

FORD KOLES

Vice President, Advisory Board

Industry Rundown





The State of the Healthcare Industry in 2024

How to prepare for the future of longstanding paradigm shifts

Perhaps his best
decision.....



The state of the healthcare industry in 2024

1

Industry snapshot

A moment of instability

- Poor outlook for patient health and industry performance
- Challenging business operating environment

2

Purchaser disruption

Government-led scrutiny

- Overall public coverage growth despite Medicaid whiplash
- Tightening MA business model
- Employer coverage balancing act harder with fiduciary rules
- Sweeping policy changes to pharmaceutical business



TODAY'S
QUESTION

How will
the industry
prepare
versus
react?

3

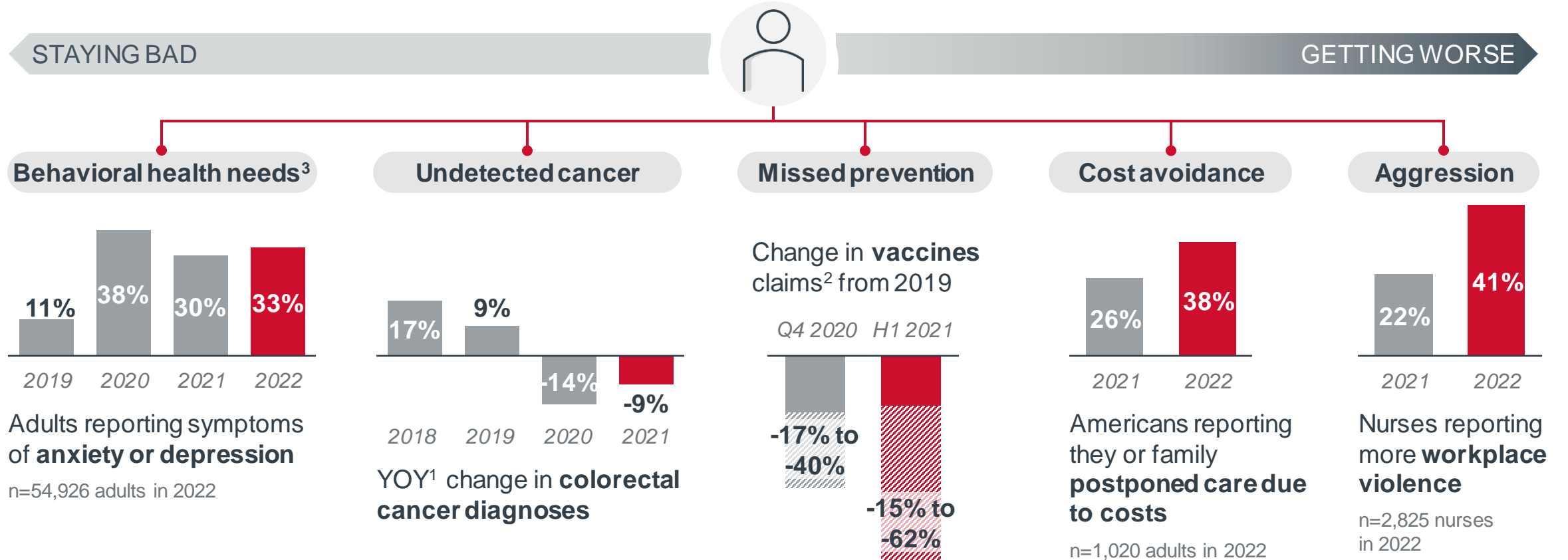
Strategic paradigms

The future of longstanding shifts

- A. Delivery infrastructure** will evolve into ecosystems focus
- B. Care team roles** will shift with new tech capabilities
- C. Treatment economics** will adapt to high-cost drugs

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.

3. Values pulled from June of each year, except 2019 is January to June.

Source: "Declines in Routine Adult and Teen Vaccinations Continued in 2021," Avallere Health, January 2022; "Updated Analysis Finds Sustained Drop in Routine Vaccines Through 2020," Avallere 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, 2024; "NNU Covid Survey Year Three," National Nurses United, December 2022; "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

73%

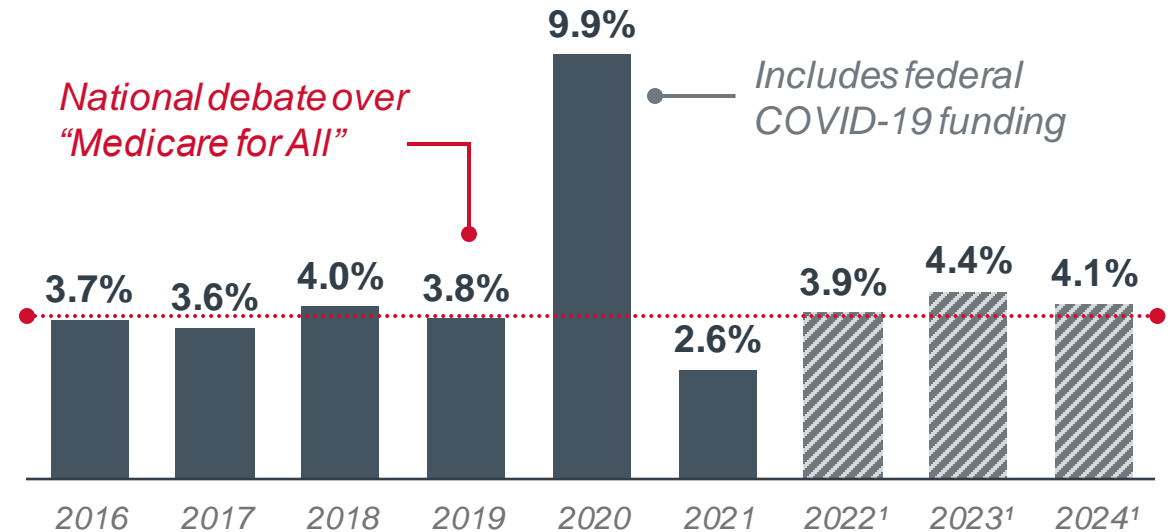
Adults believe the healthcare system is **not meeting their needs**

n=2,519 adults in March 2023

1. Projected.

Looming spending pressures

Annual growth in health expenditures per capita



Source: "The Pandemic's Consequences: Survey of Registered Nurses," AMN, January 2023; "National Health Expenditure Projections," Health Affairs, June 2023; "Sentinel Event Data 2022 Annual Review," The Joint Commission, 2023.

Purchaser and payment policy dynamics at a glance



**Medicaid coverage
whiplash**

15M

*Medicaid terminations
completed as of
January 16, 2024*



**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%

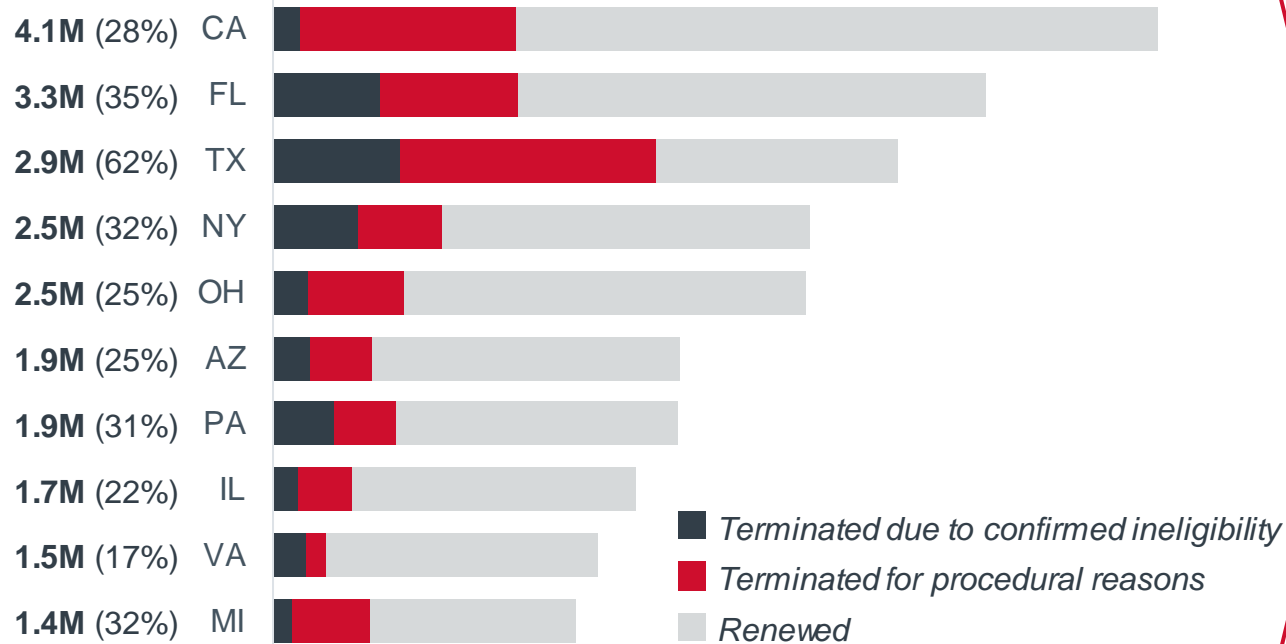
*Projected increases
in health insurance
costs for employers
for 2024 benefits*

Source: "Medicaid Enrollment and Unwinding Tracker," KFF, January 2024; 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.

Rapid Medicaid drops mostly due to paperwork burdens

Medicaid coverage status changes by state

Total number of Medicaid beneficiaries whose eligibility was redetermined, for states with the most reviewed beneficiaries, as of January 16, 2024



▲ Total terminations (with percentage of total reviewed beneficiaries)

1. Calculated using KFF-collected data, January 16, 2024. Only includes states with publicly-reported data.

Source: "The Impact of the COVID-19 Public Health Emergency Expiration on All Types of Health Coverage," Urban Institute/Robert Wood Johnson Foundation, December 2022; Recht H, "Medicaid Enrollment and Unwinding Tracker," KFF, January 2024; "What Do the Early Medicaid Unwinding Data Tell Us?," KFF, May 2023; "How Many People Might Lose Medicaid When States Unwind Continuous Enrollment?," KFF, April 2023; Olsen E, "CMS requires 30 states to pause Medicaid disenrollments after systems error," Healthcare Dive, September 2023.

Disenrollment rates (so far) are greater than predicted, prompting CMS intervention

PROJECTED

18%

Proportion of enrollees projected to lose Medicaid (March 2023)

ACTUAL

33%

Median Medicaid disenrollment rate¹ (January 2024)

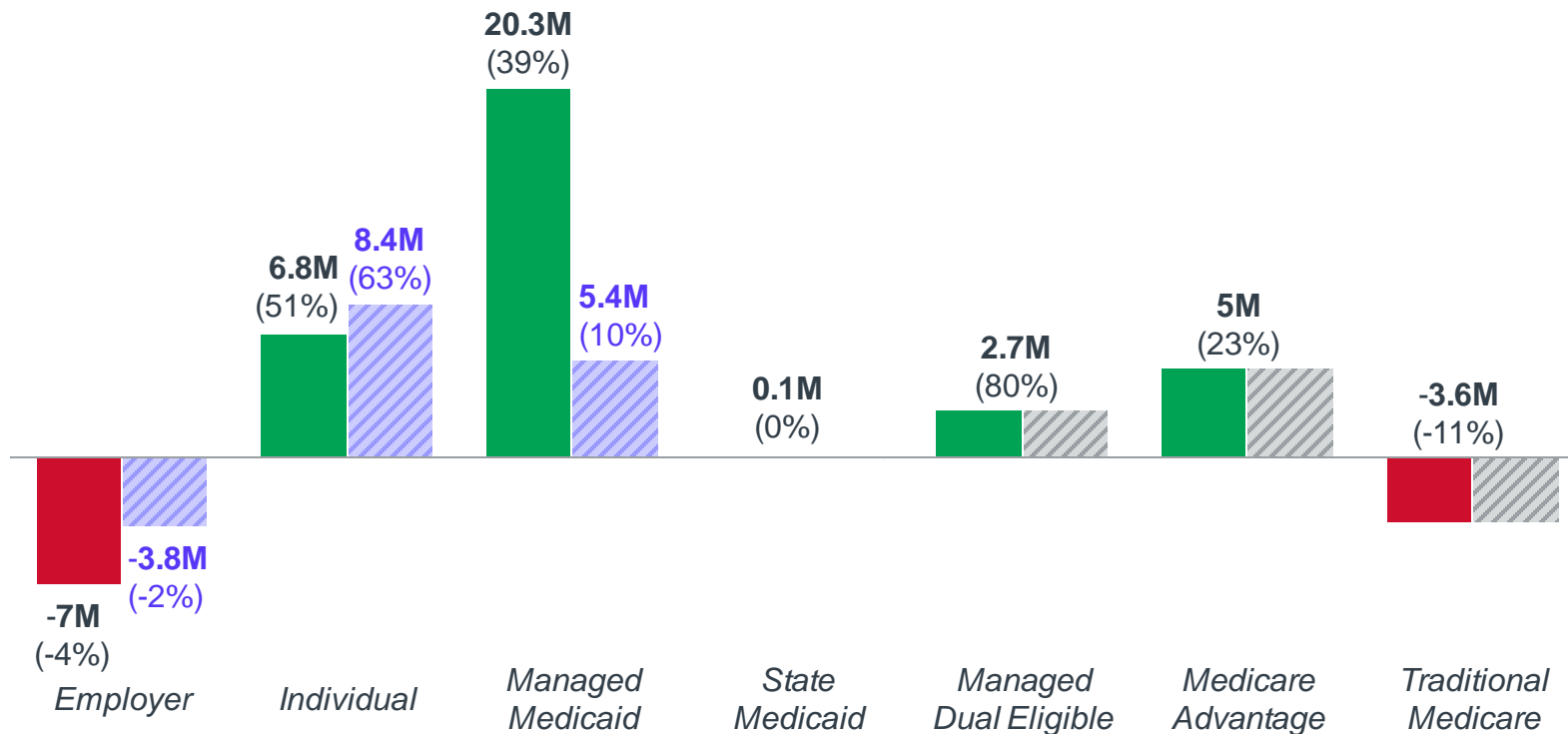
Medicaid disenrollment progress

- 15M total beneficiaries disenrolled (Jan. 2024)
- 30 states (including DC) directed to pause disenrollments after auto-renewals process error discovered, reinstating coverage for 500k beneficiaries (Sept. 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 Q3



■ Increased enrollment since 2019

■ Decreased enrollment since 2019

■ 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

■ No major predicted enrollment shift after Medicaid policy changes unfold

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 Q3; "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 attractive, but getting harder

In 2023, Corporate players prioritize 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 fees
- Government share of catastrophic coverage drops from 80% to **20%**

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

2031

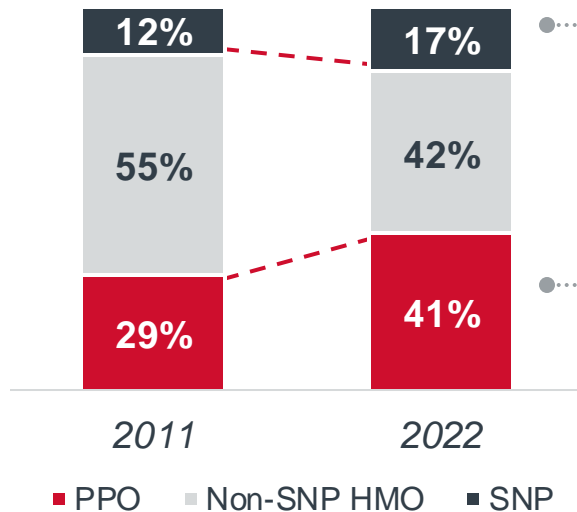
\$943B Projected payments¹ to plans

1. For Medicare Part A and Part B benefits.
2. Risk Adjustment Data Validation.

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 joining, based on 2007-2022 data¹

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).

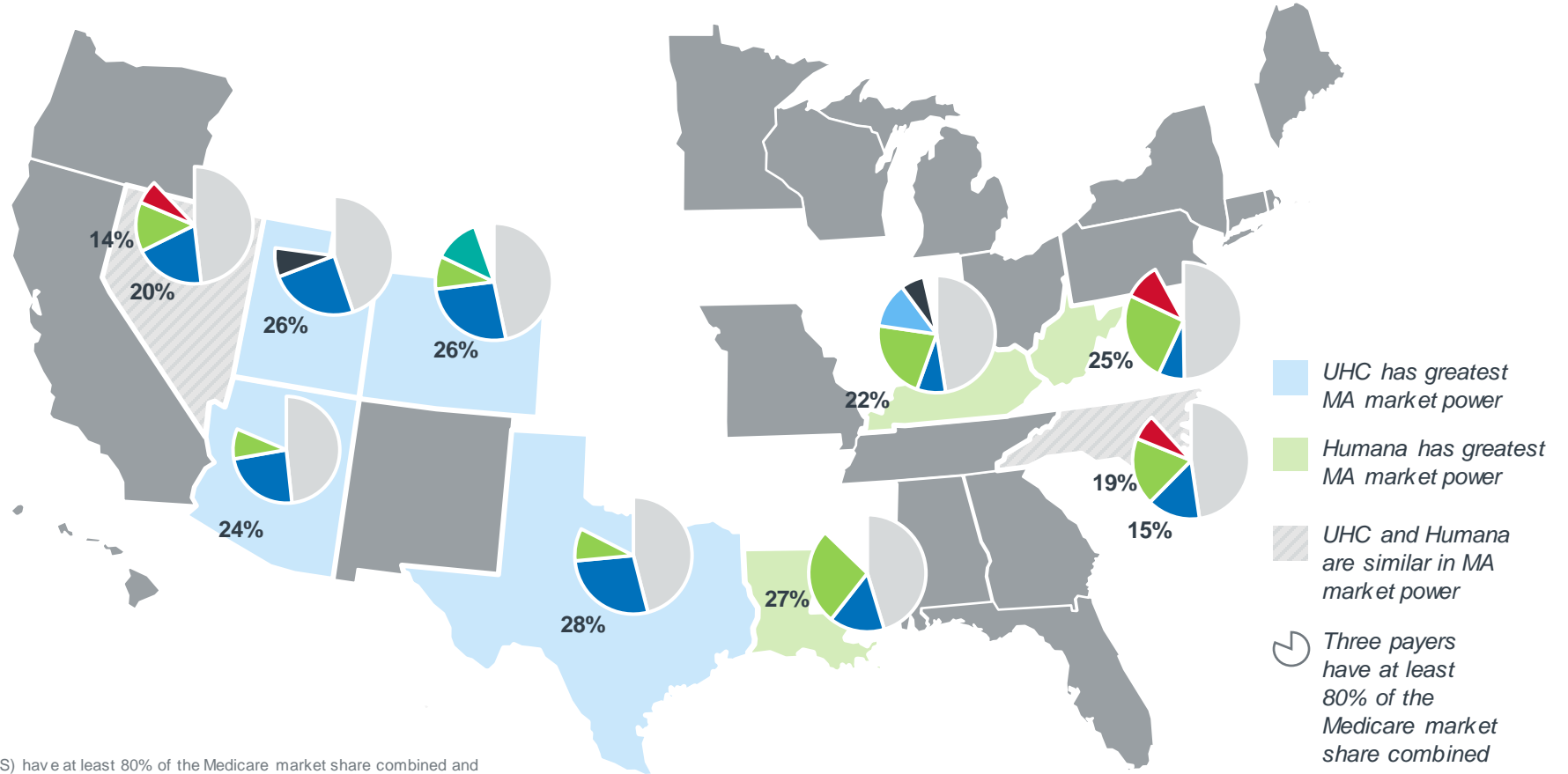
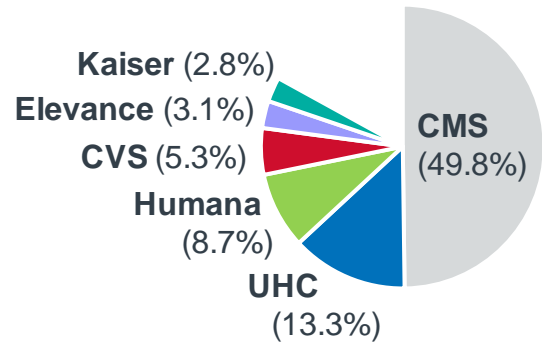
Source: "Medicare Payment Policy," MedPac, 2012 – 2023; The Optum de-identified Clinformatics® Data Mart Database (2007 – 2022).

As MA beats 50%, local power will affect partnerships

Medicare market share composition¹ within most concentrated states² (as of January 2023)

States depicted have over 50% Medicare Advantage penetration

National Medicare market share composition



1. Pie charts show states where the top three payers (including CMS) have at least 80% of the Medicare market share combined and depict payers with at least 5% of the market share. Black indicates an MA plan other than UHC, Humana, CVS, Elevance, or Kaiser.
 2. Map shows states where CMS has less than 50% of the Medicare market share.

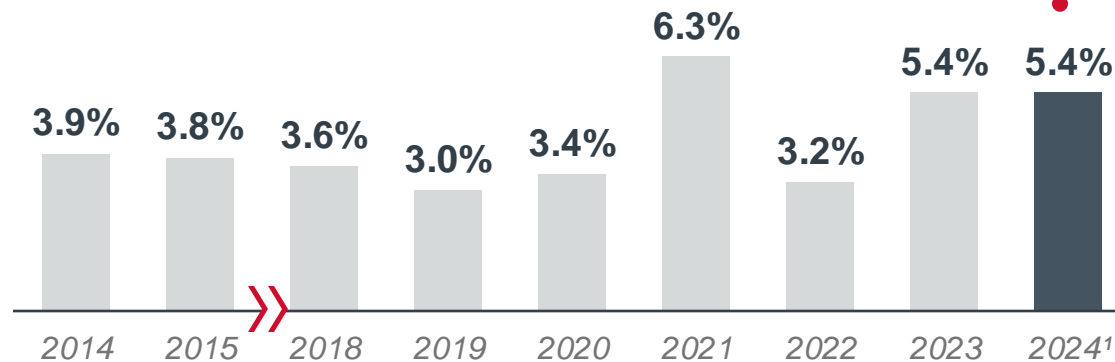
Source: Advisory Board analysis of CMS MA enrollment by SCC-October 2017-2022 and Medicare Monthly Enrollment data sets.

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

- **Peters v Aetna and OptumHealth:** Lawsuit reintroduced, June ‘23
- **Mass. Laborers’ Fund v BCBSMA:** BCBSMA found not liable, April ‘23
- **Bricklayers v Elevance:** Not yet decided, December ‘22

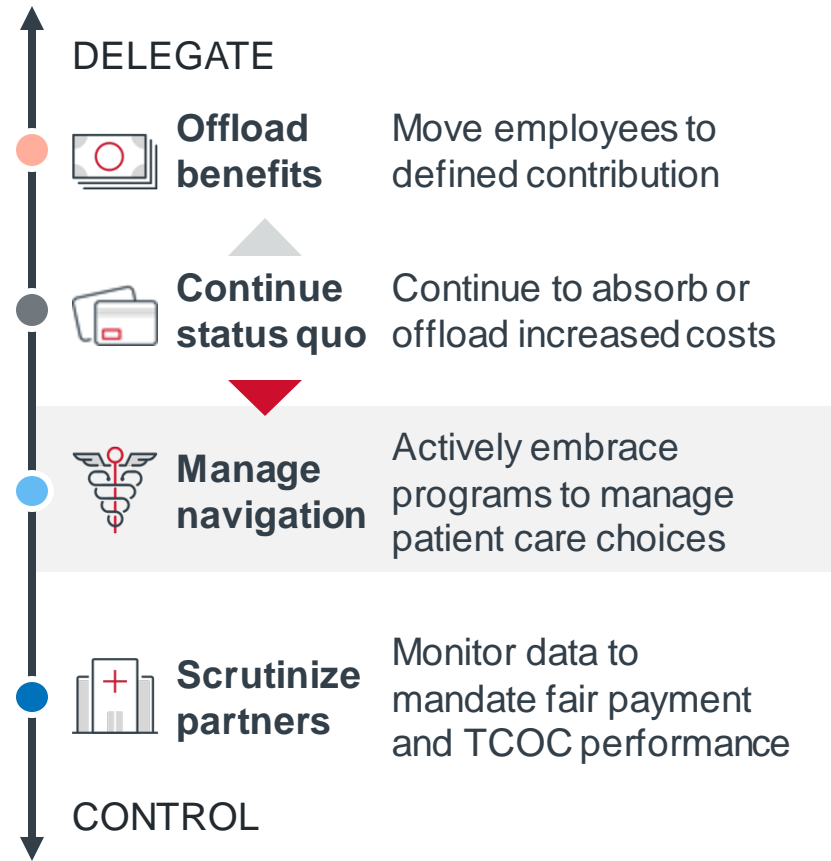
1. Estimated.

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, 2023; “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.

Managed navigation strategies offer a compromise

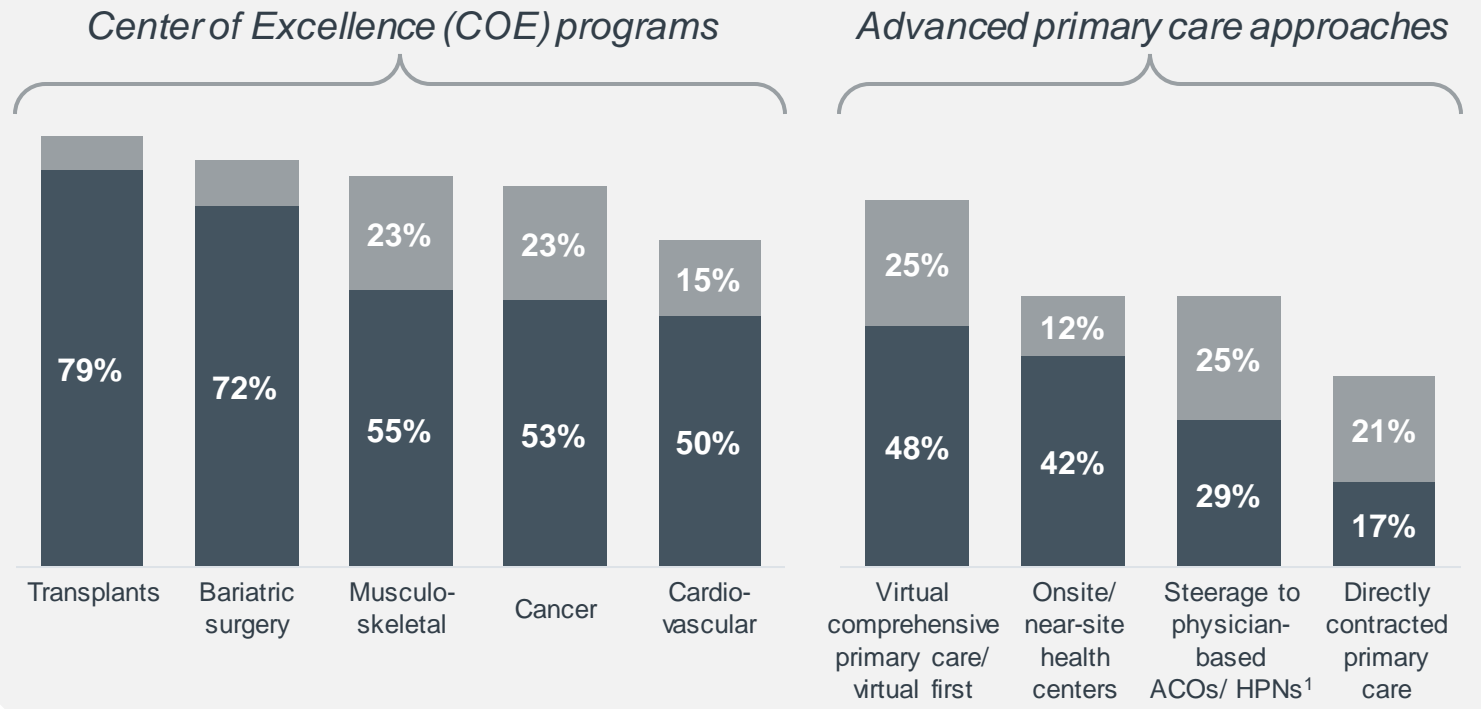
Possible employer approaches to benefits strategy



Large employer benefit strategy offerings

n=152 large employers, covering over 19M lives

■ Offered in 2024
■ Planning to offer in 2025/2026



1. High-performance networks.

Source: "2024 Large Employers' Health Care Strategy Survey," Business Group on Health, August 2023.

Landmark IRA¹ drug cost action is not a policy outlier

Recent and emerging regulatory activity on drug costs points toward systemic overhaul



Manufacturer prices

- Medicare can **negotiate a “maximum fair price”** for certain high-spend, older drugs without alternatives
- First negotiated prices take effect in 2026
- Manufacturers must **pay a rebate** if certain Medicare drug prices increase above the rate of inflation

In effect as of 2023



Drug benefits coverage

Part D benefits lower the beneficiary cost cap and **shift catastrophic coverage** across plans and manufacturers

Full changes take effect in 2025



Pharmacy sourcing

States pursue pharmacy choice laws to **restrict white bagging mandates**

EMERGING



PBM business activities

- FTC demands **disclosures** from six of the largest PBMs and three affiliated GPOs²
- Congress advances bipartisan bills aiming to address **spread pricing** and require **transparent** reporting from PBMs, building on CAA³
- General exploration of changes to 340B program

1. Inflation Reduction Act
2. Group Purchasing Organizations.
3. Consolidated Appropriations Act of 2021.

Source: McDermott+Consulting; Cubanski J et al, "Explaining the Prescription Drug Provisions in the Inflation Reduction Act," KFF, January 2023; Fein A, "The Inflation Reduction Act: 10 Predictions About Market Access and Drug Channels," Drug Channels, April 2023.

Bring on the Roaring Twenties



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The future of...



DELIVERY INFRASTRUCTURE

LEGACY MODEL

Hospital-centric service delivery

CURRENT STATE

ACCELERANTS

- Dire hospital finances
- Care delivery M&A

FUTURE OUTLOOK

Ecosystem-directed care management



CARE TEAM ROLES

Overextended generalists with automation at the margins

ACCELERANTS

- Workforce crisis
- Generative AI

Tech-dependent care teams



TREATMENT ECONOMICS

Procedure-centric delivery and cost control standards

ACCELERANTS

- Breakthrough drugs
- Finance experiments

Healthcare business defined by bespoke care

The future of...



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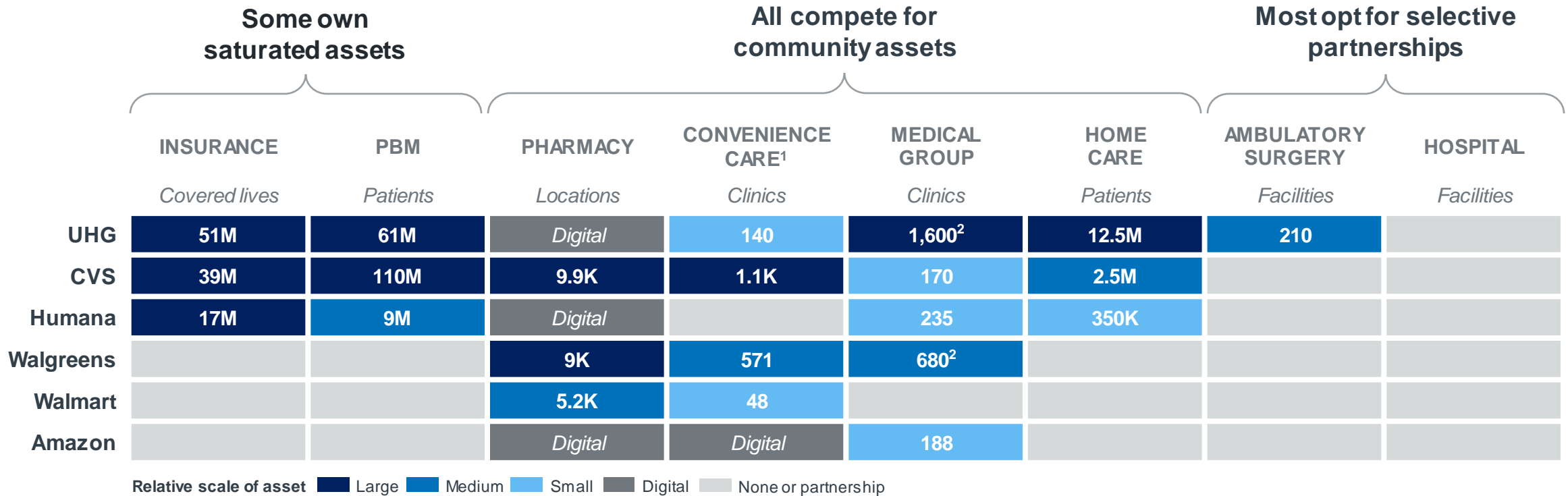
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Healthcare business defined by bespoke care

Ecosystem players build cross-continuum reach

Corporations pursue selective consolidation across care delivery and financing (as of October 2023)






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

2. Includes primary and specialty care practices.

Sources: See additional sources slide.

Players draw from mix of assets to serve unique goals

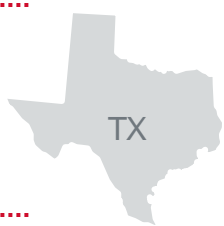
Top inferred strategic goals of ecosystem players

Ambition	 Cross-sell services <i>Walgreens, Amazon, CVS</i> Cross-sell across a diverse healthcare portfolio to capture low-acuity care and pharmacy spend	 Capture senior care value <i>Humana, CVS, UHG</i> Coordinate risk-based care across settings in a market to manage longitudinal senior health	 Oversee network operations <i>UHG, KP (Kaiser Permanente)</i> Equip value-based physician groups and select hospital operators to steer patients to preferred cost-effective sites
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>

Corporate strategies adapt to local market dynamics

As of July 2023

Demographics and population growth attract competing corporate players



36 UHG's OptumCare, LHC Group locations ¹

63 Humana's CenterWell primary and home health locations²

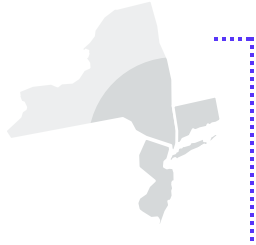
18 CVS' Oak Street Health clinics

241 Walgreens' VillageMD locations

24 Amazon's One Medical and Iora locations³

4 Walmart's Health clinics

Pressure for attributed lives pushes aggressive medical group strategy



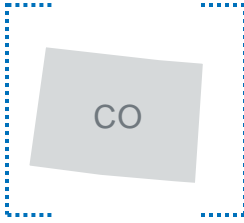
2021 Walgreens partners with Northwell

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

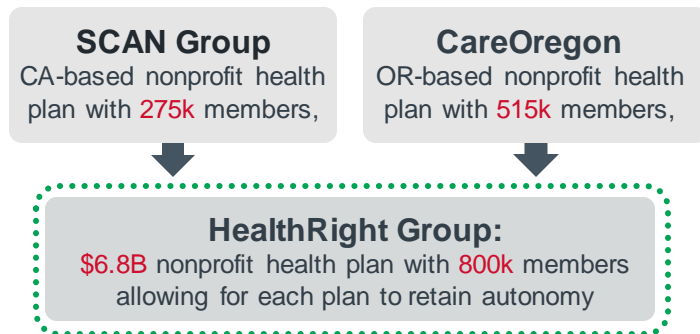


Traditional acquisition

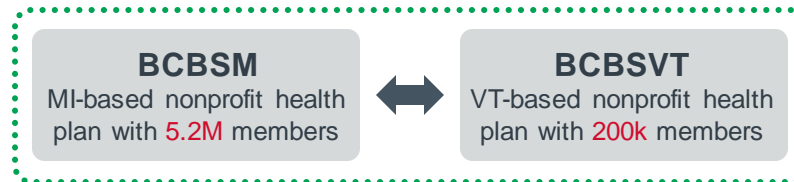
Smaller plans remain competitive by aligning with a larger operator to strengthen market share

EXAMPLES (As of Sept 2023)

SCAN and CareOregon to form HealthRight Group



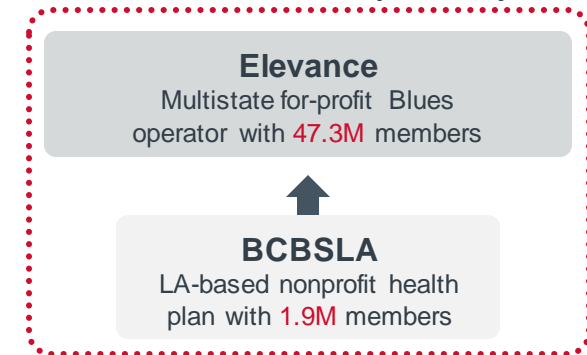
BCBSVT to affiliate with BCBSM group of companies



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

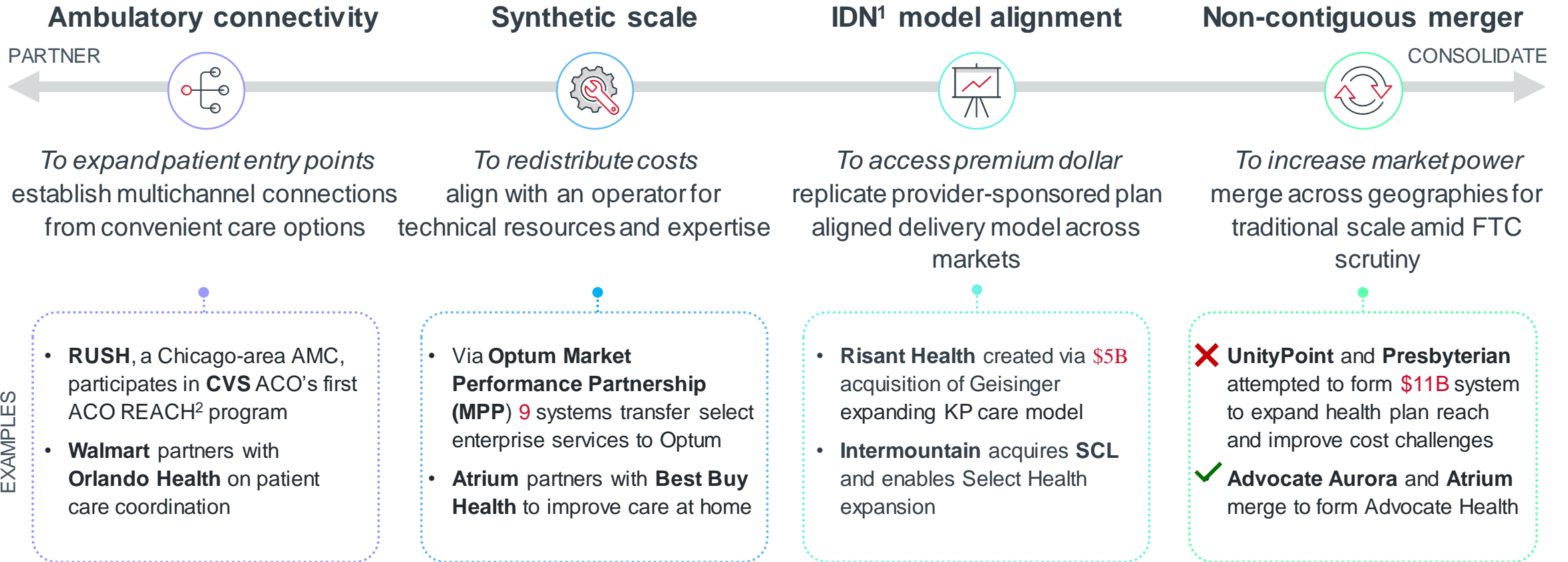


Elevance to acquire BCBSLA (halted)



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," VT Digger, 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.

Strategic lifelines emerge for system partners

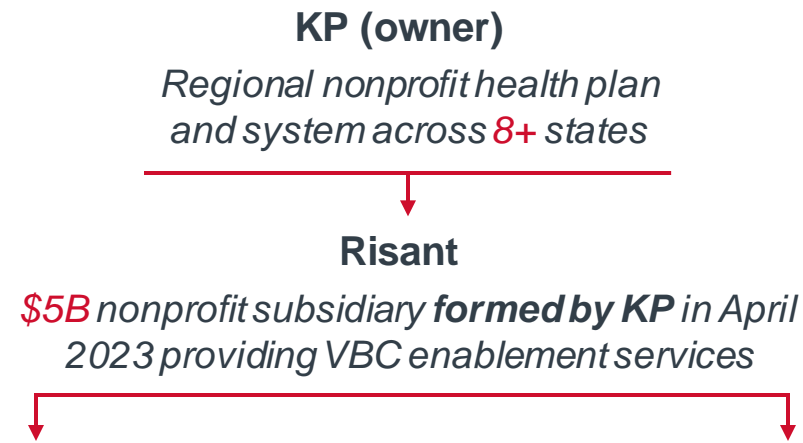


1. Integrated delivery network.
2. ACO Realizing Equity, Access, and Community Health Model.

Source: "CVS Health and RUSH collaborate to increase health care access for Chicago-area Medicare patients," CVS, January 2023; "Walmart Health inks partnerships with Orlando Health, Florida insurer to streamline care coordination," Fierce Healthcare, November 2023; "The Hospital Strikes Back: Why Kaiser Permanente Formed Risant Health," Work Week, May 2023; "Healthcare Dealmakers—UnityPoint, Presbyterian's \$11B merger called off," Fierce Healthcare, November 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?



Today: **Geisinger**

Nonprofit PA-based health plan and system gains \$215M for expansion efforts and research enterprise



Future: **4-5 future members**

\$2B+ allocated to support additional community health systems in multi-payer, multi-provider environments



“[Risant is looking for] organizations that are nonprofit, mission-minded, community-oriented health systems that are setting out to do things in a value-based care kind of model. I think a hallmark feature of that is **not being so hospital-centric.**”

DR. JAEWON RYU
PRESIDENT AND CEO, GEISINGER | FUTURE CEO, RISANT

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; Hudson C, "Risant Health could reshape healthcare: Geisinger CEO," Modern Healthcare, August 2023.

The future of...



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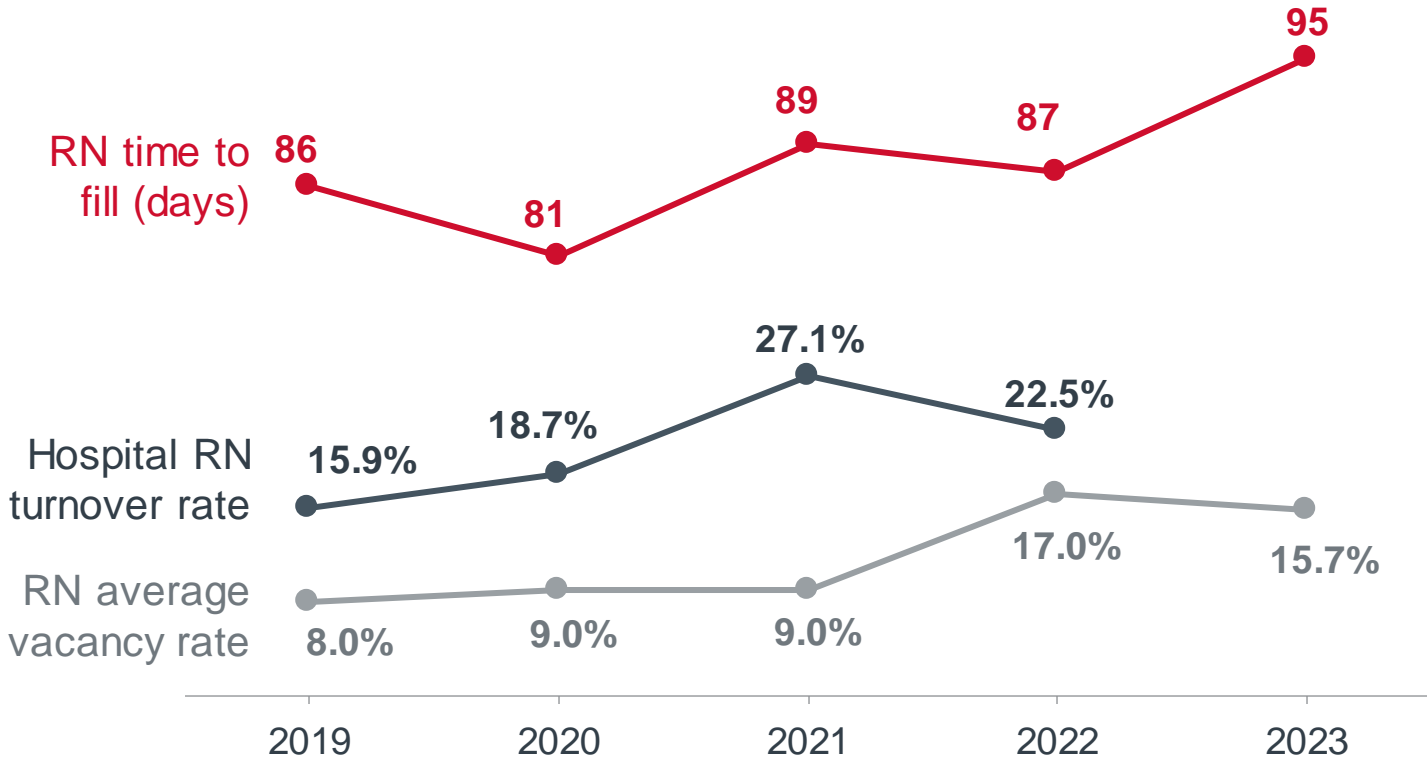
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Healthcare business defined by bespoke care

Labor challenges persist as AI increases in popularity

Turnover, vacancy rates, and time to fill remain elevated

n=164 hospitals (2020), n=226 (2021), n=272 (2022), n=273 (2023)



AI IN THE NEWS

“Microsoft Invests **\$10 Billion** in ChatGPT Maker OpenAI”

BLOOMBERG, JAN ‘23

“ChatGPT reaches **100 million** users two months after launch”

THE GUARDIAN, FEB ‘23

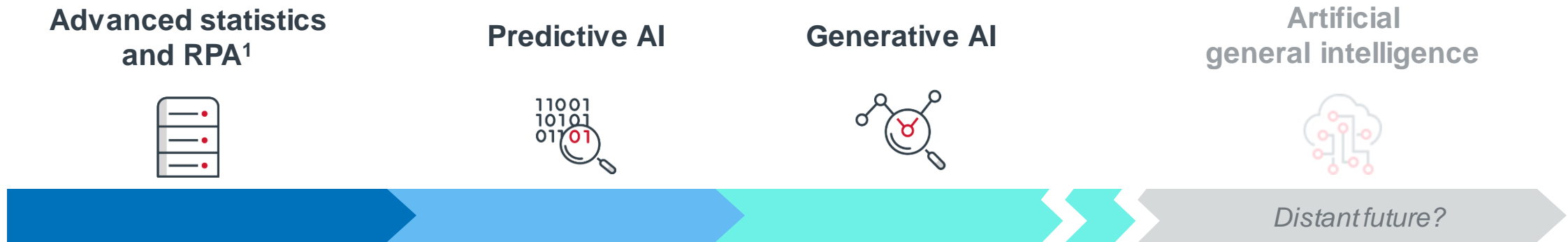
“AI Adoption **Skyrocketed** Over the Last 18 Months”

HBR, SEPT ‘21

Source: “National Health Care Retention Report,” NSI, 2020, 2021, 2022, 2023; “ChatGPT reaches 100 million users two months after launch.” The Guardian, February 2023; “AI Adoption Skyrocketed Over the Last 18 Months.” HBR, September 2021; “Microsoft to Invest \$10 Billion in ChatGPT Maker OpenAI (MSFT).” Bloomberg, January 2023.

What is AI, *really*?

Advances in technology pushing the limits of AI



AI is not magic, but rather is a range of specialized tools



AI today

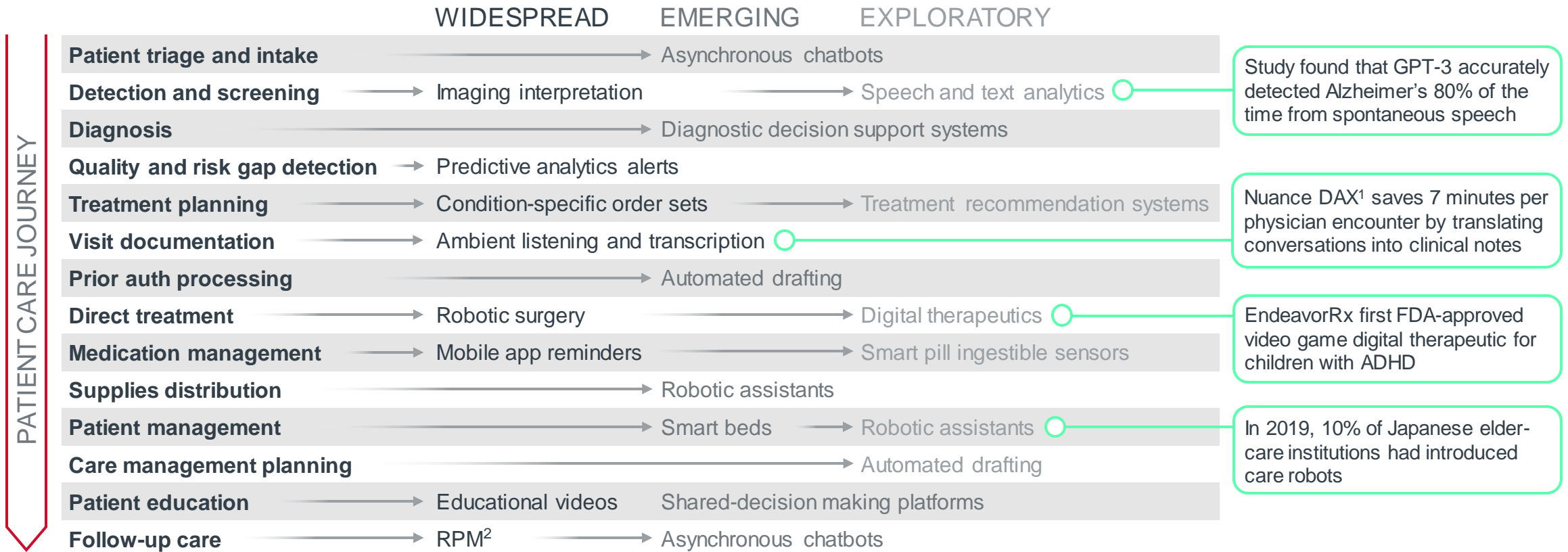
- Performs **specific tasks** that normally require human intelligence by using algorithms, pattern matching, etc.
- Must be **trained**, and can only learn from data it has access to
- **Continuously improves** accuracy of predictions and pattern matching with more interactions
- Each AI model has **limited utility** outside of the task for which it was designed

1. Robotic process automation.

Source: "[AI in health care](#)," Advisory Board, March 2022; "[Generative artificial intelligence](#)," Advisory Board, March 2023.

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.

Sci-fi ambitions handcuffed to fax machine reality

Doximity generative AI platform

Provides physicians an **easy way to accelerate** and complete administrative and clinical tasks...

The screenshot displays the DocsGPT BETA interface. On the left, there are six AI capabilities listed in a grid:

- Write a statement of support for social security disability for my patient with bipolar disorder. (Try Prompt →)
- Trained in medical terminology and shorthand; knows how to format clinical documentation and common medical correspondence.
- May occasionally generate incorrect information. Confirm any factual references before using clinically.
- Write home care instructions for an 8 y/o with asthma in the style of Dr. Seuss. (Try Prompt →)
- Fluency in dozens of languages; can translate documents and produce multilingual patient education.
- Is not HIPAA-compliant; do not include PHI in prompts.

On the right, the 'Free Fax to Insurers' section lists the following insurance providers:

- ae** Aetna 833-596-0339
- Anthem** 800-754-4708
- Cigna** 615-401-4642
- Health Net** 800-781-2999

Below the list is a 'Send Fax' button with a fax icon. A note states: 'Doximity members can fax letters directly to insurers using our digital fax service. To enter Doximity's HIPAA compliant'.

...but also offers **free fax service**, because most communication between providers and payers still relies on fax machines

Source: "Docs GPT," Doximity, 2023.


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

“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 **building blocks**

Top 3 “back to basics” 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.

Goal and related problems should inform tech investment decisions

Sample Goal

Retain nursing staff



Potential Root Causes

- Lack of schedule flexibility
- Feeling unsafe at work
- Undesirable task mix



Targeted Tech Solution

Leverage ambient listening and automated note summaries, reducing time spent on administrative tasks



Caution

Temptation to **add** other undesirable tasks to reallocate newly available nurse time

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**?

AI's business impact will go beyond workforce

As AI becomes more prevalent and less expensive in healthcare, watch for possible consequences



Uneven progress across individuals and organizations

"The rich get richer"

- Early adopters skew representative training datasets and outpace peers in efficiency gains
- Varying clinician adoption alters outcomes, compensation, and patient experience



Replicating existing challenges and inequities

"Doomed to repeat the past"

- Automating single tasks entrenches ineffective workflows and prevents structural redesign
- Models inadvertently reinforce health inequities found in data, complicating quality efforts



New power levers for the owners of data and algorithms

"More cooks in the kitchen"

- Reliance on vendors changes supply contract structures and competitive data ownership
- Owners of AI solutions have new entry points to control patient pathways

Source: ["Leveraging AI/ML to identify more at-risk."](#) IQVIA, 2023; ["Doctors Are Using ChatGPT to Improve How They Talk to Patients."](#) NY Times, June 2023; ["Algorithmic Bias In Health Care: A Path Forward."](#) Health Affairs, November 2019.

The future of...



DELIVERY INFRASTRUCTURE

LEGACY MODEL

Hospital-centric service delivery

CURRENT STATE

ACCELERANTS

- Dire hospital finances
- Care delivery M&A

FUTURE OUTLOOK

Ecosystem-directed care management



CARE TEAM ROLES

Overextended generalists with automation at the margins

ACCELERANTS

- Workforce crisis
- Generative AI

Tech-dependent care teams



TREATMENT ECONOMICS

Procedure-centric delivery and cost control standards

ACCELERANTS

- Breakthrough drugs
- Finance experiments

Healthcare business defined by bespoke care

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Drugs poised to eclipse the strategic focus on procedures



THERAPEUTIC DRUGS

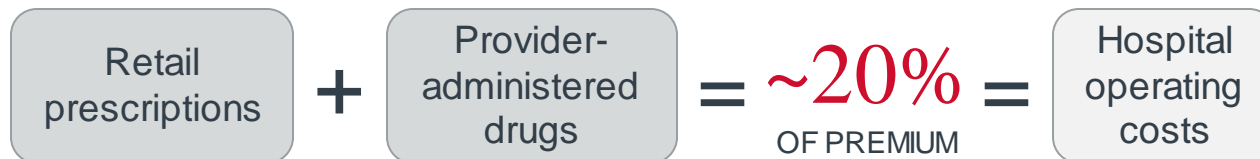
1. Innovation activity targets rare, untreated conditions
2. Drug spend catching up to hospital operating costs



EPISODIC PROCEDURES

1. Innovation activity enables lower-acuity care
2. Transparency data and outpatient shift pressure rates

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



69%

Average price for a procedure in an ASC relative to the same in a HOPD¹, 2019

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

1. Hospital outpatient department.

Weight management drugs driving industry frenzy



Promising clinical effects

15-20% Average **total body weight loss** on semaglutide¹



Rising patient demand

44% Of surveyed people with obesity would **change jobs to gain coverage** for obesity treatment



Financial implications

142M Eligible **US patient population** for semaglutide for weight loss according to FDA criteria²

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.

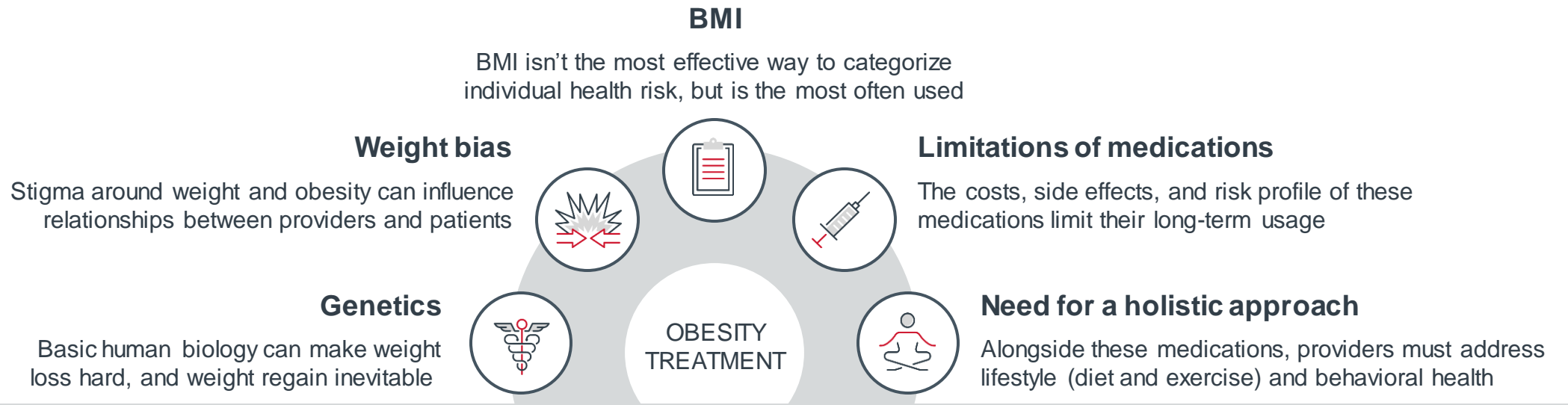
Variable coverage in 2023

- ✓ **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


See additional sources slide f or sources.


Drugs not a silver bullet for the obesity epidemic


Factors that influence obesity treatment, driving need for personalized care solutions



WHERE WE CAN MAKE EFFECTIVE CHANGE

 **Improve risk stratification** to include factors beyond BMI, such as including percent body fat or presence of metabolic syndrome

 **Train providers to deliver destigmatized obesity care** that acknowledges the long-term, complex journey of weight management

 **Optimize benefit models** to increase access to medications for the patients who would benefit the most

Source: "[House of Delegates Handbook and Addendum](#)," AMA, 2023; "[Management of obesity](#)," The Lancet, February 2016; "[Addressing Medicine's Bias Against Patients Who Are Overweight](#)," JAMA, February 2029.

CGTs bring clinical breakthroughs, but don't come cheap



IN THE NEWS

Cell and gene therapies (CGTs) celebrated for clinical capabilities...

“Zolgensma demonstrates ‘remarkable’ long-term results for children with SMA¹”
HEALIO, MAY ‘21

“The FDA approved a gene therapy that can reverse a form of childhood blindness”
QUARTZ, DEC ‘17

...but high costs bring debate over prices and financing

“FDA approves \$3.5 million treatment for hemophilia, now the most expensive drug in the world”
CNN, NOV ‘22

“At \$850,000, price for new childhood blindness gene therapy four times too high, analysis says”
PBS, JAN ‘18

1.09M Estimated patients treated by gene therapy between 2020-2035

\$25.3B Estimated annual spend on gene therapies in 2026²

0.5% Predicted gene therapy spend as a percent of estimated national health expenditure in 2026²

1. Spinal muscular atrophy.

2. 2026 is projected to be the peak in spend on gene therapies between 2020 and 2035.

See additional sources slide f or sources.

All “high-cost drugs” are not the same

Key characteristics to evaluate the impact of specific emerging high-cost drugs

EXAMPLES	1 List prices and revenues	2 Estimated population size <i>As of 2022</i>	3 Clinical significance	4 Administration logistics and timing	5 Future pipeline developments to watch
GLP-1 agonists for weight loss ¹	\$16.2K per patient ² \$25B sales est. for 2028	142M (eligible)	Improvement to weight loss treatments	<ul style="list-style-type: none"> • Ongoing weekly injections • Patient-administered 	<ul style="list-style-type: none"> • May be used to reduce BMI to qualify for surgery • FDA approval for oral versions likely by end of 2023
Leqembi (lecanemab) for Alzheimer’s	\$26.5K per patient ³ \$3.1B sales est. for 2028	100K (eligible)	New treatment to slow cognitive and functional decline	<ul style="list-style-type: none"> • Ongoing biweekly infusions • Provider-administered 	<ul style="list-style-type: none"> • Eli Lilly expected to submit bid for approval of Alzheimer’s treatment donanemab in 2023
CAR T-cell therapies for blood disorders	\$373K per patient \$6B sales est. for 2026	2,000 (treated from 2019 – January 2022)	Improvement in short-term and long-term cancer remission	<ul style="list-style-type: none"> • One-time gene therapy infusion • Provider-administered 	<ul style="list-style-type: none"> • Decision on cell-based gene therapy to treat sickle cell disease and beta thalassemia expected in early 2024
Hemgenix gene therapy for hemophilia B	\$3.5M per patient \$44M sales est. for 2028	3,300 (eligible)	New treatment to replace regular prophylactic infusions	<ul style="list-style-type: none"> • One-time gene therapy infusion • Provider-administered 	<ul style="list-style-type: none"> • Gene therapy Roctavian approved by FDA in June 2023 for adults with severe hemophilia A

1. Such as Saxenda (liraglutide), Wegovy (semaglutide).

2. Annually, for semaglutide.

3. Annually, for lecanemab.

See additional sources slide f or sources.

Drug categories favor different players and capabilities

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



Example capabilities needed for delivery

Treatment planning

support to navigate patient demand

Referral management

into specialized treatment centers

Specialized care

to manage risks and complications

Care management

to coordinate follow-up and support care

Care monitoring

of treatment response and side effects

Data collection infrastructure

to enable performance-related reimbursement



Emerging business dynamics to watch



Non-traditional players circle business opportunities

B2C digital health vendors such as Ro and Sequence advertise ability to help with coverage of GLP-1 agonists for weight loss

Growth in private equity investment in infusion centers as Alzheimer's MABs emerge



Scale of complexity and cost requires specialized access management

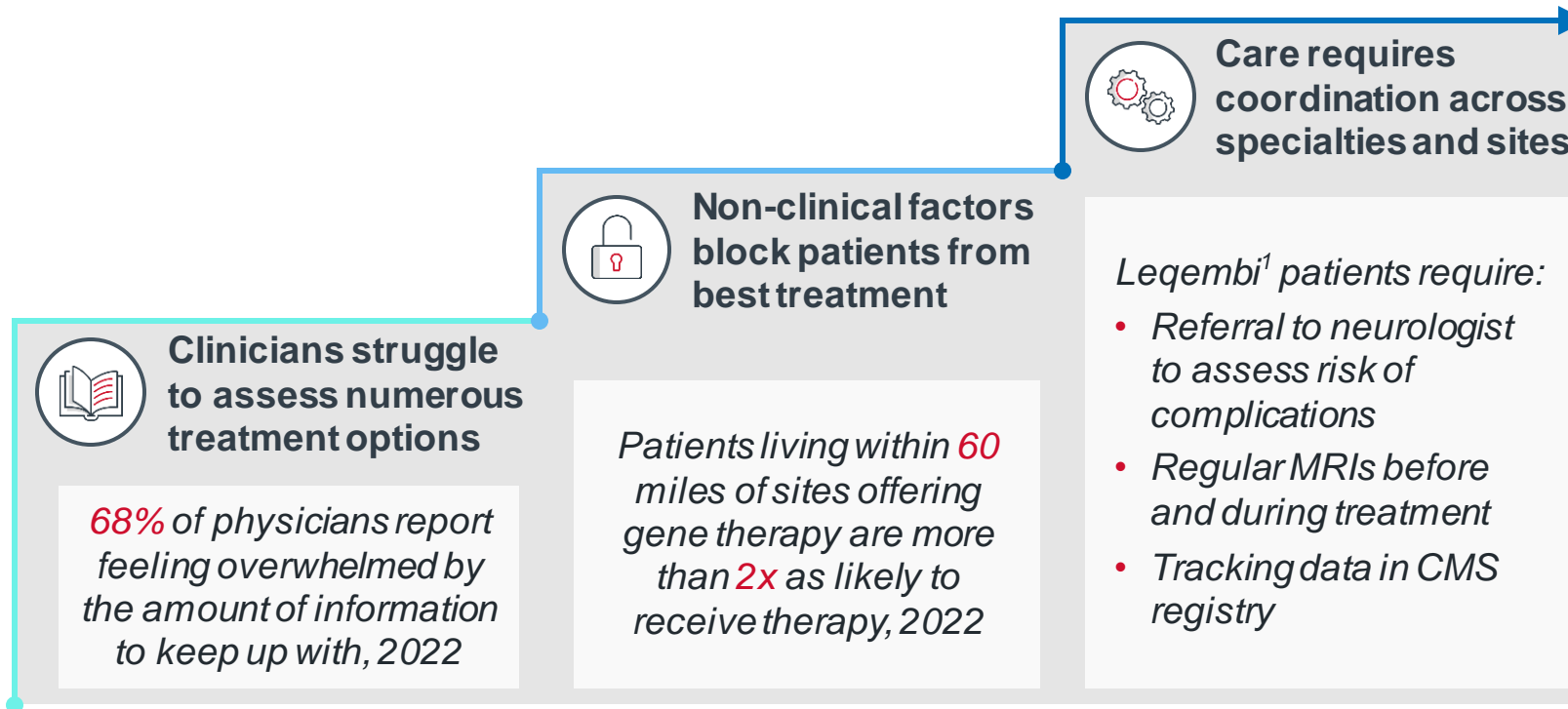
Specialized cancer centers needed to manage CAR-T complications and run clinical trials

Designated entity must gather data to execute outcomes-based contracts offered by Hemgenix manufacturer

See additional sources slide f or sources.

Clinicians face increasing complexity in decision-making

Personalized medicine becoming more clinically possible, but operationally difficult



LEARNINGS FROM MEDICAL ONCOLOGY

Infrastructure we're likely to see more of

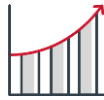
- Organizational governance for formulary decisions, prescribing guidelines, and clinical pathways
- Emphasis on real world evidence
- Clinical decision-support technology
- Shared decision-making tools
- Expert consults and hardwired referral pathways
- Patient navigation and coordination

1. Medication used to treat Alzheimer's disease.

See additional sources slide f or sources.

Treatments getting harder for purchasers to manage

Plan sponsors grapple with challenges that come with emerging high-cost therapies



Over-use concerns

Purchaser concerns

How can I counter over-optimism and experimental use cases to target only beneficiaries most likely to benefit?



Performance uncertainty

How do I know the effects of this expensive treatment will last when it's relatively new?



Actuarial uncertainty

How can I predict which rare diseases with costly treatments will show up in my beneficiary pool when the populations are so small?



Payment timing

What if I pay a large upfront cost for a medication and the beneficiary leaves my pool before I see any TCOC reductions?

Purchaser strategies

Heavier scrutiny on coverage decisions

Exploring alternative financing models

Source: "Out of Reach? New models for financing and providing rare disease treatment could make for a sustainable system for patients and employers," Leaders Edge, May 2020.

Purchasers turn to old tools to balance access and cost...

Greater scrutiny expands use of familiar strategies to regulate access



Formulary exclusions

What do we cover?

10x

Increase in unique products excluded by top three PBMs, 2014 to 2022

47%

Excluded medicines with no therapeutically equivalent drugs on the market, 2022



Utilization management

Who do we cover it for?

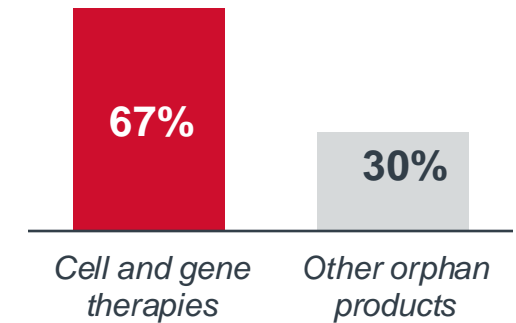
9 of 17

Largest insurers restrict Wegovy¹ beyond FDA label, Dec 2022

14 of 19

Medicaid coverage policies reviewed restrict Zolgensma² beyond FDA label, June 2023

Coverage restrictions by largest commercial health plans, April 2020

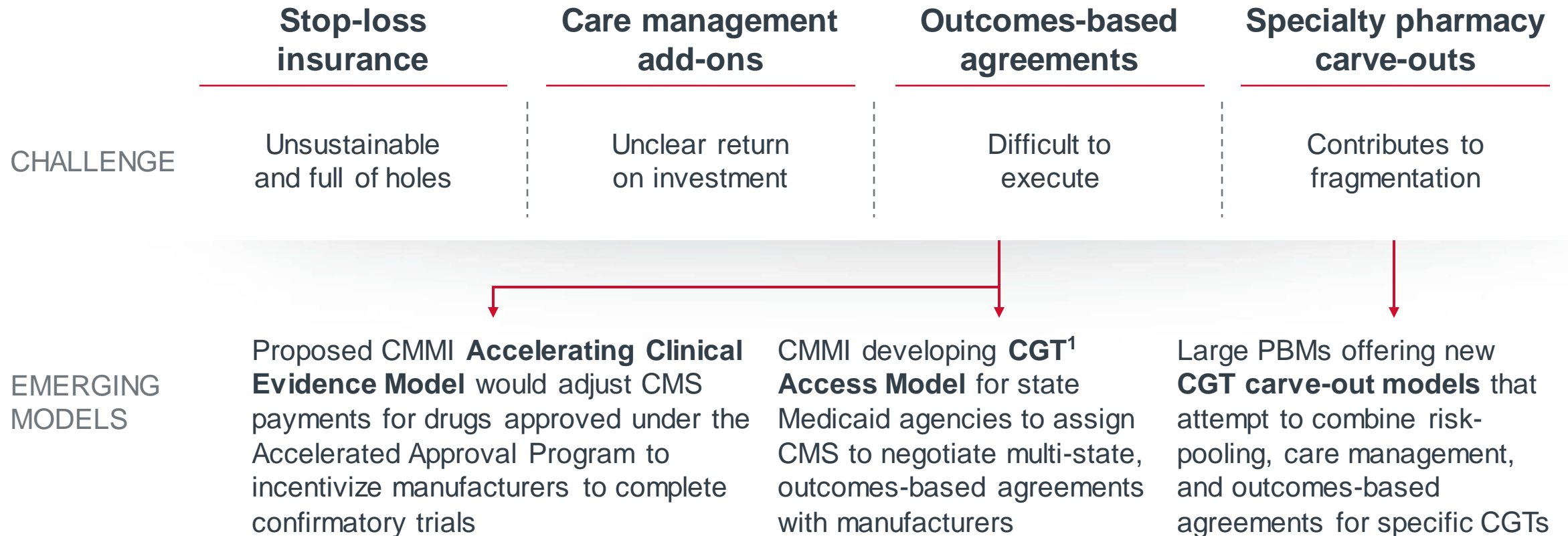


1. Semaglutide (weight management medication).

2. Prescription gene therapy for children under two with spinal muscular atrophy.

Sources: 2023 Benefit Design Report, PSG, June 2023; "Medicare Officially Limits Coverage of Aduhelm to Patients in Clinical Trials," NY Times, April 2022; "Variation in market access decisions for cell and gene therapies across the United States, Canada, and Europe," Tunis et al., December 2021; "Medicaid coverage practices for approved gene and cell therapies: Existing barriers and proposed policy solutions," Allen et al., June 2023; "PBMs, insurers restrict Ozempic, Wegovy, weight loss drug access," Modern Healthcare, May 2023.

...but explore alternative models to manage drug costs



1. Cell and gene therapy .

Source: "CMMI Drug Pricing Model Concepts," Avalere, February 2023.

The future of...



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The state of the healthcare industry in 2024

1

Industry snapshot

A moment of instability

- Poor outlook for patient health and industry performance
- Challenging business operating environment

2

Purchaser disruption

Government-led scrutiny

- Overall public coverage growth despite Medicaid whiplash
- Tightening MA business model
- Employer coverage balancing act harder with fiduciary rules
- Sweeping policy changes to pharmaceutical business



TODAY'S
QUESTION

How will
the industry
prepare
versus
react?

3

Strategic paradigms

The future of longstanding shifts

- **Delivery infrastructure** will evolve into ecosystems focus
- **Care team roles** will shift with new tech capabilities
- **Treatment economics** will adapt to high-cost drugs



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