



**NANBEN - North American Nagarathar  
Business & Entrepreneurship Network**

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# US Healthcare Industry Investment Primer

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August 29, 2020

# About Us



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**Work:**

CIO at a healthcare organization

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**Native:**

Alavakottai

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**Family:**

Lives with wife Lakshmi, and 2  
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**Passion:**

Running, Charity (Education)

Global Economics, Finance

# About this Seminar

- **Objective:**

- Create a broad awareness of the US healthcare industry, key players, and equity (stock) investment opportunities.

- **Exclusion:**

- International, Biotech, Life sciences, Consumer tech
- Not about business ventures

- **Agenda:**

- Birds eye view
- Deep Dive
  - Payers
  - Providers
  - Pharmacy
  - Technology
- Trends: COVID-19
- Summary: Key success factors

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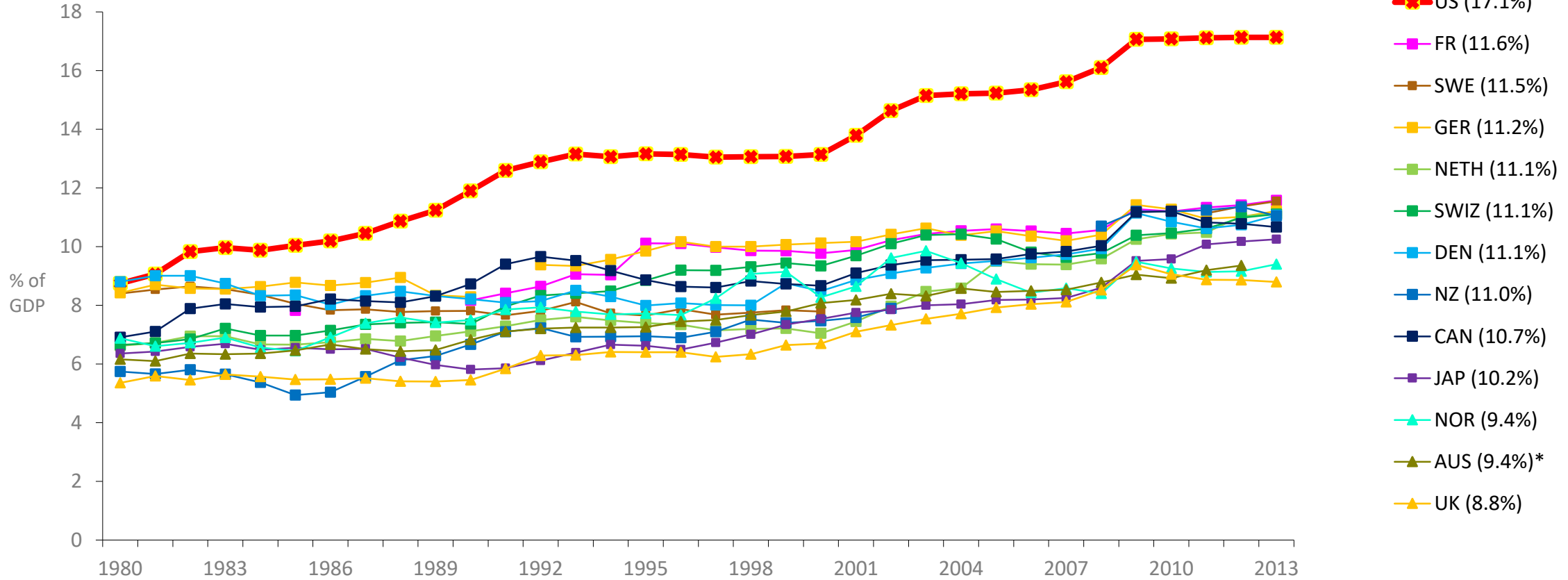
# US Healthcare: Birds Eye View

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# US Healthcare Spend

Twice the OECD average, growing at 5% a year, declining quality of health

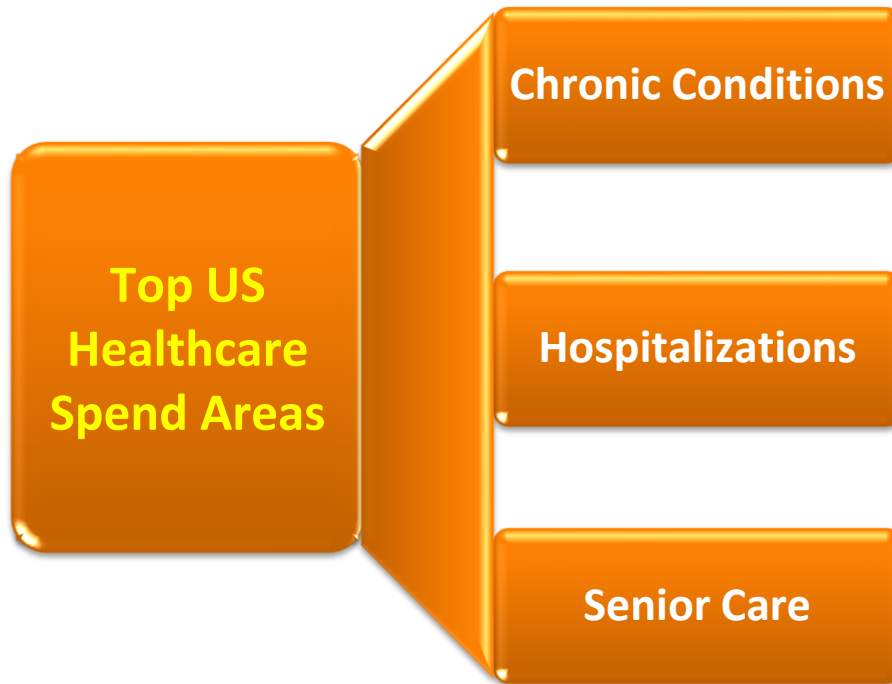
### Healthcare Spending, as a % of GDP, 1980 – 2013



Notes: GDP refers to gross domestic product. Dutch and Swiss data are for current spending only and exclude spending on capital formation of healthcare providers.  
Source: OECD Health Data 2015.

# Where does the money go?

\$3.6 trillion  
\$11,172 per person  
17.7% of GDP  
Grew 4.6% in 2018<sup>7</sup>



- 45% of population have 1+ chronic disease<sup>1</sup>
- 70% of deaths<sup>1</sup>
- 86% of spend (\$2.5 trillion)<sup>2</sup>



- 1/3 of total spend (\$972 billion)<sup>3</sup>
- 30-day readmission = 20% for Medicare patients<sup>4</sup>
- 10%, \$30Bn, preventable<sup>5</sup>

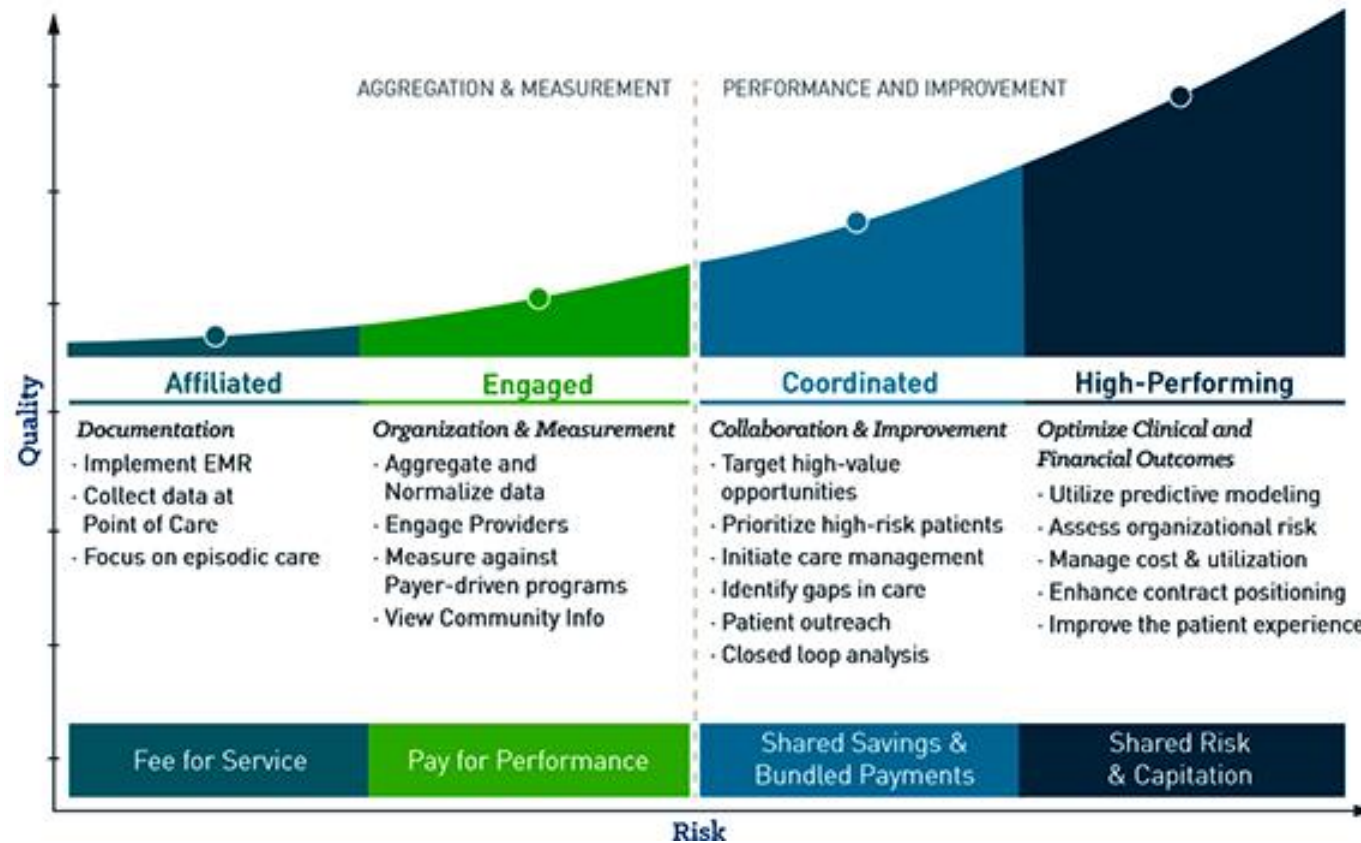


- Medicare (65+ federal program) spending = \$619 billion<sup>3</sup>
- 13% of population = Baby Boomers, 65+, highest ever & growing



<sup>1</sup> "The Growing Crisis of Chronic Disease in the United States", [http://www.fightchronicdisease.org/sites/default/files/docs/GrowingCrisisofChronicDiseaseintheUSfactsheet\\_81009.pdf](http://www.fightchronicdisease.org/sites/default/files/docs/GrowingCrisisofChronicDiseaseintheUSfactsheet_81009.pdf)  
<sup>2</sup> "Chronic Disease Overview", <http://www.cdc.gov/chronicdisease/overview/>  
<sup>3</sup> "National Health Expenditures 2014 Highlights", <https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/downloads/highlights.pdf>  
<sup>4</sup> Data Shows Reduction in Medicare Hospital Readmission Rates During 2012, <https://www.cms.gov/mmrr/Briefs/B2013/mmrr-2013-003-02-b01.html>  
<sup>5</sup> [http://healthaffairs.org/healthpolicybriefs/brief\\_pdfs/healthpolicybrief\\_102.pdf](http://healthaffairs.org/healthpolicybriefs/brief_pdfs/healthpolicybrief_102.pdf), <https://www.hcup-us.ahrq.gov/reports/statbriefs/sb72.pdf>  
<sup>6</sup> <http://journalistsresource.org/studies/society/public-health/trends-statistics-relating-us-seniors-elderly-census-bureau-2014-report>  
<sup>7</sup> <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical>

# So, what are we doing about it?



**Volume**  
**Treatment**



**Value**  
**Prevention**

# Sector Analysis - Health Care

## Defensive

- Defensive play to help weather economic downturns.

Business  
cycle



## Consistent

- Consistently best-performing sector
- Growth - aging baby-boomer population
- Continued development in medical technology

Economic  
Prospects



## Highly Regulated

- HIPAA Data privacy protections
- CMS regulations
- Transparency
- Patient Protection (surprise medical billing)

Regulatory  
environment



## High Barriers

- Network effect
- Certificate of Need Laws
- High capital costs

Barriers to  
entry





# Fundamental Analysis

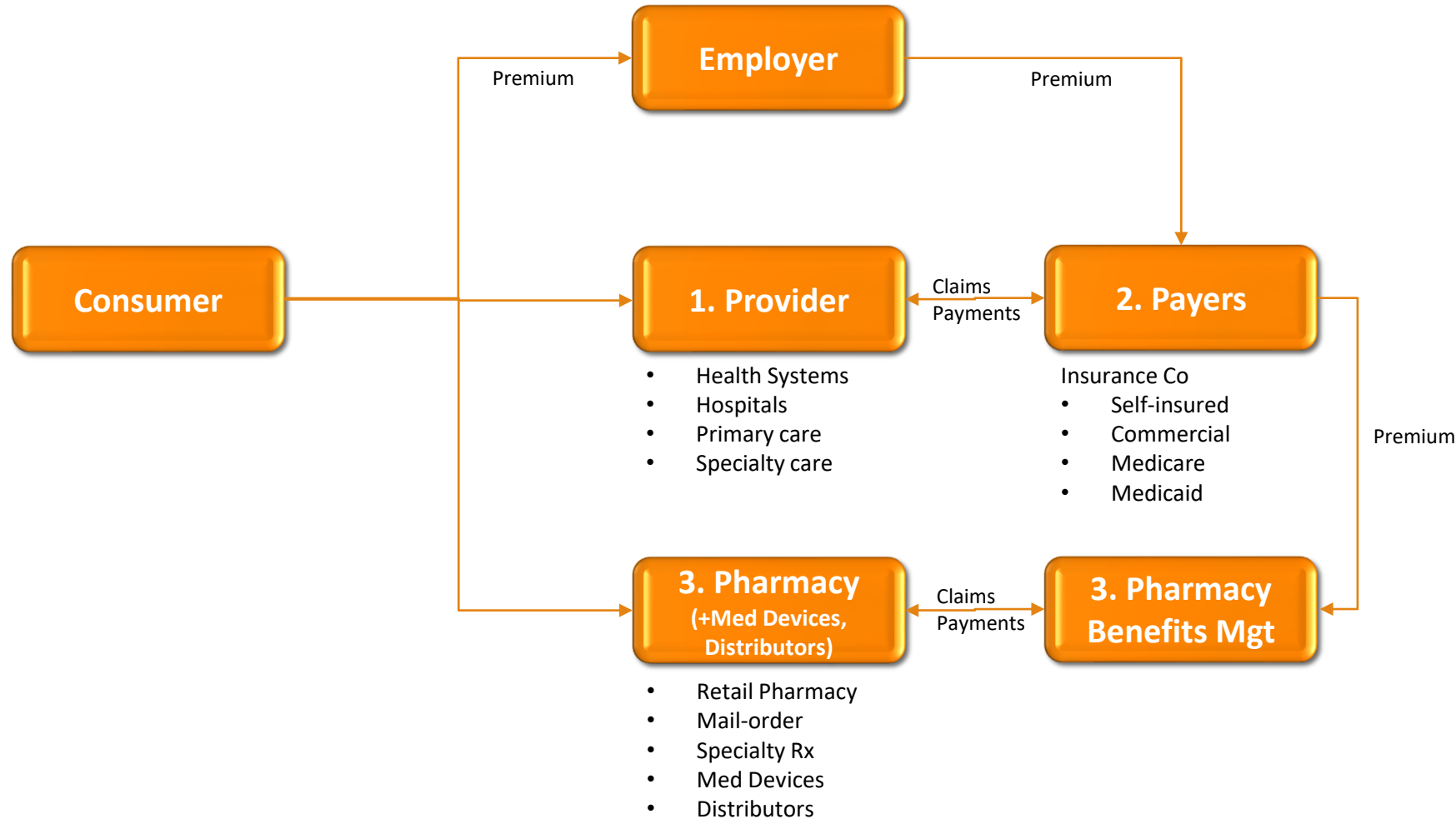
## Business Analysis:

- Business model
- High quality financial reports
- Income statement
- Balance Sheet
- Cash flow statement
- Company's Earnings
- Unusual/extraordinary items

## Financial Ratio Analysis:

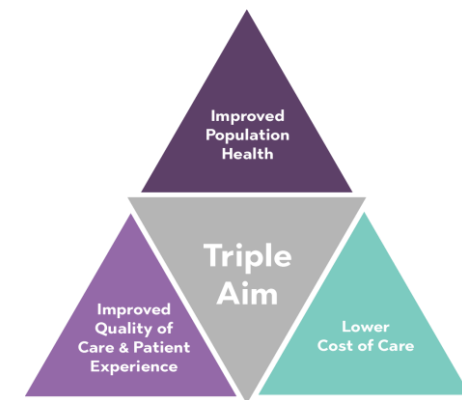
<u>Category</u>	<u>Ratio</u>	<u>Measure</u>
Liquidity	<b>Current Ratio</b>	Measures Ability to meet Short term Obligation
Solvency	<b>Debt to Equity</b>	Measures ability to meet long term obligations
Valuation	<b>Price to Earnings</b>	Measures performance on a per share basis
Profitability	<b>Gross Profit Margin</b>	Measures profitability related to assets

# US Healthcare Industry Overview



## 4. Technology

- Claims Software
- Electronic Medical Records
- Analytics
- TeleHealth
- IOT / Remote monitoring



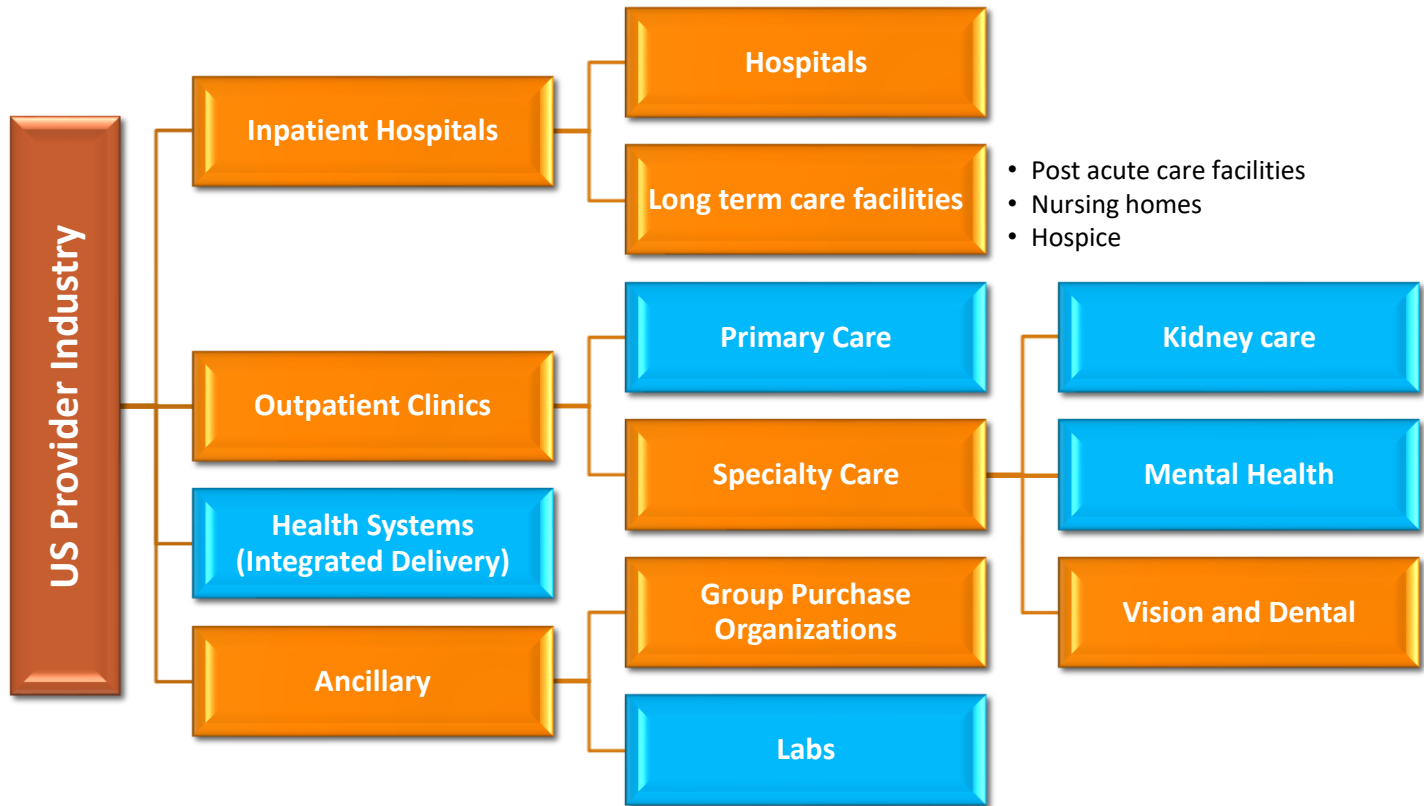
# Section 1: Providers

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Provide healthcare services.

Eg: hospitals, doctors, specialists, and everything in-between

# Providing the healthcare services



- **Health Systems**
  - Hospital, Primary, Specialty, Post acute
  - Brand, Financial stability, ACO
  - Eg: Mayo Clinic, Partners Healthcare, Geisinger
- **Labs:**
  - 80Bn industry
  - Labs - Labcorp and Quest command 15%, outside Hospitals (68%)
- **Primary Care**
  - Better health at lower cost
  - Not institutionalized
  - Direct primary care – different model
  - Eg: One Medical, Oak St Health
- **Kidney Care**
  - ESRD - need for ongoing dialysis
  - \$25Bn industry
  - Eg: Da Vita, Fresenius
- **Mental Health**
  - 20% of US: Depression, anxiety, SUD
  - Therapists not covered by insurance
  - Eg: AbleTo (acquired by Optum)

# Financial Ratios - Providers

Name	Industry	Ticker	Stock Price	Market Cap (M)	Current Ratio	Debt / Equity	P/E	P/E (Fwd)	Gross Profit Margin	Revenue Growth	Comments
Mednax	Health System	NYSE:MD	19.31	1,617	1.79	219.8%	-1.32	14.19	24.2%	22.5%	NeoNatal Care.
HCA	Health System	NYSE:HCA	135.99	45,969	1.09	-1821.8%	13.56	12.65	36.8%	2.7%	Large Cap , High debt
Lab Corp	Lab	DB:LAB	174.85	14,527	1.12	96.8%	45.62	12.68	27.2%	1.6%	
Quest	Lab	NYSE:DGX	110.75	14,874	1.29	88.1%	21.22	13.93	34.2%	-0.5%	
One Medical	Primary Care	NASDAQGS:ONEM	29.14	3,678	7.50	76.5%	-37.26	-35.24	35.7%	28.1%	
Cardinal Health	Group Purchase Organization	NYSE:CAH	50.50	14,768	1.10	404.5%	-4.00	9.10	4.5%	5.1%	
McKesson	Group Purchase Organization	NYSE:MCK	153.87	24,956	1.00	173.7%	26.74	9.88	5.2%	6.2%	
DaVita	Kidney Care	NYSE:DVA	86.94	10,606	1.35	597.6%	12.99	12.80	31.0%	2.4%	37% market share. Executive order to shift dialysis patients from high-cost clinics to home care. Buffet investment.
Fresenius	Kidney Care	NYSE:FMS	42.25	24,694	1.01	111.1%	16.39	16.53	31.3%	7.2%	38% market share. German based. Executive order to shift dialysis patients from high-cost clinics to home care

New IPO: Oak St Health (Medicare)

Other Health Systems: Community Health Systems, Select Medical Holdings Corporation, Surgery Partners, Tenet Healthcare Corporation, Universal Health Services

<https://www.beckershospitalreview.com/hospital-management-administration/7-largest-group-purchasing-organizations-for-hospitals.html>

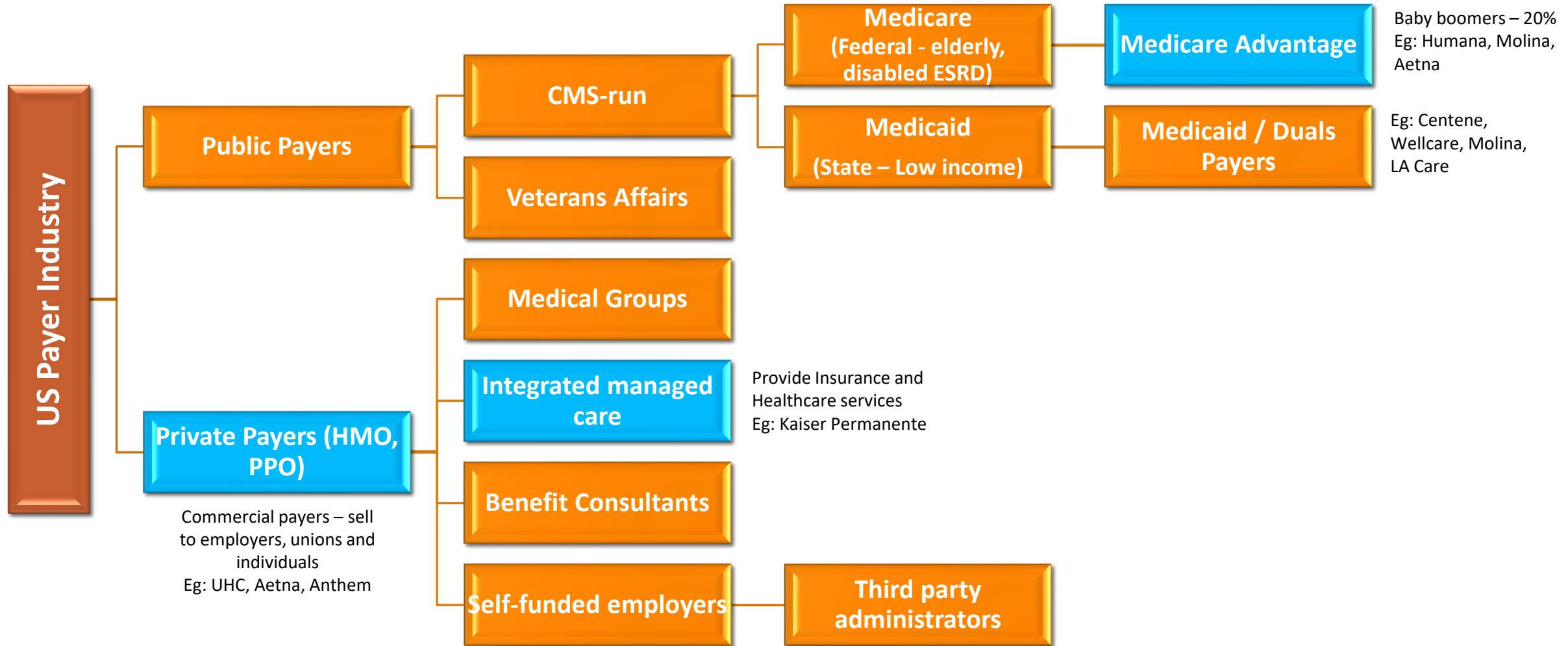
# Section 2: Payers

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Insurance companies

**Business model:** Manage healthcare risk. Profit from Premium vs claims.

# Making healthcare affordable



# Financial Ratios - Payers

Name	Industry	Member ship (M)	Ticker	Stock Price	Market Cap (M)	Current Ratio	Debt / Equity	P/E	P/E (Fwd)	Gross Profit Margin	Revenue Growth	Comments
<b>UnitedHealth Group</b>	Commercial, Government	49.5	NYSE:UNH	314.37	298,757	0.79	72.4%	17.35	18.56	26.4%	5.1%	Optum – Healthcare Services/tech, OptumRx (PBM)
<b>Anthem</b>	Commercial, Government	40.2	NYSE:ANTM	277.28	69,738	1.64	68.5%	11.75	12.29	26.4%	16.8%	Anthem acquired WellPoint
<b>CVS Health (Aetna)</b>	Commercial, Government	22.2	NYSE:CVS	63.21	82,723	0.98	135.3%	10.02	8.79	18.2%	16.3%	CVS (Pharmacy) acquired Aetna (Payor)
<b>Cigna</b>	Commercial, Government	17	NYSE:CI	181.15	66,518	0.83	78.5%	12.38	9.47	16.2%	50.8%	Acquired ESI (PBM), which acquired Medco (PBM)
<b>Centene</b>	Government	23	NYSE:CNC	60.48	35,046	1.22	71.2%	22.64	12.32	17.5%	32.1%	Centene acquired Wellcare
<b>Humana</b>	Government	16.6	NYSE:HUM	408.04	53,981	1.69	56.1%	15.41	21.66	19.4%	16.2%	
<b>Molina Healthcare</b>	Government	3.3	NYSE:MOH	183.82	10,901	1.88	102.3%	13.56	15.25	15.4%	-0.3%	Recent exits of CEO and CFO.



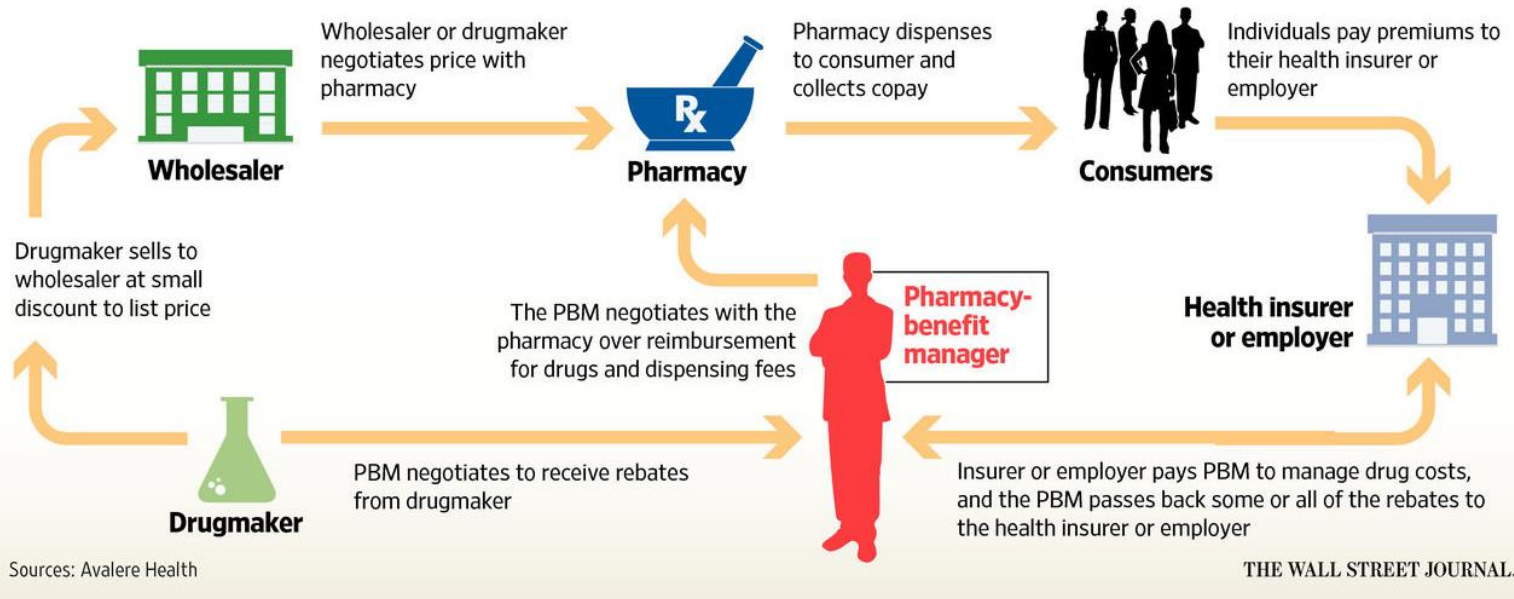
# Section 3: Pharmacy and Medical Devices

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# Pharmacy

## How Drug Distribution Works

A complex supply chain determines how prescription drugs are paid for in the U.S.



## Related industries:

- Medical devices (eg: Medtronic)
- Distributors (eg: AmeriSource Bergen)
- Mail Order pharmacies (eg: GoodRx, Walmart)
- Specialty Pharmacies (CVS, Walgreens)

# Financial Ratios - Pharmacy & Med Devices

Name	Industry	Ticker	Stock Price	Market Cap (M)	Current Ratio	Debt / Equity	P/E	P/E (Fwd)	Gross Profit Margin	Revenue Growth	Comments
CVS Health	Insurance, Pharmacy, Provider, PBM	NYSE:CVS	63.21	82,723	0.98	135.3%	10.02	8.79	18.2%	16.3%	CVS (Retail Pharmacy) acquired Caremark (PBM), Aetna (Payor)
Walgreens Boots Alliance	Pharmacy, PBM, Provider	NASDAQGS:WBA	38.76	33,587	0.69	201.5%	44.09	8.33	20.5%	1.8%	Acquired Boots Alliance (UK)
UnitedHealth	Insurance, Provider, PBM, Health care services, Analytics	NYSE:UNH	314.37	298,757	0.79	72.4%	17.35	18.56	26.4%	5.1%	Optum – Healthcare Services/tech, OptumRx (PBM)
Cigna	Insurance, PBM	NYSE:CI	181.15	66,518	0.83	78.5%	12.38	9.47	16.2%	50.8%	Acquired ESI (PBM), which acquired Medco (PBM)
Medtronic	Medical devices	NYSE:MDT	107.86	144,887	1.87	54.1%	28.78	27.46	66.3%	-8.9%	
AmerisourceBergen	Drug distribution	NYSE:ABC	97.55	19,914	0.98	120.9%	12.68	12.26	2.7%	5.1%	

Other companies: Magellan Health

# Section 4: Healthcare Tech

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# Healthcare Tech - Traditional

- **Claims Software:**

- Used by insurance companies
- Cognizant acquired TriZetto, which owns Facets, QNXT contribute to 80% of market share.
- Health Edge



- **Electronic Medical Records System (EMR):**

- EPIC, All scripts, Cerner, Nextgen, eClinicalWorks, Athena, Kareo
- Epic (Private) holds 28% market share of US hospital industry. Monop
- Upcoming vendors: Kareo (Private), Elation (Private).



- **Interoperability:**

- Ability to exchange info between systems. Continuity of care.
- Eg: Salesforce acquired Mulesoft, Redox Engine (Private), Bridge Connector (Private)

- **Analytics:**

- Population health, predictive analytics, risk stratification
- Eg: Health Catalyst

Healthcare Analytics Adoption Model

Level 8	Personalized Medicine & Prescriptive Analytics
Level 7	Clinical Risk Intervention & Predictive Analytics
Level 6	Population Health Management & Suggestive Analytics
Level 5	Waste & Care Variability Reduction

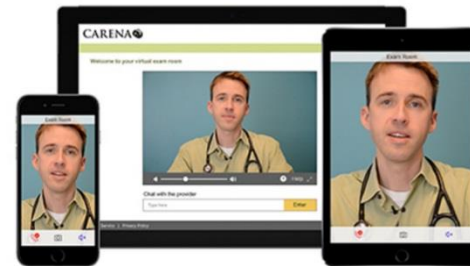
# Healthcare Tech - Innovation

- **Mobility**

- Consumerism: appt scheduling, meds, education
- Eg: Spruce, CirrusMD, Wellframe, Welltok

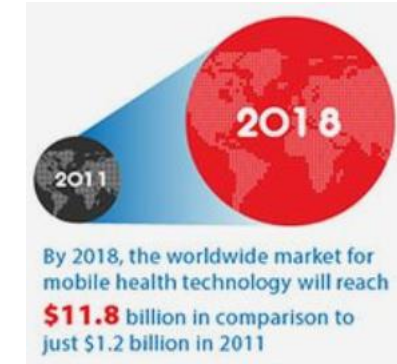
- **Tele visit**

- Video visit with provider, On demand healthare
- Eg: TeleDoc, Amwell, DrOnDemand, 98point6



- **Remote Monitoring**

- IOT, Chronic condition management
- Eg: Livongo, Vivify, Amada



**Connected Devices**  
BP, weight, blood glucose, pulse

# Financial Ratios – Health Care tech

Name	Industry	Ticker	Stock Price	Market Cap (M)	Current Ratio	Debt / Equity	P/E	P/E (Fwd)	Gross Profit Margin	Revenue Growth	Comments
<b>Cerner</b>	Provider software (EMR)	NASDAQGS:CERN	72.80	22,232	2.04	37.7%	42.07	25.26	81.9%	1.6%	Has some primary care clinics
<b>Cognizant</b>	Claims Mgt, IT Services	NASDAQGS:CTSH	67.69	36,704	2.66	31.6%	22.68	19.02	35.8%	1.8%	New CEO; Sr mgt exit Claims software; IT services
<b>Health Catalyst</b>	Analytics	NASDAQGS:HCAT	30.59	1,215	7.91	76.7%	-12.46	-41.90	48.9%	21.5%	SaaS
<b>Livongo</b>	Remote monitoring	NASDAQGS:LVGO	132.96	13,337	19.88	71.8%	-386.76	2130.11	75.2%	128.3%	
<b>Teladoc</b>	Tele Medicine	NYSE:TDOC	208.57	16,942	11.36	75.8%	-181.90	-153.31	63.5%	45.4%	Teladoc acquired Livongo
<b>Nuance</b>	Communications	NASDAQGS:NUAN	29.67	8,376	1.28	144.0%	46.24	34.60	60.6%	12.5%	

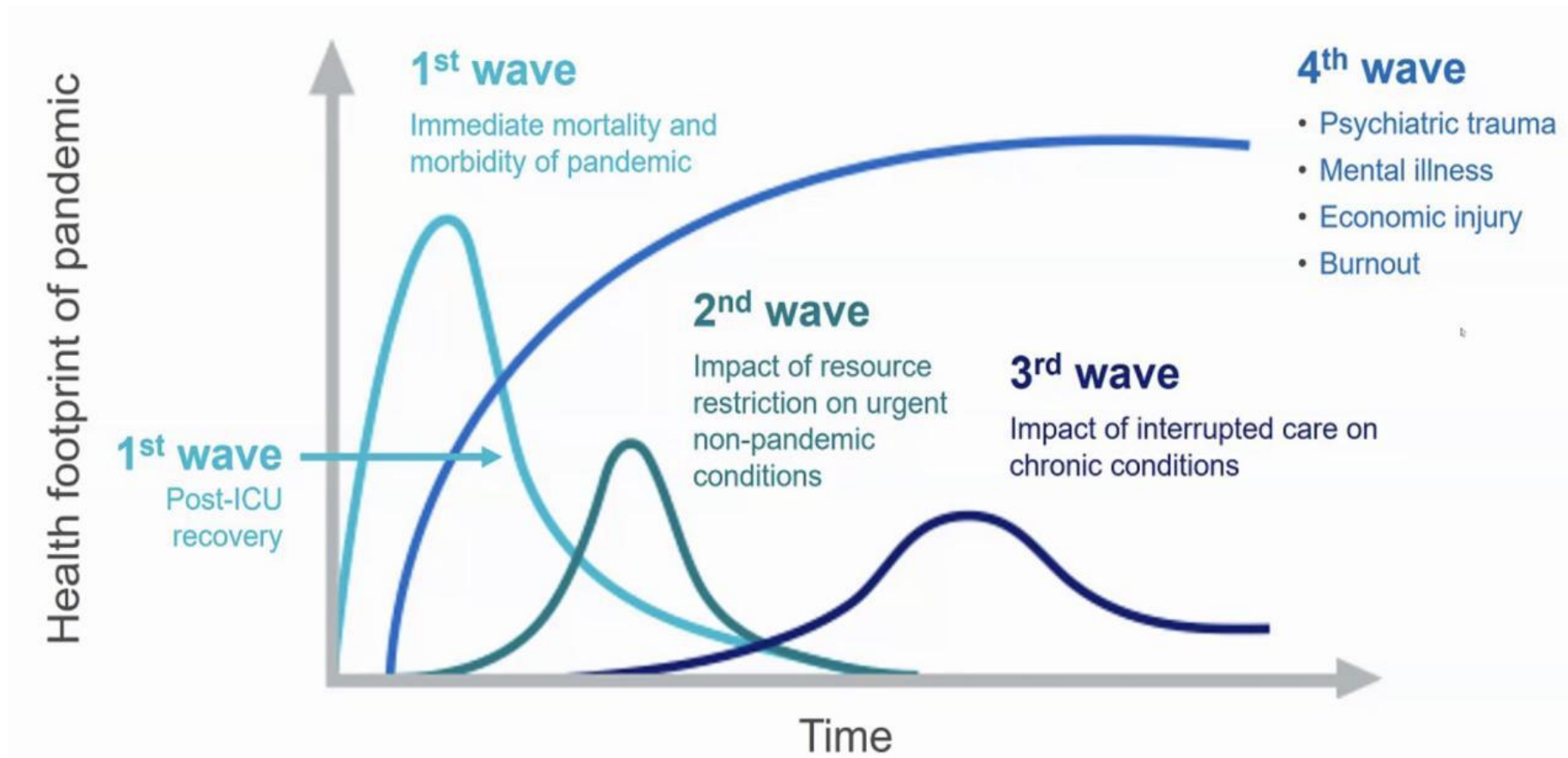
Other Companies: All scripts , Health Equity, Accolade, Inovalan, HMS, Amwell

# Section 5: Healthcare Trends

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# COVID-19



# Impact of COVID-19 on Healthcare Industry

- **Hospital Systems are in the red**
  - Elective procedures postponed (50% of inpatient surgeries and 80% of outpatient procedures)
  - Job losses - employer-sponsored coverage to Medicaid, insurance exchanges, or self-pay.
- **High growth of Virtual care**
  - Video visits and Remote monitoring (Zoom, TeleDoc, Livongo)
- **Subscription business persists**
  - Business that relied on Fee for service (volume) are impacted.
  - Businesses with Subscription (Per member per month) fee saw minimal impact

# Summary: Key Success Factors

- Business Model
  - Subscription revenue (not Fee-for-service)
- Technology
  - Digital Experience (Mobility, Virtual Care, Remote monitoring)
- Focus areas
  - Medicare
  - Chronic condition management (Kidney, Diabetes, Mental Health)
- Financial ratios
  - Revenue growth
  - Gross profit margin > 40%, Net profit margin > 20%
  - Debt equity ratio < 100%
  - Low P/E

# Thank You

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