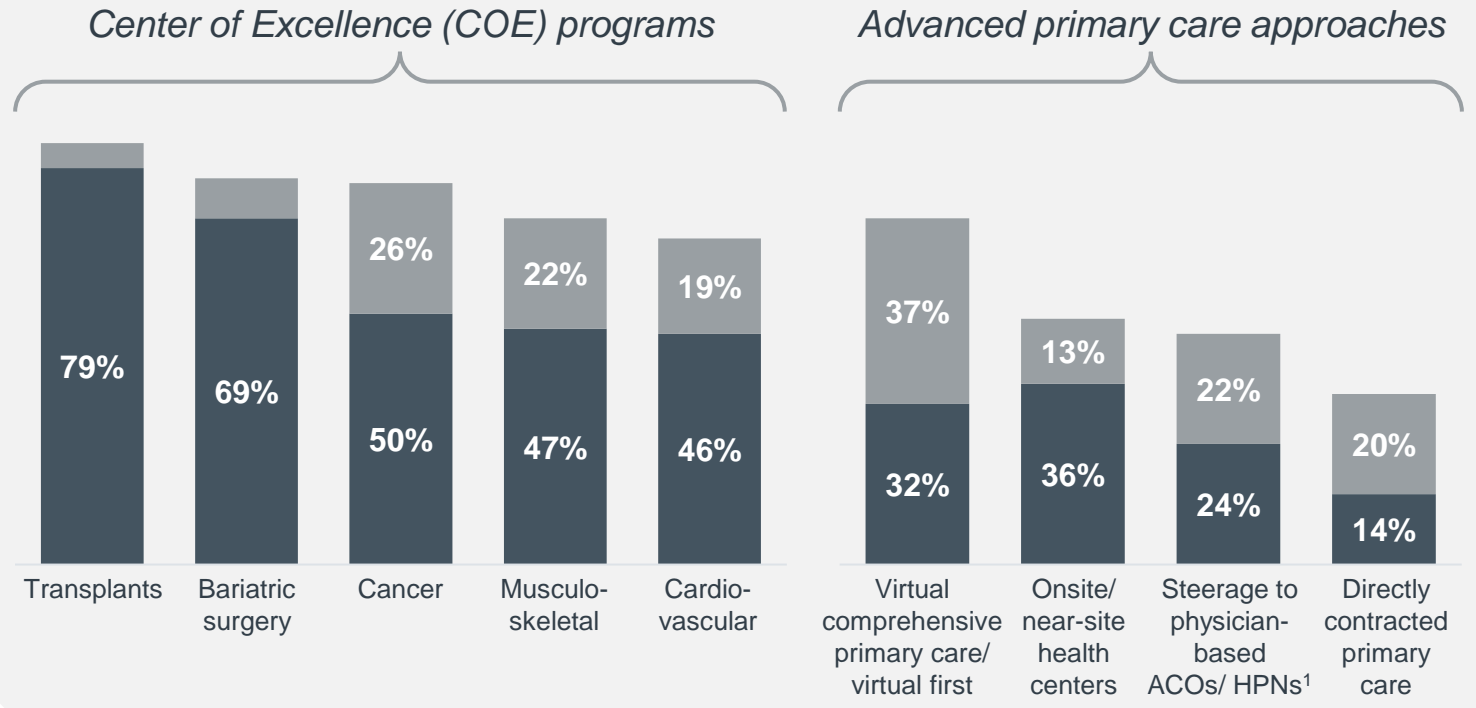
Possible employer approaches to benefits strategy



Large employer benefit strategy offerings

n=135 large employers, covering over 18M lives

■ Offered in 2023
■ Planning to offer in 2024/2025

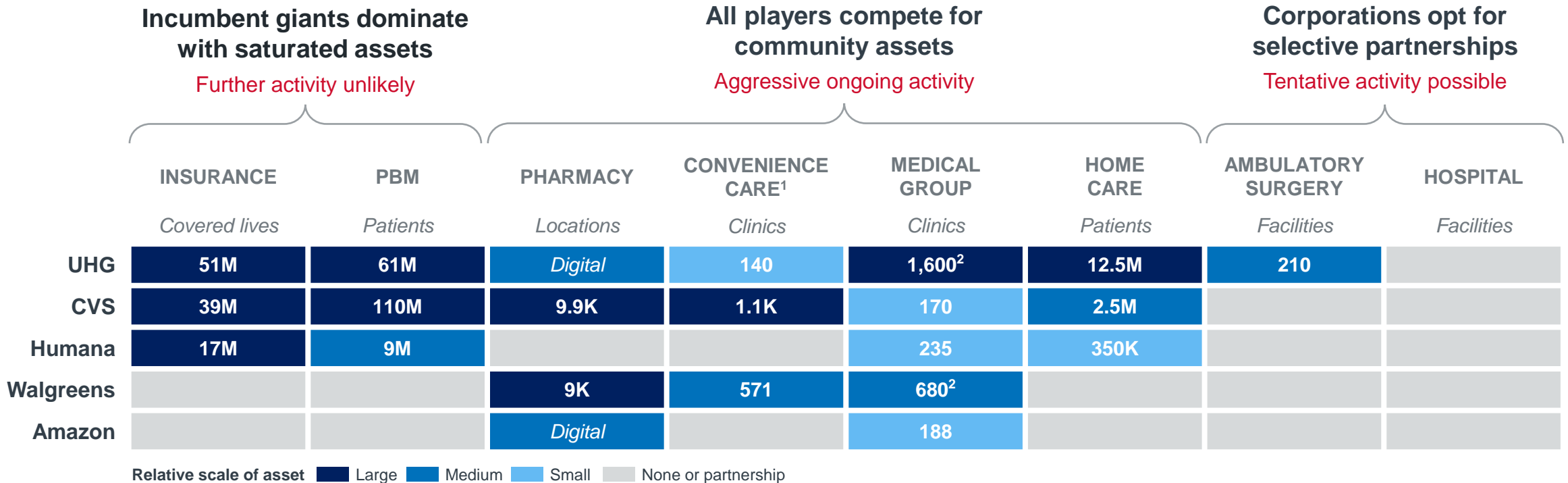


1. High-performance networks.

Source: "2023 Large Employers' Health Care Strategy and Plan Design Survey," Business Group on Health, August 2022.

National players build cross-continuum reach

Giants pursue selective consolidation across care delivery and financing






1. Convenience care includes retail care and urgent care centers.

2. Includes primary and specialty care practices.

Sources: See additional sources slide.


Giants draw from mix of assets to serve unique ambitions

Sample strategic ambitions of corporate players poised to have ripple effects on the industry

	 Cross-sell adjacent services <i>Walgreens, Amazon, CVS</i>	 Contain senior care value <i>Humana, CVS, UHG</i>	 Control network operations <i>UHG, KP (Kaiser Permanente)</i>
Corporate ambition	Cross-sell across a diverse healthcare portfolio to capture low-acuity care and pharmacy spend	Coordinate risk-based care across settings in a market to manage longitudinal senior health and capture data	Equip value-based physician groups and select hospital operators to steer patients to preferred cost-effective providers
Hurdles to overcome	<i>Patient conversion, reimbursement economics, partner coordination</i>	<i>Patient attribution, clinician enablement, scaling, government scrutiny, quality</i>	<i>Patient engagement, multi-payer partnerships, referral discipline, cost management, antitrust</i>
Impact on industry	<ul style="list-style-type: none"> • Consumer data: Insights and cross-sell opportunities increase value of data as a product (and invite scrutiny) • Top-of-license care: Pharmacist and APP roles expand to connect care • Community hubs: Retail becomes an essential ambulatory partner 	<ul style="list-style-type: none"> • Attributed lives: Competition forces offensive moves by systems and plans • Care continuum assets: Bidding war from pressure to exert vertical control • Payment models: Virtuous cycle reinforces value-based care adoption • Entangling alliances: Market leaders demand partnerships that exclude rivals 	<ul style="list-style-type: none"> • Mergers and coalitions: Reactionary consolidation by local systems and plans • Performance scrutiny: Cost and quality data integration enable targeted referrals • Volumes redistribution: Network managers swing provider market share depending on strategic partner alignment

Corporate strategies adapt to local market dynamics

Demographics and population growth attract competing corporate players



36 UHG's OptumCare, LHC Group locations ¹

121 Walgreens' VillageMD locations

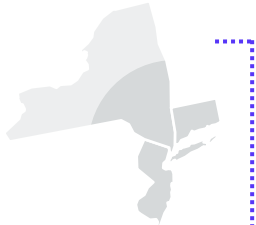
63 Humana's CenterWell primary and home health locations²

24 Amazon's One Medical and Iora locations³

18 CVS' Oak Street Health clinics

4 Walmart's Health clinics

Pressure for attributed lives pushes aggressive medical group strategy



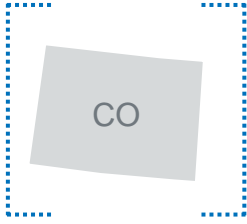
2021 Walgreens partners with Northwell

2022 Walgreens' VillageMD acquires Summit Health-CityMD

2022 Optum acquires 3+ specialty care practices

2023 Optum acquires Crystal Run Healthcare; Riverdale Family Practice

Challenging local delivery finances creates opening for national player entry



2020 Boulder Community Health joins Optum MPP⁴

2022 Intermountain-SCL Health merger, brings Select Health to CO

2023 Walgreens' VillageMD enters CO

2023 Kaiser invests \$10M to help safety-net hospital

2023 Common Spirit and Advent break up

MARKET FACTORS

- Self-contained market with high patient churn
- Growing senior demographic well-positioned for Medicare Advantage strategy
- Consolidated physician market
- Prevalence of sophisticated risk-based physician practices
- Fragile health system finances
- State pressure on spend and access
- Limited risk-based payment

1. 27 LHC Group locations and 9 Optum Care locations.
2. 26 primary care locations and ~37 home health locations.

3. 18 One Medical locations and 6 Iora locations.
4. Market Performance Partnership.

Sources: See additional sources slide.

Regional health plans respond to new urgency for scale

Range of health plan consolidation activity amid growth of large nationals and difficult economic climate



Specialized health plan mergers

Similarly sized health plans with unique expertise and relationships merge to amass scale, develop new-in-kind offerings, and maintain autonomy



Independent health plan partnerships

Regional plans collaborate to scale individual expertise, innovation, and maximize investments while protecting market share

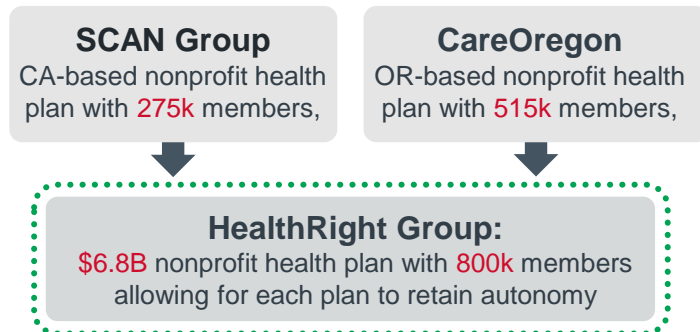


Traditional acquisition

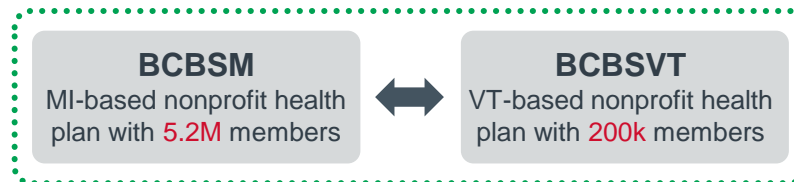
Smaller plans remain competitive by aligning with a larger operator to strengthen market share

EXAMPLES

SCAN and CareOregon to form HealthRight Group

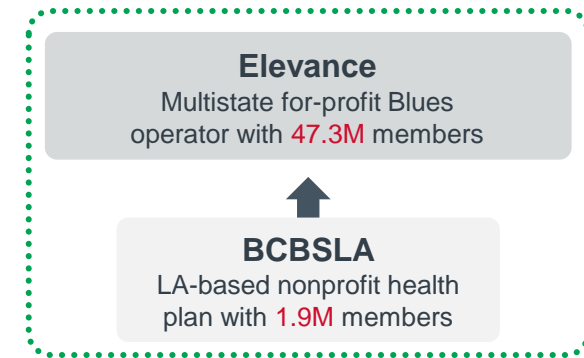


BCBSVT to affiliate with BCBSM group of companies



BCBS Association antitrust settlement's removal of National Best Efforts clause changes Blues competitive landscape

Elevance to acquire BCBSLA



Sources: "Blue Cross and Blue Shield of Vermont and Blue Cross Blue Shield of Michigan Pursue Affiliation," BCBS VT, May 2023; and "Blue Cross and Blue Shield of Vermont to affiliate with Michigan counterpart," VTDigger, May 2023; "SCAN Group, CareOregon plan merger into HealthRight Group," Modern Healthcare, December 2022; "Elevance Health To Buy Louisiana Blue Cross Plan," Forbes, January 2023.

Systems face unrelenting financial struggle

Core challenges to hospital-based care finances

Workforce and supply chain volatility

200,000 Estimated loss of experienced RNs, 2020-2022

6% Increase in total supply expenses at U.S. hospitals each year

Capacity and quality challenges

19% Increase in average length of stay, 2019-2022

7% Increase in likelihood of a patient dying with each additional patient assigned to a nurse

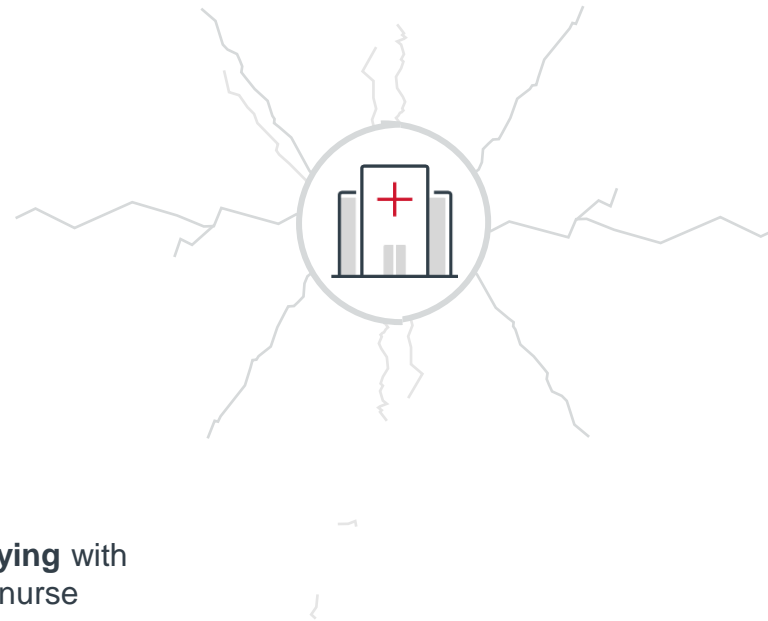
Inpatient revenue erosion

2x YoY growth in OP vs. IP revenue, 2022 to 2023

-31% Hospital operating margins, change from 2019 to 2022

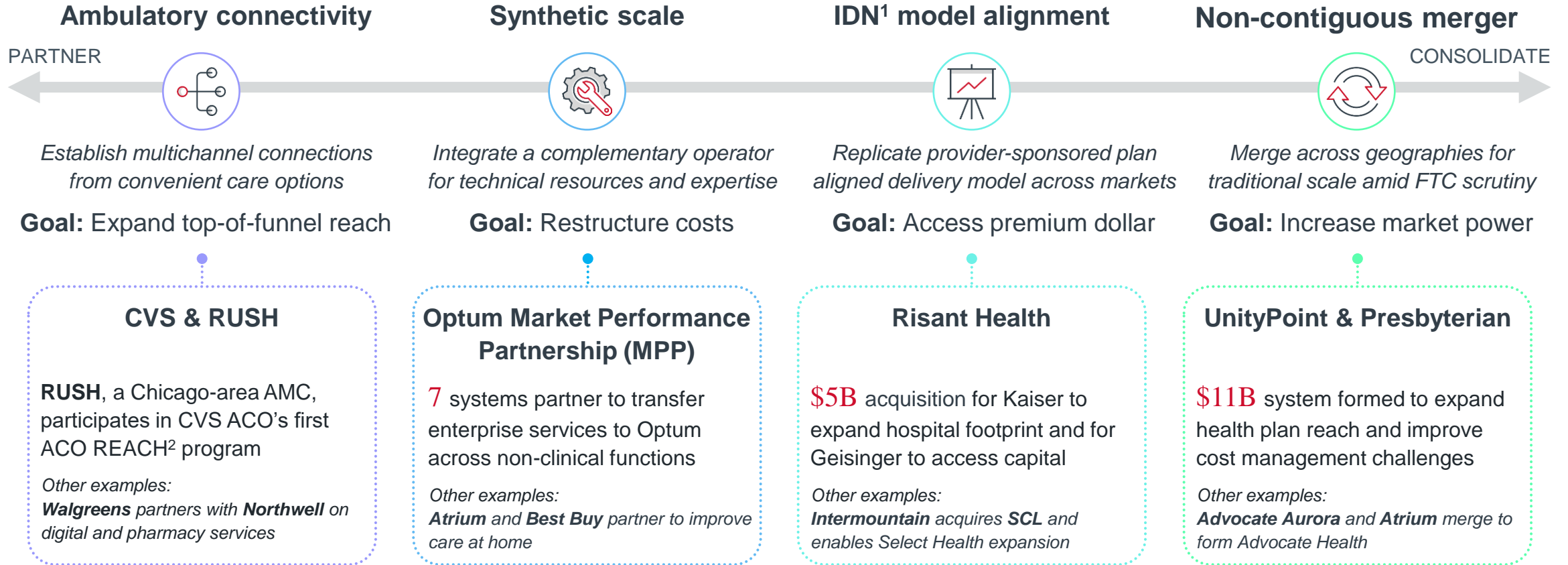
Scrutiny over legacy subsidies

- Site neutral payments
- 340B drug discounts program
- Not-for-profit status



See additional sources slide for sources.

Strategic lifelines emerge for system partners

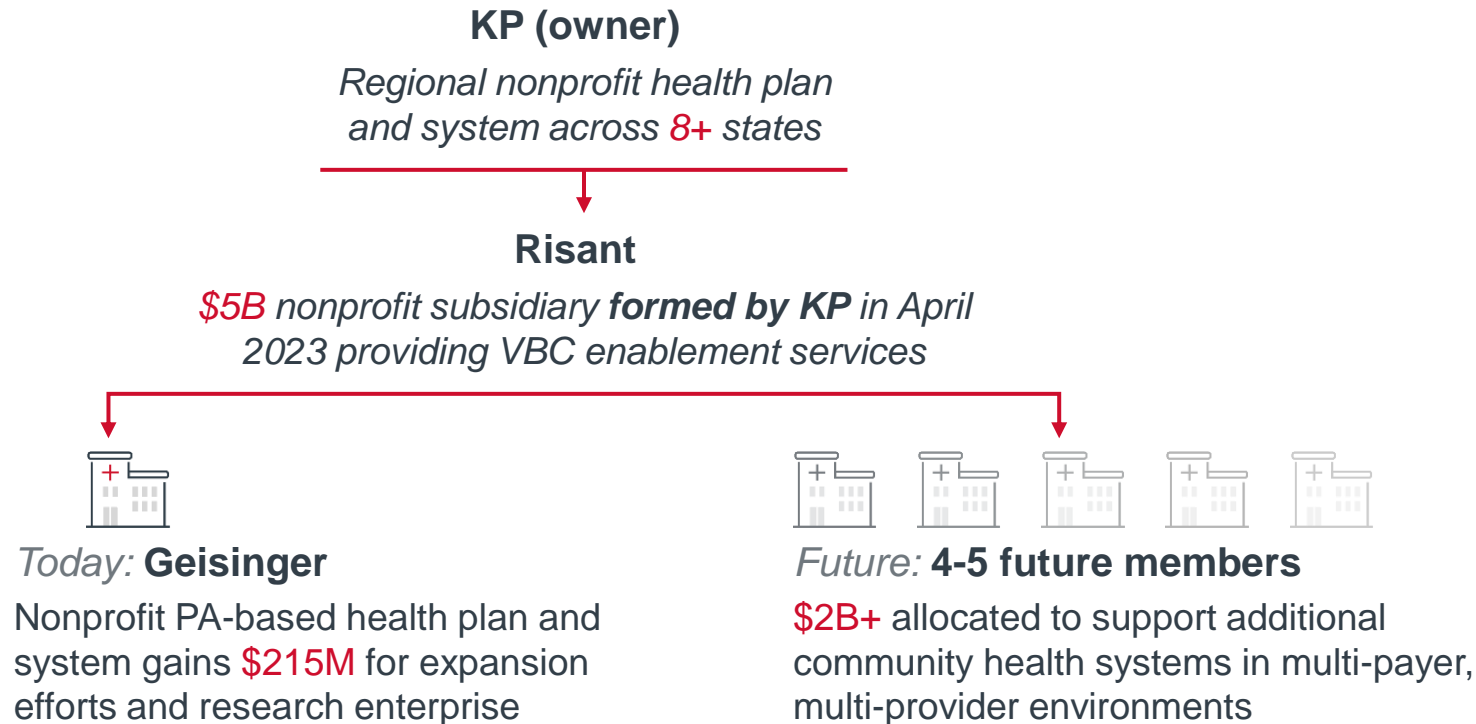


1. Integrated delivery network.
 2. ACO Realizing Equity, Access, and Community Health Model.

Source: "CVS Health and RUSH collaborate to increase health care access for Chicago-area Medicare patients," CVS, January 2023; "The Hospital Strikes Back: Why Kaiser Permanente Formed Risant Health," Work Week, May 2023; "Presbyterian Healthcare-UnityPoint Health merger moves forward," Modern Healthcare, April 2023.

A new strategy: combine (and coordinate) VBC entities

KP (Kaiser Permanente) offers a new option for not-for-profit health systems:
VBC enablement and health plan partner



ADVISORY BOARD'S TAKE

► Why it's different

- **VBC enablement services** by a provider organization, not a consulting company
- Attempt to **shape national VBC adoption** to extend health plan footprint, not a pure economies of scale play


► What to watch

- Will the FTC intervene?
- Which health systems will Risant target next?
- How open is Risant to working with national plans?


Source: "[Fast facts](#)," Kaiser Permanente, 2023; "[What Kaiser's Acquisition Of Geisinger Means For Us All](#)," Forbes, May 2023; "[The Hospital Strikes Back: Why Kaiser Permanente Formed Risant Health](#)," Work Week, May 2023.

Systems' survival strategies leaves access gaps

Health systems make tough choices...

 **Rationalized services** **163M** Decreases in the number of psychiatric beds
Americans live in mental healthcare health professional shortage areas


 **Service line closures** **217** Hospitals closed their labor and delivery departments, 2011-2022
7M Women of childbearing age live in maternity care deserts

 **Hospital closures** **150** Rural hospital closures, 2016-2021
80% Rural U.S. areas designated as medically underserved

1. Compared to \$306M in 2017.

2. From 7 acquisitions in 2010-2017 to 17 in 2017-2019.

...other sectors step in with patchwork solutions

 **Behavioral health solutions focused on low-acuity patients**
\$12B Venture funding in digital behavioral health, 2018-2022
1k Behavioral health startup companies created since 2018

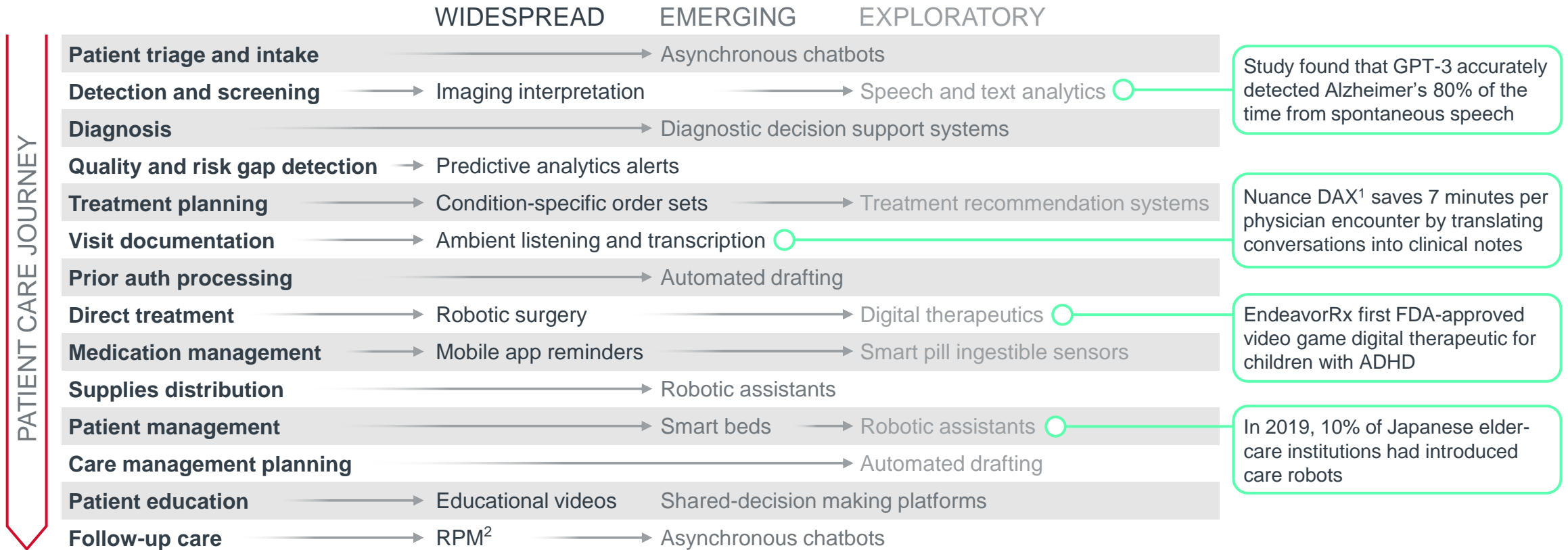
 **Women's health startups aimed at employers**
\$854M Venture funding of fertility technology start-ups in 2022¹
143% Increase in PE acquisitions of OB/GYN practices and fertility services companies²

 **Rural care limited and often focuses on preventative care**
3 Dollar General locations test mobile health clinics to improve rural care
300+ VillageMD locations in medically underserved communities by 2027

See additional sources slide for sources.

Tech increasingly capable of more tasks, often with AI

Adoption of select clinical workforce technologies across the patient care journey



1. Dragon Ambient eXperience.
2. Remote patient monitoring.

Source: ["Ambient Clinical Intelligence,"](#) Nuance, 2023; ["Inside Japan's long experiment in automating eldercare,"](#) MIT, January 2023; ["FDA Permits Marketing of First Game-Based Digital Therapeutic to Improve Attention Function in Children with ADHD,"](#) FDA, June 2020; ["Predicting dementia from spontaneous speech using large language models,"](#) PLOS Digital Health, December 2022; ["ChatGPT's AI Could Help Catch Alzheimer's Early,"](#) WebMD, February 2023.

Can't leap forward with tech until we nail the essentials

Resist **magical** thinking.

“A lot of organizations are susceptible to ‘magical thinking’ where they gravitate towards new technology. This results in them looking past a lot of the **basic foundational technology.**”

CIO
Large health system in Midwest



Prioritize technology **building blocks.**

Top 3 “back to basics” provider strategies seen in 2023

- 01** Maximize **value of existing systems**
(i.e., are you using all the functionality built into the EHR¹?)
- 02** Make basic functions like order sets as **accurate, effective, and easy** to execute as possible
- 03** Prioritize **clinical staff needs**—not “shiny things”—for technology investment

1. Electronic health record.

Tech can't replace humans, but it will change their roles

As technology becomes a member of the care team, the rest of the care team must evolve

ROLE

Who does what tasks?

- As technology makes some tasks **faster**, what will clinicians spend **more time** on?
- Will we need to **add** new roles or **repurpose** existing ones?
- How will clinicians engage with **patients** as consumer access to AI-powered diagnostic tools grows?



TRAINING

Where does learning happen?

- How will clinicians gain **experience** and **expertise** as technology takes on **simple** tasks?
- When will schools, employers, and accreditors standardize training on **working with technology**?
- Will technology enable clinicians to take on some responsibilities with **less training**?

COMPENSATION

How do we value work?

- How will compensation models shift to **incentivize** performance that is **blended** with technology?
- Will compensation **levels** vary to reflect shifting **training** requirements?

Who will make decisions **proactively** – and who will be forced to **respond**?



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