The reality: a big, complex, growing, capital intense, labor intense, highly regulated and profitable for many
Context: some sectors compete globally, some nationally, some locally (S&P)

Health Care

Chart 7 – Revenue growth (local currency)

Chart 8 – EBITDA margin (adjusted)

Chart 9 – Debt / EBITDA (adjusted)

Chart 10 – FFO / debt (adjusted)

Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate.

Context: The U.S. spends more on admin, drugs & hospital care and less on public health than other developed systems

Health expenditure by function as a % of total national health expenditure

<table>
<thead>
<tr>
<th>Function</th>
<th>US</th>
<th>Germany</th>
<th>NLD</th>
<th>CHE</th>
<th>Canada</th>
<th>Australia</th>
<th>UK</th>
<th>Sweden</th>
<th>Japan</th>
<th>India</th>
<th>France</th>
<th>Germany</th>
<th>Brazil</th>
<th>Mexico</th>
<th>Canada</th>
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</thead>
<tbody>
<tr>
<td>Inpatient care</td>
<td>8%</td>
<td>5%</td>
<td>4%</td>
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<tr>
<td>Outpatient care</td>
<td>42%</td>
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<td>Long-term care</td>
<td>26%</td>
<td>24%</td>
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<td>Medical goods</td>
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<td>Home-based care</td>
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<td>Preventive care</td>
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<td>Population with healthcare coverage, %</td>
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HFMA REGION 9 NOVEMBER 2018
Healthcare has outperformed other sectors of the economy

Health care stocks vs. the broader market since ACA

March 22, 2010 to Oct. 16, 2018

S&P Health Care Index +186%
S&P +141%
Dow +139%

#1
Clinical innovations drive changes in delivery

From episodic to chronic
From procedures to medications & alternative health
From populations to personalized care
Social determinants play significant role

WATCH FOR:
Gene Therapies | Precision Medicine | Smart Parts | Artificial Intelligence | Machine Learning | Alternative Health | Self-directed Care | Micro-Hospitals | Urgent Care & Retail Clinics | Elective Admission

Innovations specialty drugs, brain science, social determinants are gaining momentum
#2: Capital is necessary to growth & sustainability. The system is profitable & dependable to capital sources

Health systems depend on public funding, philanthropy and private capital

There are lenders, investors and donors

- Lenders want lower risk
- Investors want quicker returns (especially financial investors)
- Donors want recognition & tax advantages
- And all have options about where to place their bets

Hospital operating margins have decreased prompting consolidation; private investment is focused in biotech & home-solutions

#3 Regulatory compliance risks are significant

Hospitals are disproportionately impacted by federal, state regulations

Big laws:
- MACRA
- Tax Cuts & Jobs Act
- ACA
- 21st Century Cures Act

Pending changes:
- ACO’s must accept risk
- Site neutral payments
- Increased price transparency
- Vertical consolidation approval

Trump policy: shift healthcare to states while cutting reimbursement
#4 The economics of healthcare are not sustainable

Healthcare spending is expected to increase 5.4% a year thru 2026

Drug prices, hospitals and specialty care are primary drivers

BUDGET REALITY
• Healthcare is 28% of federal budget, up to 34% of state budgets & 14% of household budgets

EMPLOYER ROLE
• 75%/25% split with employees
• Wellness, HRA-HSA features

HHS Focus: increase alternative payment participation (bundles, ACOs); expand Medicare Advantage; create competition for drugs and intensify price transparency in every sector

#5 Consumers are worried

But consumers are not well informed

• Healthcare is 28% of federal budget, up to 34% of state budgets & 14% of household budgets
• 1 in 4 consumers has an active diagnosis; 2 of 3 has suboptimal health
• Consumers under 65 pay 14% of their discretionary household spending on healthcare—and the range is wide and big outlays unplanned
• The majority thinks the system is expensive, complicated and not user friendly...and they have no way to prepare
• Mid Term Election & Posturing for 2020
• Role of employers in adopting alternative strategies (i.e. Amazon, Apple, et al)
• Potential for state legislation re: drug price controls
• Federal budget cuts in Medicare, Medicaid
• Private investments & role of disruptors