The State of the Healthcare Industry Heading Into 2024

How to prepare for the future of longstanding paradigm shifts

Aaron Mauck, PhD
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

**STAYING BAD**

- **Behavioral health needs**
  - 11% in 2019
  - 39% in 2020
  - 32% in 2021
  - 32% in 2022

- **Undetected cancer**
  - YOY\(^1\) change in colorectal cancer diagnoses
  - 2018: 17%
  - 2019: 9%
  - 2020: -14%
  - 2021: -9%

- **Missed prevention**
  - Change in vaccines claims\(^2\) from 2019
  - Q4 2020: 26%
  - H1 2021: 38%

- **Cost avoidance**
  - 2021: 26%
  - 2022: 38%

- **Aggression**
  - 2021: 22%
  - 2022: 48%

**GETTING WORSE**

- **Americans reporting they or family postponed care due to costs**
  - n=1,020 adults in 2022
  - 2021: 26%
  - 2022: 38%

- **Nurses reporting more workplace violence**
  - n=2,575 nurses in 2022
  - 2021: 22%
  - 2022: 48%

Source:
1. Year-over-year.
2. As a percent of claims in corresponding month of 2019 for recommended vaccines.

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Advisory Board interviews and analysis.
A poor report card for our overall performance

Declining quality outlook

19% Increase in adverse events resulting in permanent/severe harm or death

38% Increase in maternal mortality deaths per 100,000 live births

11% Increase in percent of nurses who are not satisfied with the quality of care they can provide in their current job

73% Adults believe the healthcare system is not meeting their needs

Looming spending pressures

Annual growth in health expenditures per capita


1. Projected.
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**
- **Medicare Advantage business model squeeze**
- **Pharmaceutical business regulatory overhaul**
- **Employer benefits fiduciary pressure**

### Key Figures

- **7.4M**
  - Medicaid terminations completed as of September 2023

- **$4.7B**
  - Estimated reduction in Medicare Advantage plan annual revenues from 1.12% effective rate cut for 2024

- **$98.5B**
  - Expected Medicare savings from drug price negotiation, over the next ten years

- **8.5%**
  - Projected increases in health insurance costs for employers for 2024 benefits

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

<table>
<thead>
<tr>
<th>Segment</th>
<th>Change in Enrollment</th>
<th>Percentage Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer</td>
<td>-6.7M (-4%)</td>
<td></td>
</tr>
<tr>
<td>Individual</td>
<td>-3.5M (-2%)</td>
<td></td>
</tr>
<tr>
<td>Managed Medicaid</td>
<td>5.8M (44%)</td>
<td></td>
</tr>
<tr>
<td>State Medicaid</td>
<td>7.4M (56%)</td>
<td></td>
</tr>
<tr>
<td>Managed Dual Eligible</td>
<td>1M (5%)</td>
<td></td>
</tr>
<tr>
<td>Medicare Advantage</td>
<td>2.4M (71%)</td>
<td></td>
</tr>
<tr>
<td>Traditional Medicare</td>
<td>-3.5M (-11%)</td>
<td></td>
</tr>
<tr>
<td>Medicare Advantage</td>
<td>4.7M (22%)</td>
<td></td>
</tr>
</tbody>
</table>

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.

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

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

CVS/Aetna
- Acquires Oak Street Health for $10.6B
- Acquires Amedisys for $3.3B

UnitedHealthGroup
- Acquires LHC Group for $5.4B

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

Humana
- Announces exit from employer insurance by 2024

…despite increased scrutiny on MA business model

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

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

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

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

Humana
- Announces exit from employer insurance by 2024

Projected payments¹ to plans $943B

Projected payments¹ to plans $473B

SAMPLE CORPORATE MOVES

SAMPLE PAYMENT CHANGES

1. For Medicare Part A and Part B benefits.
2. Risk Adjustment Data Validation.
3. Direct and indirect renumeration (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

<table>
<thead>
<tr>
<th>Product Type</th>
<th>2011</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPO</td>
<td>55%</td>
<td>42%</td>
</tr>
<tr>
<td>Non-SNP HMO</td>
<td>29%</td>
<td>41%</td>
</tr>
<tr>
<td>Special Needs Plans (SNPs)</td>
<td>12%</td>
<td>17%</td>
</tr>
</tbody>
</table>

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

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

Employers feel cost pressure and face new rules

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

### Annual change in total health benefit cost per employee

<table>
<thead>
<tr>
<th>Year</th>
<th>Change (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>3.9%</td>
</tr>
<tr>
<td>2015</td>
<td>3.8%</td>
</tr>
<tr>
<td>2018</td>
<td>3.6%</td>
</tr>
<tr>
<td>2019</td>
<td>3.0%</td>
</tr>
<tr>
<td>2020</td>
<td>2.4%</td>
</tr>
<tr>
<td>2021</td>
<td>6.3%</td>
</tr>
<tr>
<td>2022</td>
<td>3.2%</td>
</tr>
<tr>
<td>2023</td>
<td>5.4%</td>
</tr>
</tbody>
</table>


### 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.
Drugs poised to eclipse the strategic focus on procedures

**Innovation activity targets rare, untreated conditions**

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:

\[
\text{Retail prescriptions} + \text{Provider-administered drugs} = \sim 20\% \text{ OF PREMIUM} = \text{Hospital operating costs}
\]

**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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\(1\). Hospital outpatient department.

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Weight management drugs driving industry frenzy

Promising clinical effects

15-20%
Average total body weight loss on semaglutide

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 criteria

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 medications

Medicaid covers select weight loss drugs in 16 states

Medicare Advantage can cover weight management drugs as an additional benefit, 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

<table>
<thead>
<tr>
<th>EXAMPLES</th>
<th>Capabilities needed for delivery</th>
<th>Business dynamics to watch</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLP-1 agonists for weight loss</td>
<td>• Treatment planning: Prescribing support to help providers navigate demand&lt;br&gt;• Care management: Coordination of behavioral and nutritional support; weight management support if patient discontinues drug</td>
<td>B2C digital health vendors such as Ro and Sequence advertise coaching and ability to work with consumer's insurance for coverage</td>
</tr>
<tr>
<td>Leqembi (lecanemab) for Alzheimer’s</td>
<td>• Care monitoring: Coordination of regular MRIs to monitor for brain swelling&lt;br&gt;• Data collection: Infrastructure to collect data on drug’s performance to obtain Medicare reimbursement</td>
<td>Growth in private equity investment in infusion centers potentially indicative of increased competition for drug administration</td>
</tr>
<tr>
<td>CAR T-cell therapies for blood disorders</td>
<td>• Specialized care: Acute care to manage risks and complications&lt;br&gt;• Referral management: Referral pathways into specialized cancer centers</td>
<td>Specialized cancer centers needed to manage complications and often serve as clinical trial sites</td>
</tr>
<tr>
<td>Hemgenix gene therapy for hemophilia B</td>
<td>• Care management: Coordination of weekly follow-up to monitor liver enzymes and factor IX activity&lt;br&gt;• Specialized care: Designation as Hemgenix administration center</td>
<td>Manufacturer, payer, and provider will need to designate entity to gather data to execute outcomes-based contracts offered by manufacturer</td>
</tr>
</tbody>
</table>

Examples of delivery and competitive considerations for sample emerging high-cost drugs.
Managed navigation strategies offer a compromise

Possible employer approaches to benefits strategy

- **DELEGATE**
  - **Offload benefits**: Move employees to defined contribution
  - **Continue status quo**: Continue to absorb or offload increased costs
  - **Manage navigation**: Actively embrace programs to manage patient care choices
  - **Scrutinize partners**: Monitor data to mandate fair payment and TCOC performance

**Large employer benefit strategy offerings**

- **n=135 large employers, covering over 18M lives**

**Center of Excellence (COE) programs**

- Transplants: 79%
- Bariatric surgery: 69%
- Cancer: 50%
- Musculo-skeletal: 47%
- Cardio-vascular: 46%

**Advanced primary care approaches**

- Virtual comprehensive primary care/virtual first: 37%
- Onsite/near-site health centers: 32%
- Steerage to physician-based ACOs/HPNs\(^1\): 36%
- Directly contracted primary care: 20%


National players build cross-continuum reach

Giants pursue selective consolidation across care delivery and financing

<table>
<thead>
<tr>
<th>INSURANCE</th>
<th>PHARMACY</th>
<th>CONVENIENCE CARE</th>
<th>MEDICAL GROUP</th>
<th>HOME CARE</th>
<th>AMBULATORY SURGERY</th>
<th>HOSPITAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covered lives</td>
<td>Locations</td>
<td>Clinics</td>
<td>Clinics</td>
<td>Patients</td>
<td>Facilities</td>
<td>Facilities</td>
</tr>
<tr>
<td>UHG</td>
<td>51M</td>
<td>61M</td>
<td>Digital</td>
<td>140</td>
<td>1,600²</td>
<td>12.5M</td>
</tr>
<tr>
<td>CVS</td>
<td>39M</td>
<td>110M</td>
<td>9.9K</td>
<td>1.1K</td>
<td>170</td>
<td>2.5M</td>
</tr>
<tr>
<td>Humana</td>
<td>17M</td>
<td>9M</td>
<td>9K</td>
<td>571</td>
<td>680²</td>
<td>350K</td>
</tr>
<tr>
<td>Walgreens</td>
<td>9K</td>
<td>571</td>
<td>680²</td>
<td>350K</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amazon</td>
<td>188</td>
<td>680²</td>
<td>350K</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Relative scale of asset | Large | Medium | Small | None or partnership

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

<table>
<thead>
<tr>
<th>Corporate ambition</th>
<th>Cross-sell adjacent services</th>
<th>Contain senior care value</th>
<th>Control network operations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Walgreens, Amazon, CVS</td>
<td>Humana, CVS, UHG</td>
<td>UHG, KP (Kaiser Permanente)</td>
</tr>
</tbody>
</table>

- **Cross-sell adjacent services**: Walgreens, Amazon, CVS
- **Contain senior care value**: Humana, CVS, UHG
- **Control network operations**: UHG, KP (Kaiser Permanente)

**Hurdles to overcome**

- **Patient conversion, reimbursement economics, partner coordination**
- **Patient attribution, clinician enablement, scaling, government scrutiny, quality**
- **Patient engagement, multi-payer partnerships, referral discipline, cost management, antitrust**

**Impact on industry**

<table>
<thead>
<tr>
<th>Higher</th>
<th>Lower</th>
</tr>
</thead>
<tbody>
<tr>
<td>• <strong>Consumer data</strong>: Insights and cross-sell opportunities increase value of data as a product (and invite scrutiny)</td>
<td>• <strong>Attributed lives</strong>: Competition forces offensive moves by systems and plans</td>
</tr>
<tr>
<td>• <strong>Top-of-license care</strong>: Pharmacist and APP roles expand to connect care</td>
<td>• <strong>Care continuum assets</strong>: Bidding war from pressure to exert vertical control</td>
</tr>
<tr>
<td>• <strong>Community hubs</strong>: Retail becomes an essential ambulatory partner</td>
<td>• <strong>Payment models</strong>: Virtuous cycle reinforces value-based care adoption</td>
</tr>
<tr>
<td>• <strong>Entangling alliances</strong>: Market leaders demand partnerships that exclude rivals</td>
<td>• <strong>Mergers and coalitions</strong>: Reactionary consolidation by local systems and plans</td>
</tr>
<tr>
<td>• <strong>Performance scrutiny</strong>: Cost and quality data integration enable targeted referrals</td>
<td>• <strong>Volumes redistribution</strong>: Network managers swing provider market share depending on strategic partner alignment</td>
</tr>
</tbody>
</table>
Corporate strategies adapt to local market dynamics

Demographics and population growth attract competing corporate players

- 36 UHG’s OptumCare, LHC Group locations
- 63 Humana’s CenterWell primary and home health locations
- 18 CVS’ Oak Street Health clinics
- 121 Walgreens’ VillageMD locations
- 24 Amazon’s One Medical and Iora locations
- 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 MPP
- 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
- Consolidated physician market
- Fragile health system finances
- Growing senior demographic well-positioned for Medicare Advantage strategy
- Prevalence of sophisticated risk-based physician practices
- State pressure on spend and access
- Limited risk-based payment

Sources: See additional sources slide.

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.
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

SCAN and CareOregon to form HealthRight Group

SCAN Group
CA-based nonprofit health plan with 275k members,

CareOregon
OR-based nonprofit health plan with 515k members,

HealthRight Group:
$6.8B nonprofit health plan with 800k members allowing for each plan to retain autonomy

BCBSVT to affiliate with BCBSM group of companies

BCBSM
MI-based nonprofit health plan with 5.2M members,

BCBSVT
VT-based nonprofit health plan with 200k members

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

Elevance to acquire BCBSLA

Elevance
Multistate for-profit Blues operator with 47.3M members

BCBSLA
LA-based nonprofit health plan with 1.9M members

EXAMPLES

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

### Ambulatory connectivity

**Goal:** Expand top-of-funnel reach

*Establish multichannel connections from convenient care options*

**PARTNER**

- CVS & RUSH
  - RUSH, a Chicago-area AMC, participates in CVS ACO’s first ACO REACH² program
  - Other examples: Walgreens partners with Northwell on digital and pharmacy services

### Synthetic scale

**Goal:** Restructure costs

*Integrate a complementary operator for technical resources and expertise*

**Goal:** Replicate provider-sponsored plan aligned delivery model across markets

**Goal:** Access premium dollar

**Goal:** Increase market power

**CONSOLIDATE**

- Optum Market Performance Partnership (MPP)
  - 7 systems partner to transfer enterprise services to Optum across non-clinical functions
  - Other examples: Atrium and Best Buy partner to improve care at home

- Risant Health
  - $5B acquisition for Kaiser to expand hospital footprint and for Geisinger to access capital
  - Other examples: Intermountain acquires SCL and enables Select Health expansion

- UnityPoint & Presbyterian
  - $11B system formed to expand health plan reach and improve cost management challenges
  - Other examples: Advocate Aurora and Atrium merge to form Advocate Health

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

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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

KP (owner)
Regional nonprofit health plan
and system across 8+ states

Risant
$5B nonprofit subsidiary formed by KP in April 2023 providing VBC enablement services

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


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?
Systems’ survival strategies leaves access gaps

Health systems make tough choices…

- **Rationalized services**
  - Decreases in the number of psychiatric beds
  - 163M
- **Service line closures**
  - Hospitals closed their labor and delivery departments, 2011-2022
  - 217
  - Women of childbearing age live in maternity care deserts
  - 7M
- **Hospital closures**
  - Rural hospital closures, 2016-2021
  - 150
  - Rural U.S. areas designated as medically underserved
  - 80%

…other sectors step in with patchwork solutions

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

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

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


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

<table>
<thead>
<tr>
<th>PATIENT CARE JOURNEY</th>
<th>WIDESPREAD</th>
<th>EMERGING</th>
<th>EXPLORATORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient triage and intake</td>
<td>Asynchronous chatbots</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detection and screening</td>
<td>Imaging interpretation</td>
<td>Speech and text analytics</td>
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</tr>
<tr>
<td>Diagnosis</td>
<td></td>
<td>Diagnostic decision support systems</td>
<td></td>
</tr>
<tr>
<td>Quality and risk gap detection</td>
<td></td>
<td>Predictive analytics alerts</td>
<td></td>
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<tr>
<td>Treatment planning</td>
<td>Condition-specific order sets</td>
<td>Treatment recommendation systems</td>
<td></td>
</tr>
<tr>
<td>Visit documentation</td>
<td>Ambient listening and transcription</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prior auth processing</td>
<td></td>
<td>Automated drafting</td>
<td></td>
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<tr>
<td>Direct treatment</td>
<td>Robotic surgery</td>
<td>Digital therapeutics</td>
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<td>Medication management</td>
<td>Mobile app reminders</td>
<td>Smart pill ingestible sensors</td>
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<td>Supplies distribution</td>
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<td>Robotic assistants</td>
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<tr>
<td>Patient management</td>
<td>Smart beds</td>
<td>Robotic assistants</td>
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<td>Care management planning</td>
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<td>Automated drafting</td>
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<td>Patient education</td>
<td>Educational videos</td>
<td>Shared-decision making platforms</td>
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<tr>
<td>Follow-up care</td>
<td>RPM^2</td>
<td>Asynchronous chatbots</td>
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</tbody>
</table>

**Source:**

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1. Dragon Ambient eXperience.  
2. Remote patient monitoring.
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 EHR\(^1\)?)

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

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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?
Thank you for your time.

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