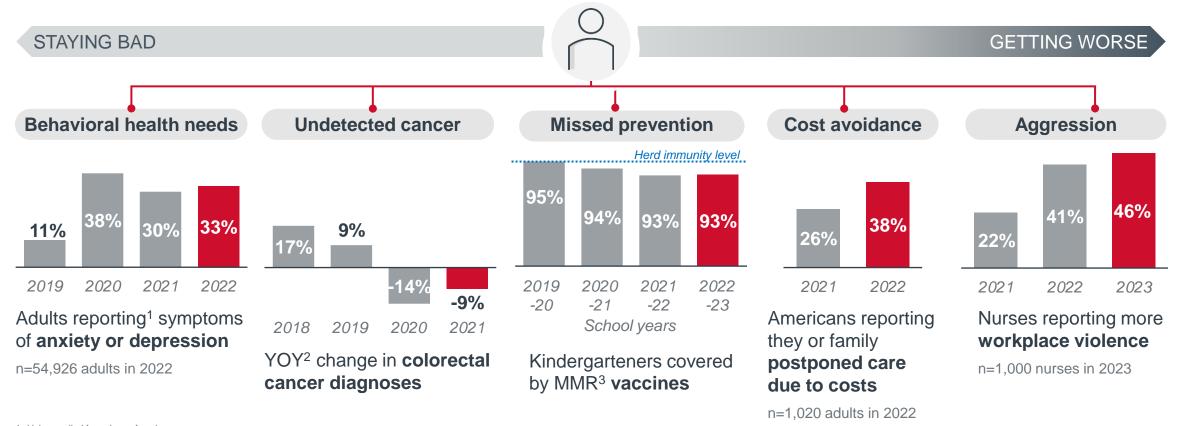


# The State of the Healthcare Industry in 2024

How to prepare for the future of longstanding paradigm shifts

### The patients are not alright

#### Characteristics of the patient emerging from the pandemic era



Source: "Coverage with Selected Vaccines and Exemption from School Vaccine Requirements Among Children in Kindergarten — United States, 2022–23 School Year," CDC, November 2023; "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 report shows increased rates of workplace violence experienced by nurses," National Nurses United, February 2024; "Declining Cancer Screenings Suggest Increased Burden of Disease," Trilliant Health, April 2022.



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

<sup>2.</sup> Year-over-year.

<sup>3.</sup> Measles, mumps, and rubella.

### 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

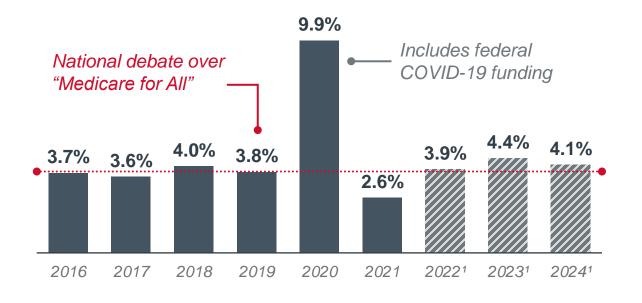


Adults believe the healthcare system is **not meeting their needs** 

n=2,519 adults in March 2023

### **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.

1. Projected.



### Tough economic climate even less forgiving

#### Difficult economic context for businesses in general

#### **High operating costs**

**▲** 4.5%

June 2023 YOY1

Employment cost index

#### **High borrowing costs**

▲ 525 BPS

May 2023 over March 2022

Federal interest rate

#### Volatile stock market

-19.4%

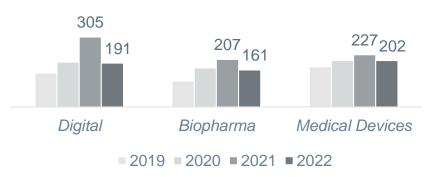
2022 YOY 2023 YTD to June

+15.9%

Change in S&P 500 value

#### **Tough capital culls ventures**

Number of strategic investment deals



#### **Cumulative impact on healthcare incumbents**



Continued investment income losses **▼** 185%

Decline in investment income for 10 large nonprofit health systems (2022 YOY)

- Capital and labor costs challenge traditional growth mechanisms
- Ventures desperately seek established partners to prove business viability

Source: "ECI," BLS, April 2023; "2023 Q1 digital health funding," Rock Health, April 2023; "What's Behind Losses At Large Nonprofit Health Systems?" Health Affairs, March 2023; "2023 Healthcare and Life Sciences Investment Outlook, "KPMG, January 2023: "Bright Health to sell Medicare Advantage arm, focus on NeueHealth, "Modern Healthcare, April 2023: "Pear Therapeutics sold for parts at \$6 million auction," STAT, May 2023: NYSE 2023.



1. Year-over-year.

### Purchaser and payment policy dynamics at a glance









Medicaid coverage whiplash

Medicare Advantage business model squeeze

Pharmaceutical business regulatory overhaul

**Employer benefits** fiduciary pressure

20.1M

Medicaid terminations completed as of April 11, 2024

\$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

Source: "Medicaid Enrollment and Unwinding Tracker," KFF, March 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.



### Disruptions will trickle down to all—and raise tensions

### Medicaid coverage whiplash

Redeterminations reduce enrollment and create churn

Reduced premium revenues payer mix and more bad debt

Disrupted care management

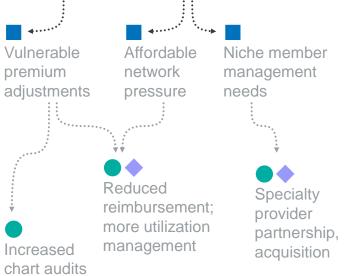
and patient

engagement

### Medicare Advantage business model squeeze

More audits and limits on plan revenue staples

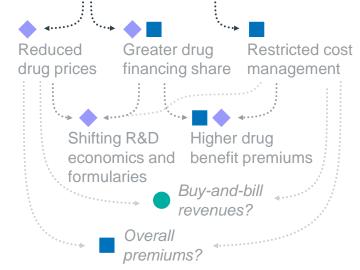
Enrollment shifts toward opposite PPOs and SNPs



### Pharmaceutical business regulatory overhaul

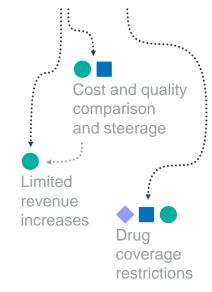
Medicare drug payment a restructuring b

Growing scrutiny and limits on PBM business practices



### **Employer benefits** fiduciary pressure

Premium spikes and ERISA changes spur cost control activism



CARE DELIVERY ORGANIZATIONS



◆ LIFE SCIENCES AND TECHNOLOGY FIRMS



### Industry snapshot

### A moment of instability

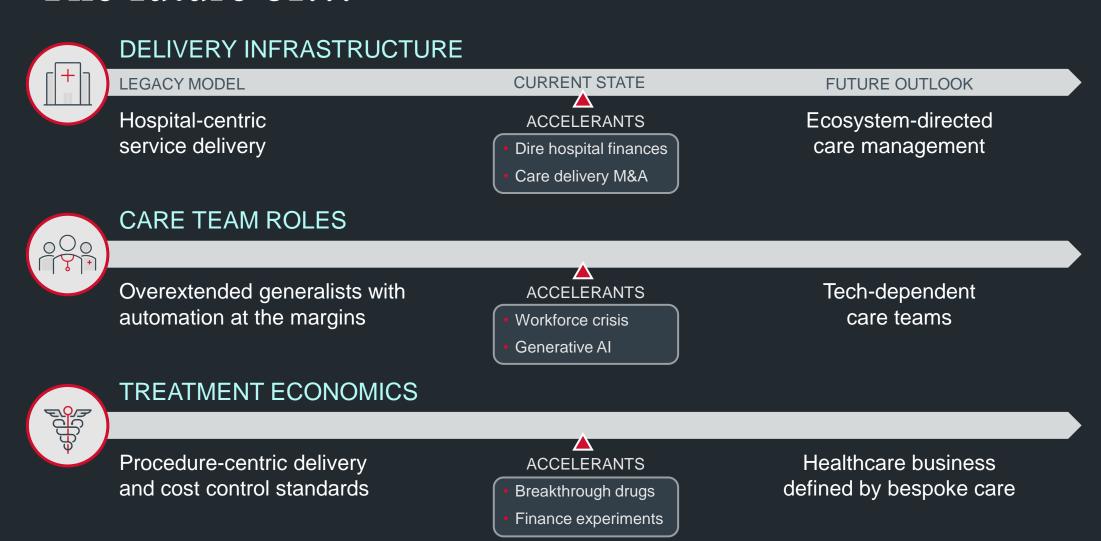
- The industry has emerged from a shared catastrophe into a time of instability. Poor patient health, declining clinical quality, and higher overall health spending form a concerning foundation.
- As these factors combine with a tightening economy and impending disruption, healthcare leaders are anxious about changes that lie ahead.

### **Government-led scrutiny**

- Despite the pending enrollment mix whiplash, overall public payer coverage share will grow steadily—and with it, scrutiny over the industry's vulnerabilities.
- Regulators have already made policy steps aiming to tighten the MA business model, heighten employer fiduciary responsibilities, and overhaul the pharmaceutical business —putting the industry in the crosshairs.

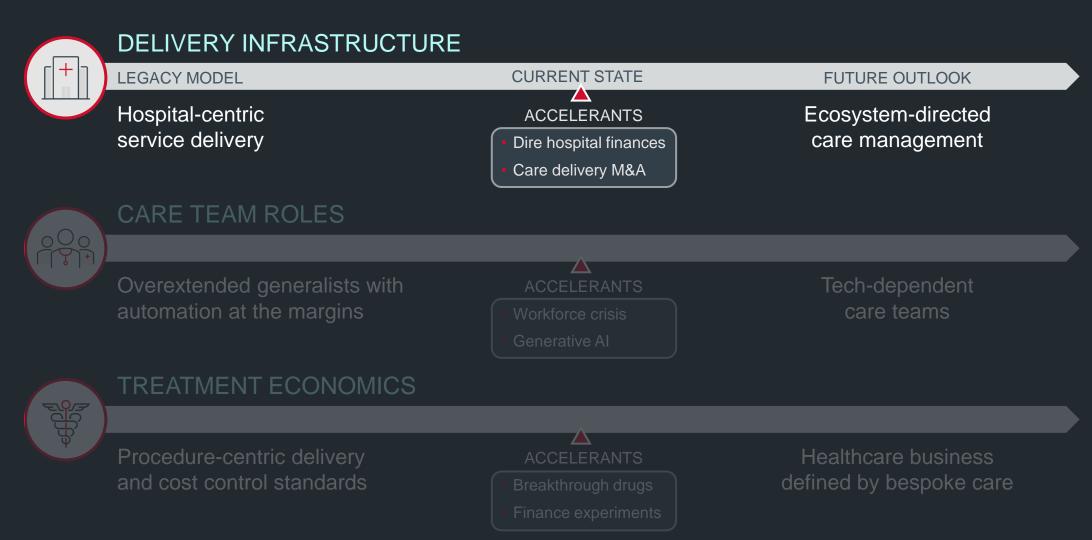


### The future of...





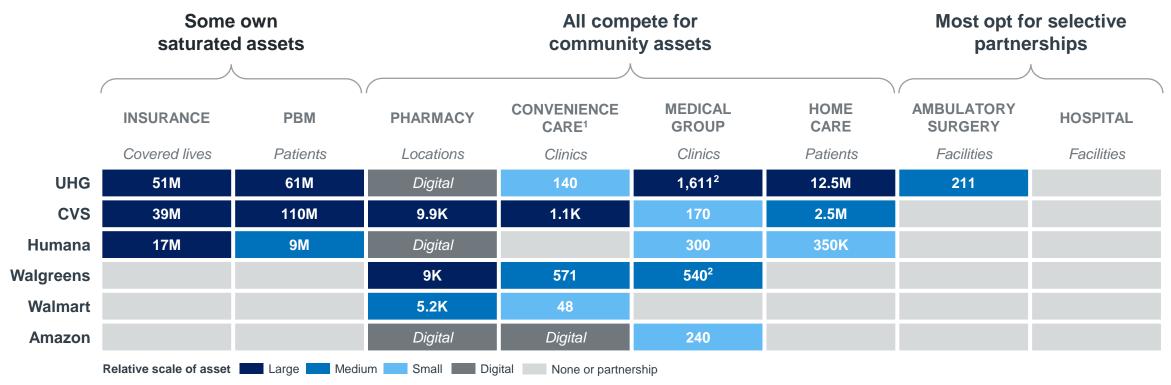
### The future of...





### Ecosystem players build cross-continuum reach

Corporations pursue selective consolidation across care delivery and financing (as of March 2024)



Sources: See additional sources slide



<sup>1.</sup> Convenience care includes retail care and urgent care centers

<sup>2.</sup> Includes primary and specialty care practices. Walgreens' medical group total excludes the 140 clinics they've closed as of 3/28/24

### Players draw from mix of assets to serve unique goals

### Top inferred strategic goals of ecosystem players



**Cross-sell services** Walgreens, Amazon, CVS

Cross-sell across a diverse healthcare portfolio to capture lowacuity care and pharmacy spend

Hurdles to overcome

**Ambition** 

Patient conversion, reimbursement economics, partner coordination



Capture senior care value Humana, CVS, UHG

Coordinate risk-based care across settings in a market to manage longitudinal senior health

Patient attribution, clinician enablement, scaling, government scrutiny, quality



**The Oversee network operations** UHG, KP (Kaiser Permanente)

Equip value-based physician groups and select hospital operators to steer patients to preferred cost-effective sites

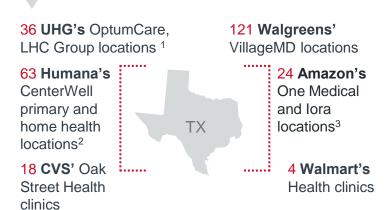
Patient engagement, multi-payer partnerships, referral discipline, cost management, antitrust



### Corporate strategies adapt to local market dynamics

As of July 2023

**Demographics and population growth** attract competing corporate players



Self-contained market with high patient churn

Growing senior demographic well-positioned

#### 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



#### MARKET FACTORS

- Consolidated physician market
- Prevalence of sophisticated risk-based physician practices

- Fragile health system finances
- State pressure on spend and access
- Limited risk-based payment

for Medicare Advantage strategy



Sources: See additional sources slide

<sup>1. 27</sup> LHC Group locations and 9 Optum Care locations.

<sup>2. 26</sup> primary care locations and ~37 home health locations.

<sup>3. 18</sup> One Medical locations and 6 lora locations.

<sup>4.</sup> Market Performance Partnership

### Systems' survival strategies leaves access gaps

#### Health systems make tough choices...





Decreases in the number of psychiatric beds

Rationalized services

Americans live in mental healthcare health professional shortage areas, September 2023



Service line closures

Hospitals closed their labor and delivery departments, 2011-2022

Women of childbearing age live in maternity care deserts, 2022



**Hospital** closures Rural hospital closures, 2016-2021

Rural U.S. areas designated as medically underserved, 2019

- 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

Venture funding in digital behavioral health, 2018-2022

Behavioral health startup companies created, 2018-July 2023



#### Women's health startups aimed at employers

**Venture funding** of fertility technology start-ups, 2022<sup>1</sup>

Increase in PE acquisitions 143% of OB/GYN practices and fertility services companies<sup>2</sup>



#### Rural care limited and often focuses on preventative care

**Dollar General** mobile 3 health clinics to improve rural care, January 2023

Projected VillageMD locations 300+ in medically underserved communities by 2027

See additional sources slide for sources



### The future paradigm of delivery infrastructure

While large conglomerates make a final push for remaining assets across the care continuum, health systems seek financial survival pathways through partnerships. These moves will cement a shift away from hospital-centric service delivery toward ongoing care management directed by the ecosystem level—upending performance standards and creating distinct challenges for patient access.



### The future of...

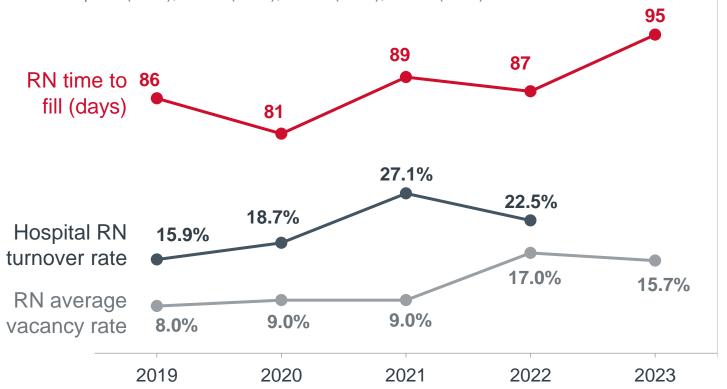




### Labor challenges persist as AI increases in popularity

#### Turnover, vacancy rates, and time to fill remain elevated

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





"Microsoft Invests \$10 Billion in ChatGPT Maker OpenAI"

BLOOMBERG, JAN '23

"ChatGPT reaches **100 million users** two months after launch"

THE GUARDIAN, FEB '23

"Big majority of doctors see upsides to using health care AI"

AMA, JAN '24

Source: "National Health Care Retention Report," NSI, 2020, 2021, 2022, 2023; "ChatGPT reaches 100 million users two months after launch," The Guardian, February 2023; "Microsoft to Invest \$10 Billion in ChatGPT Maker OpenAI (MSFT)," Bloomberg, January 2023; "Big majority of doctors see upsides to using health care AI," AMA, January 202



### Tech increasingly capable of more tasks, often with AI

#### Adoption of select clinical workforce technologies across the patient care journey

		WIDESPREAD	EMERGING	EXPLORATORY		
IIEN I CARE JOURNEY	Patient triage and intake		Asynchronous chatbots			
	Detection and screening	Imaging interpretation		➤ Speech and text analytics O	Study found that GPT-3 accurately detected Alzheimer's 80% of the	
	Diagnosis		Diagnostic decision	time from spontaneous speech		
	Quality and risk gap detection	Predictive analytics a	lerts			
	Treatment planning	Condition-specific ord	ler sets	➤ Treatment recommendation systems	Nuance DAX¹ saves 7 minutes per physician encounter by translating conversations into clinical notes	
	Visit documentation	Ambient listening and	transcription O			
	Prior auth processing	Automated drafting				
	Direct treatment	Robotic surgery		➤ Digital therapeutics O	EndeavorRx first FDA-approved video game digital therapeutic for children with ADHD	
	Medication management	Mobile app reminders		➤ Smart pill ingestible sensors		
	Supplies distribution		➤ Robotic assistants			
₹ K	Patient management		Smart beds	➤ Robotic assistants O	In 2019, 10% of Japanese elder-	
	Care management planning			→ Automated drafting	care institutions had introduced care robots	
	Patient education	Educational videos	Shared-decision making platforms			
/	Follow-up care	→ RPM <sup>2</sup>	Asynchronous chat	tbots		

<sup>1.</sup> Dragon Ambient eXperience.



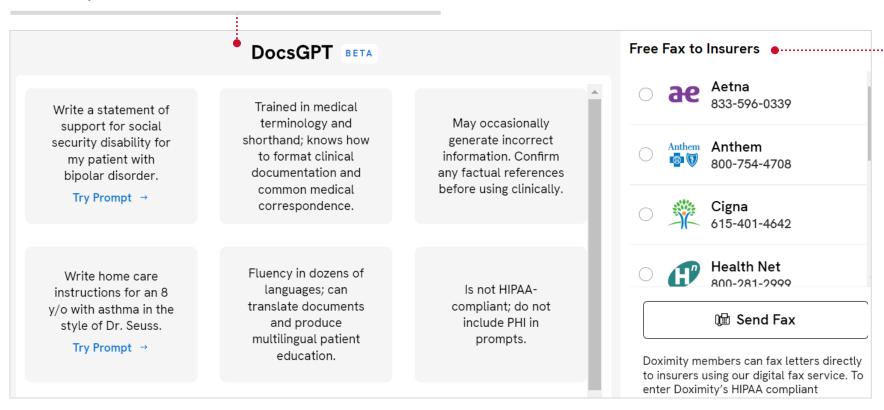
<sup>2.</sup> Remote patient monitoring.

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 Al 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...



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

Source: "Docs GPT," Doximity, 2023.



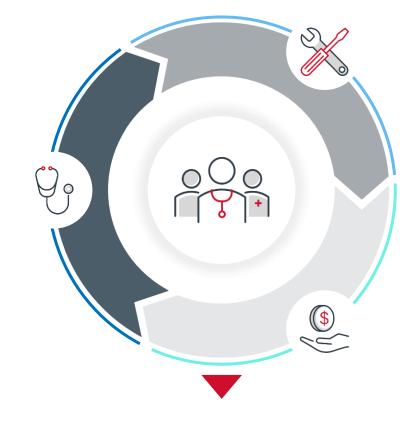
### Tech can't replace humans, but it will change their roles

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 Al-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?



### The future paradigm of care team roles

Rapid, chaotic advances in technology (especially AI) create new opportunities to address persistent workforce challenges. In the quest for top-of-license care, clinician roles must evolve—possibly to the point where *clinicians* will complement technology. The new era of tech enablement will open the door to greater efficiency, entrench inequities, and shift control over care decisions.



### The future of...





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



#### THERAPUETIC DRUGS

#### **EPISODIC PROCEDURES**



Innovation activity enables lower-acuity care

Drug spend catching up to hospital operating costs

Transparency data and outpatient shift pressure rates

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

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Hospital operating costs



58%

Average price for a procedure in an ASC relative to the same in a HOPD<sup>1,</sup> 2022

Source: Costs for Common Health Care Procedures Significantly Higher When Performed in Hospital Outpatient Departments. Blue Health Intelligence, 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 semaglutide<sup>1</sup>



### Rising patient demand

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 criteria<sup>2</sup>

- 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 2023-2024

- Direct-to-consumer companies Ro and WeightWatchers enter weight loss medication space
- 51% of surveyed health plans do not cover weight loss medications<sup>3</sup>
- **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 for obesity alone, but CMS now allows Part D coverage for cardiovascular treatment



### 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	Estimated population size As of 2022	Clinical significance	Administration logistics and timing	Future pipeline developments to watch
GLP-1 agonists for weight loss <sup>1</sup>	\$16.2K per patient <sup>2</sup> \$25B sales est. for 2028	142M (eligible)	Improvement to weight loss treatments	<ul><li>Ongoing weekly injections</li><li>Patient-administered</li></ul>	<ul> <li>May be used to reduce BMI to qualify for surgery</li> </ul>
Leqembi (lecanemab) for Alzheimer's	\$26.5K per patient <sup>3</sup> \$3.1B sales est. for 2028	100K (eligible)	New treatment to slow cognitive and functional decline	<ul><li>Ongoing biweekly infusions</li><li>Provider-administered</li></ul>	<ul> <li>Eli Lilly's Alzheimer's treatment donanemab pending FDA decision in 2024</li> </ul>
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> <li>One-time gene therapy infusion</li> <li>Provider-administered</li> </ul>	<ul> <li>Gene therapy Casgevy approved by FDA to treat sickle cell disease and beta-thalassemia in early 2024</li> </ul>
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><li>One-time gene therapy infusion</li><li>Provider-administered</li></ul>	<ul> <li>Pfizer's hemophilia B gene therapy fidanacogene elaparvovec pending FDA decision in 2024</li> </ul>

See additional sources slide for sources.

<sup>1.</sup> Such as Saxenda (liraglutide), Wegovy (semaglutide).

<sup>2.</sup> Annually, for semaglutide.

<sup>3.</sup> Annually, for lecanemab.

### Envisioning a healthcare business defined by drugs

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Illustrative comparison of business characteristics for procedure and drug treatments

	Ŝ
ITIONAL	PROCE



TRADITIONAL PROCEDURES	CATEGORY	BESPOKE THERAPIES	
Improve safety and reduce invasiveness	Innovation impact	Address conditions without available or effective treatme	
IP/OP, ASC, surgical specialty office	Delivery options	IP/OP, infusion center, home delivery, patient administration, medical specialty office	
Pre-operative consults and prep, rehab, ongoing monitoring	Wraparound care	Pre-treatment diagnostic testing, concurrent symptom and side effect care, ongoing treatment, monitoring, and care	
<ul> <li>Relatively binary with predictable benchmarks established</li> <li>Market-based competition over efficiency</li> </ul>	Cost and quality competition	<ul> <li>Standards still unfolding on a gradient</li> <li>Experimentation with new models and new players</li> </ul>	
<ul><li>Prior authorization</li><li>Provider selection</li></ul>	Cost management strategies	<ul> <li>Prior authorization or formulary design</li> <li>Provider selection</li> <li>Drug/dose/modality selection</li> <li>Drug sourcing mandates</li> </ul>	
<ul><li>One-time</li><li>Provider payment</li><li>(Increasingly) bundled patient cost sharing</li></ul>	Financing	<ul> <li>Ongoing or one-time</li> <li>Provider, pharmacy, and PBM payment</li> <li>Ongoing patient cost sharing</li> </ul>	

27

### Treatments getting harder for purchasers to manage

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



#### Over-use 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

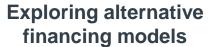
What if I pay a large upfront cost for a medication and the beneficiary leaves my pool before I see any TCOC reductions?

Purchaser strategies

Purchaser

concerns

**Heavier scrutiny on** coverage decisions



Source: "Out of Reach? New models for financing and providing rare disease treatment



### Clinicians face increasing complexity in decision-making

#### Personalized medicine becoming more clinically possible, but operationally difficult



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Non-clinical factors
block patients from
best treatment



Clinicians struggle to assess numerous treatment options

68% of physicians report feeling overwhelmed by the amount of information to keep up with, 2022 Patients living within 60 miles of sites offering gene therapy are more than 2x as likely to receive therapy, 2022



Care requires coordination across specialties and sites

#### Leqembi<sup>1</sup> patients require:

- Referral to neurologist to assess risk of complications
- Regular MRIs before and during treatment
- Tracking data in CMS registry



### 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.

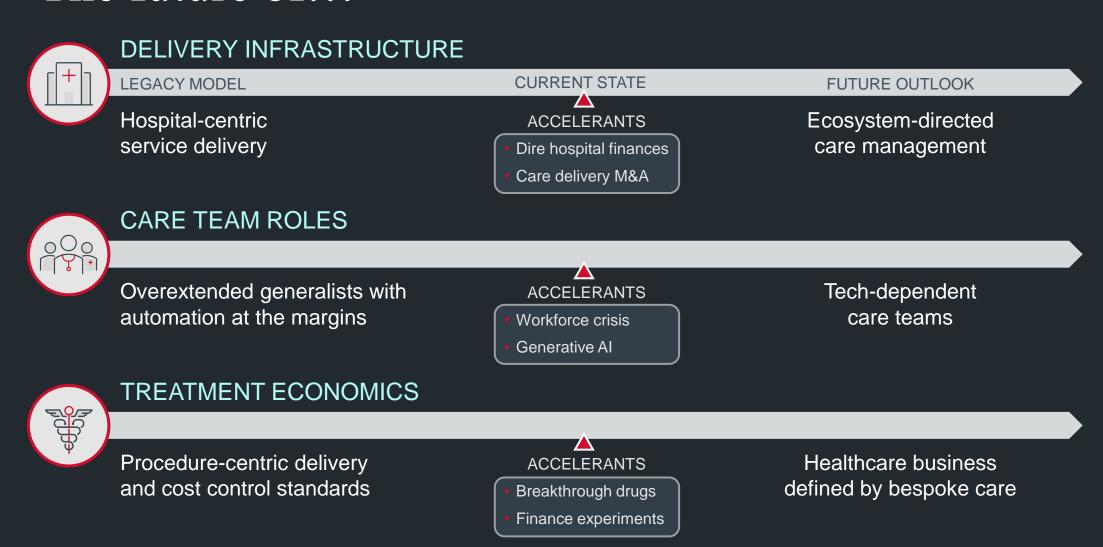
See additional sources slide for sources.

### The future paradigm of treatment economics

Emerging, diverse drugs with high prices and complicated delivery logistics will require new investments in delivery infrastructure and spur experimental financial models—and ultimately eclipse the legacy focus on procedures. Strategy in a pharmaceutical-based healthcare system will diverge from current tactics, open more paths for power grabs or consolidation, and exacerbate patient access disparities.



### The future of...





### Strategic paradigms: The future of longstanding shifts

Delivery infrastructure will evolve to have an ecosystems focus, care team roles will shift with new tech capabilities, and treatment economics will adapt to high-cost drugs. These paradigm shifts aren't new, but their recent acceleration gives the industry an opportunity to anticipate the future trajectory—and embrace new, elevated responsibilities to support the broader industry.





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