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UNDERSTANDING THE INVESTMENT FUNDAMENTALS OF LIFE SCIENCES AND HEALTHCARE

By Alan Lok, CFA; Eunice Chu, ACCA; and Guruprasad Jambunathan, FRM

The internet has done a superb job in making everyone somewhat of an expert in most fields of life, including health care. Most of us have performed a Google diagnosis of our state of health at some point in time. However, the problem with self-assessment is that we rarely have the complete picture and may not be in a position to assess the situation. Consequently, we end up with a wrong and even dangerous diagnosis.

Similarly, the life sciences and health care industry could be injurious for investors who are unfamiliar with its multifarious subsectors. And we certainly do not want that. As such, we are donning our white coats and readying our stethoscopes to help guide you through the life sciences and health care maze.

Given the broad range of firms operating in this sector, we will keep things simple and refer to life sciences and health care as health care throughout this piece. The sector can be divided into three categories:

1. Drug producers
2. Medical equipment and supplies manufacturers
3. Health care providers

We kick off with topical issues affecting the sector. Thereafter, we drill down into each pertinent area and provide suggestions for the type of questions you should ask when analysing individual companies.

THE COST OF PAIN

Health care is a relatively non-discretionary industry. Unless we choose to suffer in silence, then we must spend to mend. Moreover, our aversion to pain is reflected in the data: A recent World Health Organization report revealed that global expenditure on health care is 10% of global gross domestic product. It is also snowballing, particularly in the developing world where per capita incomes have been on the rise. Country and geographical factors are something you should bear in mind when assessing the growth potential of health care businesses.

IT'S CONTAGIOUS

We wish to highlight the different industry stakeholders whose lives are interconnected in what can, at times, be a never-ending game theory application where the actions of one party affect the decisions made by others and vice versa. Stakeholders include producers who compete to deliver the most efficient service; consumers who are better educated and increasingly empowered with Google at their fingertips; and governments that must strike a delicate balance between overregulation and the free market, including choosing the country's health care model. When, for example, the hospitalization coverage extends from 70 to 80 years of age, we expect demand for geriatric services would rise. Hospitals would plan for more physiotherapists and nurses.

GOVERNMENT BIOPSY

Governments are expected to play a bigger role in the years ahead. The average country sees the state pick up 51% of total costs of health care services; but once we strip out the contribution made by insurers and employer-sponsored schemes, the consumers shoulder a not insignificant 35% of the bill.

However, evidence points to consumers struggling to foot major medical bills, especially the lower- and lower-middle-income group. These categories of households are susceptible to falling into poverty and thus putting a cap on consumption growth. Governments may then inevitably be forced to absorb a bigger proportion of the health care tab. An eventual consequence to higher government expenditure on health care could be a keener interest in the activity of producers, which may manifest itself in tighter or new regulation to ensure lower government procurement costs. It also will not be surprising if the decibel measurement spikes up in annual general meetings as health care companies come under greater government scrutiny.

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CONTRIBUTORY FACTORS

What makes a study of this sector interesting are the numerous fundamental long-term drivers and megatrends affecting the industry. The trends and drivers below are intended to provide you with a flavor of the key developments (and mitigating factors) that could have a significant influence on the performance of the companies you analyse:

Megatrends: The three Cs

We must contend with several emerging megatrends that will further alter the landscape of the health care industry.

Consolidation – Merger and acquisition activity has been growing steadily over the past decade. Press releases from merging participants would have us believe that the new combined entity will deliver improved care at a lower price. However, as investors, you need to be aware that reduced competition has a habit of pushing prices up to the detriment of other stakeholders.

Cover – The insurance industry faces its biggest shake-up yet. We are in the age of risk segregation, which means that the health of a person can be more accurately assessed and the premiums adjusted accordingly. This approach is fair, as it curtails the collective burden on policyholders and helps insurance companies to price their products accordingly.

Change – In Europe and the United States, the emergence of what commentators are calling "populism" could spell a revision of health policies. If members of the electorate feel that they are paying too much in taxes but not receiving adequate levels of service (which always seems to be the case) and somehow discover they have a powerful voice, we may see some radical changes in health care policies.

LONG-TERM DRIVERS: THE THREE DS

Demographics – if we use Singapore as an example, the country's rapidly ageing population is already placing unprecedented demand on the government's budget and prompting the authorities to devise solutions that are effective, affordable, and sustainable. Singapore has always placed personal responsibility as a central tenet in numerous areas, including health care. Residents save for the inevitable major medical expenditure. Health care costs are also kept low with co-payments, whereby patients pay part of the bills; this encourages patients to avoid extending stay and treatment in hospitals unless absolutely needed. Nevertheless, with the percentage of residents aged 65 and above rising rapidly, new measures to slow rising health care expenditure are needed. Instead of full-fledged government restructured hospitals, community hospitals are utilized for step-down care after patients undergo primary treatment or surgery. The government has also acknowledged the benefit of social support in healing patients and has moved to allocate resources to expand social networks within the community setting. This, one hopes, will translate to better quality of care and lower growth in health care expenditure.

Disease – Diabetes, heart attack, stroke, and cancer, all are on the rise, and each can be treated if the causes are nipped in the bud. People also need to be aware of how their lifestyles contribute to these conditions. In Singapore, a programme of coordinated care, which sees ongoing contact between patients and health workers, has been proved to slash readmission rates by 60%. This is complemented by concerted efforts amongst various government agencies to encourage us to forgo sugary food and take a daily 10,000-step or more walk!

Development – Technology is more than state-of-the-art scanners; it is also data. With stacks and stacks of medical files, there are bound to be processing inefficiencies and sometimes costly mistakes. Using a computerised system, doctors, clinics, and insurance companies can quickly share relevant data and pertinent information.

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COST OF DRUGS

The big pharmaceutical companies have always maintained a firm grip on pricing. But with tighter health care budgets, we could witness a shift towards value-based pricing (VBP). If drug users can't afford to pay what the pharmaceutical companies charge, then something must give. Under VBP, drug companies would be rewarded according to the effectiveness of their products. How this might work in practice is still being debated because measuring and attributing the efficacy of a drug can be difficult. However, the very fact that the concept is being considered may point to possible changes in the near future.

DRILLING DOWN INTO PERTINENT AREAS

On that note, let's move on to explain how we think you should systematically analyse the companies in the sector. We mentioned earlier keeping things simple; hence we will begin by examining the lines of enquiry that are common to health care companies.

UNIVERSAL TREATMENT FOR HEALTHCARE COMPANIES

First, establish the level of demand for the company's products and services and be mindful of future growth potential, for sometimes an obscure offering could well become the industry's next "big thing." Follow this up by assessing the company's position in its business segment: Is the company a dominant player, and are there barriers to market entry for new operators? What are its core competencies relative to its peers? Does the company have an edge over the competition?

It is also important to determine expected product development costs and how these compare with groups offering similar services. Question the company's track record in converting R&D efforts into patentable drugs or products.

Once you are satisfied that a company has the potential to be included in your portfolio of investments, scrutinize its financial performance. Examples could consist of current operating and net margins, as well as the ratio of operating income to free cash flow. Are there adequate financial resources to undertake relevant and, most often, extended trials for drugs or devices? Last, but certainly not least, has the company ever recalled any of its drugs or devices? If so, determine the damage to the finances and reputation of the company.

You should also be reasonably knowledgeable about environmental, social, and governance issues. Learn more about the investments that a company has made or that will be directed towards ensuring, for example, that medicines have been thoroughly tested and are compliant. Look too at the staff, especially at support staff – care workers, radiologists, nurses, and cleaners – are they well treated and paid fairly? Ask if ethical behavior is a foreign practice or is stressed by a company's management.

We hope you have found the first part of our analysis useful. We will be back for the second part to dissect the sector into drug producers, medical equipment and supplies manufacturers, and health care providers. For a more in-depth assessment of the industry, the complete framework is available on www.arx.cfa.

About the Authors

Alan Lok, CFA, is the director for society advocacy engagement at CFA Institute. Mr Lok researches and writes on investor-protection issues and capital-market structure. He recently co-authored a research paper on capital-market integrity entitled "Portfolio Pumping in Singapore: Myth or Reality." Mr Lok has more than 10 years of experience in equity research spanning various industries and sectors.

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IN THE first part of this sector analysis published on Business Times dated April 27, we explored topical issues such as demographics, government policies and cost of drugs that can influence the performance of businesses operating in the life sciences and healthcare sector. Our analysis went on to touch on four elements affecting individual companies – level of demand, market structure, corporate performance, and track record – and environmental, social, and governance issues.

In this second part, we will examine the different types of health care companies and provide suggested lines of enquiry to follow when considering a business for inclusion in an investment portfolio. As before, we will refer to life sciences and health care as the health care sector.

THE MEDICAL CORPS

We have divided the health care sector into three categories for ease of analysis. They are

- drug producers,
- medical equipment and supplies manufacturers, and
- health care providers.

DRUG PRODUCERS

Our desire to live is as strong as a drug company's appetite for profits. We suggest that you initiate your assessment by examining the pipeline of drugs under development. In particular, focus on the various approvals that need to be obtained and establish how successful the firm has been in converting pipeline drugs into approved treatments. Keep a tab on costs as well.

Nothing lasts forever. Inspect the company's patent portfolio and the exclusivity period of its current drugs, especially the most profitable lines. Does the company have a strategy to deal with patent expirations and associated challenges?

Consider the competition. What benefits do the company's drugs offer above and beyond those sold by other groups? Is the company aware of peers that have pipeline drugs in late-stage development, which could well pose a threat to those currently being marketed or developed by itself?

Consider the government of the day. Are there any regulatory developments that could affect the company's ongoing business? Similarly, check if political or consumer headwinds might impact drug prices in the firm's markets. In the United States, for example, there are proposals under consideration that would change the way drugs are priced in the Medicare system.

Lastly, not all drug companies develop new products. Some specialise in the manufacture of generic treatments such as paracetamol. Therefore, your analysis should target specific areas of these businesses, such as the scale of operations, manufacturing practices, and the costs associated with introducing new drugs.

Health care isn't all about prescription drugs. We also use a vast array of other treatments that are purchased over the counter. These include skin creams, lotions, and powders. Some are manufactured by the same companies that develop prescription drugs, while specialist firms make others.

In this case, the brand is sometimes as crucial as the product itself. Think of baby powder, and Johnson & Johnson immediately comes to mind. Part of your research here should be to explore market share and name recognition. Do look at geographic reach and distribution methods in your research journey.

MEDICAL EQUIPMENT AND SUPPLIES MANUFACTURERS

We move on to the hardware section of the health care industry. It makes sense to split this topic into two subsections: equipment and supplies manufacturers. We refer to equipment as everything from high-tech scanners to the tools used in the operating theatre, clinics, and wards. These items are generally durable. Screen the company's product portfolio and determine how diversified the product offering is. This information will help you to gauge key-product risk. It also makes sense to determine whether the device and equipment the company manufactures are deemed essential regardless of technological advances or are liable to be defunct in the next few years. With regards to technological change, determine whether the company is seen as an innovator or a follower.

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Age demographics in a country matters in analyzing health care companies. Are the products manufactured geared towards geriatric wards (body scanners or mobility aids) or across all age groups (surgical equipment)? With an ageing population across the globe, there will be growth potential for businesses that manufacture equipment used primarily by the elderly.

If we consider the medical supplies market, then this tends to be at the more consumable end of the chain – bandages, syringes, gloves, and swabs, for example. Determine the medical procedures that use these items: The more frequent the occurrence, the higher the potential sales. Similarly, it's also worth your while to determine the disposable nature of these items. Single-use supplies have higher replacement levels.

From a competition perspective, does the business dominate the market, or are others producing similar product offerings? Moreover, it helps if a firm has a long-term contract with a medical facility or health board. If it does, determine the quality of this association and learn if it is reviewed periodically.

HEALTHCARE PROVIDERS

The third category of the sector is occupied by the health care providers – hospitals, specialist facilities, hospices, and drop-in centres. This area is where health care budgets and population mix have significant influences over care providers. Ascertain the factors affecting health care spending in key markets and the share of expenditure by different types of payers (government, insurance, individual out-of-pocket). Determine the dynamics governing demand from each. Do also establish the availability and acceptance of alternative medical treatment centres.

Asia is also experiencing rapid growth in health care tourism, which is being underpinned by portable insurance policies, inexpensive travel, and greater awareness among consumers of the services available out of their home territories. Bear this in mind when examining a particular business and check out how much income it generates from overseas patients. Does it have a strategy in place to develop this cash stream further? Or are medical tourists in the region favouring Thailand over Singapore hospitals for certain procedures?

Reputation is also vital. You will want to know if the facility or company employs world-class professionals at all levels and provides the best possible treatment. Fortunately, for investors, this isn't too difficult to check, with hospital league tables freely available and review sites awash with patient comments.

Finally, take time to look at the health insurers and weigh up factors such as the medical loss ratio. This measure gauges the amount of premium income allocated to health care claims as opposed to admininstrative costs or profit. The Medical Care Act in the United States requires many insurers to apportion a minimum of 80% of their income to claims.

Now that our examination is over, we hope you go on to lead healthy and happy investing lives. For a more in-depth assessment of the industry, our complete framework is available on www.arx.cfa.

About the Authors

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Sector Analysis: A Framework for Investors

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A step-by-step guide to analyzing the healthcare industry

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- Availability of substitutes

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Common to the Sector

1. What is the degree of non-discretionary demand for the company's products and services?

a. What kind of drugs and devices does the company make? Which diseases and therapeutic areas are targeted?

b. Do the drugs and devices treat critical/life threating or chronic or aesthetic problems?

c. What choices does a patient have in terms of delaying his/her treatment?

d. Are the company's drugs and devices perceived to be best in class with superior benefits? Do they have cheaper substitutes with comparable benefits?

2. How dominant are companies that operate in chosen business segments? How easy is it for new players to enter and compete?

a. What is the company's core competency relative to its competitors? Does it enjoy any advantages, which allow it to dominate in specific segments or markets?

b. How long does it take to obtain approvals for novel drugs or devices or generic drugs or similar devices?

c. How expensive and time-consuming it is to conduct different trials for regulatory approval?

d. Are any special marketing arrangements in place resulting in a competitive edge in specific segments or markets?

3. What are the long-term demographic trends in key markets?

a. What is the distribution of the company's sales by country?

b. What is the current population and per capita income level in those countries?

c. What is the expected population and income growth in those countries?

d. How much of the total GDP is spent on healthcare in key markets? How is this expected to evolve?

e. What are the household income levels in key markets? What proportion of that income is spent on health care? How is this expected to evolve?

4. What are the company's typical product development costs? How do these compare with peers? To what extent are product development costs expected to change in future?

a. How much does the company spend on research & development (R&D) as a percentage of sales?

b. How does the company measure efficiency in converting R&D expenses into patentable molecules, drug and product approvals?

c. How do these compare to pharmaceutical and biotech drugs?

5. How is the company performing from a financial perspective? How do key financial metrics compare to peers?

a. What is the correlation between the company's cash flows and return on capital with revenues?

b. What is the company's sales, general and administrative (SG&A) expense ratio?

c. What are the current operating and net margins?

d. What is the current ratio of operating income to free cash flow?

e. Does the company have sufficient cash to conduct relevant trials for drugs or devices? If not, how will future trials be funded?

6. What is the extent of the company's liabilities concerning its products and services?

a. Has the company faced any regulatory or legal penalties in the past? How significant were those penalties relative to revenues?

b. What class action suits and regulatory investigations are currently faced?

c. Has the company recalled any of its drugs/devices in the past? If so, what were the reasons for these recalls? What was the financial and reputational impact?

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Prescription Drug Companies

7. What is the potential market size and the potential duration of usage per customer of the company's current and pipeline drug portfolio?

a. What are the prevalence and incidence rates of the diseases and conditions treated by the company's suite of drugs?
b. What treatment options are currently available for these diseases and conditions?
c. How frequently, at what dosage and for how long should patients use these drugs?
d. How does this translate into market size?
e. What benefits do the company's drugs offer compared to options currently available to patients, for example, higher efficacy, shorter duration, reduced side effects, cheaper cost, or other benefits?
f. If the company's drugs are for diseases and conditions for which there is no treatment currently available, what other companies are concurrently developing drugs for these diseases and conditions?
g. Is the company aware of peers that have pipeline drugs in late-stage development, which could pose a threat to those currently being marketed or which are in the development pipeline?

8. What is the shape of the company's patent portfolio and the exclusivity period of current drugs?

a. How many patents are held and what are their expiration schedules?
b. How much revenue is derived from these drugs?
c. What is the company's strategy in dealing with patent expirations and associated challenges?
d. How long is the typical exclusivity period for new drugs? How does this vary for pharma and biotech drugs?
e. What patent and exclusivity related litigation challenges are currently faced?
f. How much cost is incurred defending patents and exclusivity periods for the company's drugs?

9. Does the company have a pipeline of drugs under development?

a. How many drugs/molecules are currently under development?
b. What stages of development are these drugs currently in?
c. What therapeutic areas are these molecules targeted at?
d. When are the various approvals expected to be granted?
e. What is the company's past success rate in converting pipeline drugs into approved treatments?
f. Are any of the company's late-stage pipeline drugs facing roadblocks during the approval process? If so, when are these roadblocks expected to be cleared?
g. How long does it typically take to develop, test, obtain approvals and launch drugs into the market?
h. What is the expected schedule for launching various drugs currently under development?
i. What costs are typically incurred in developing, testing and obtaining required approvals for new drugs?
j. How are development costs expected to evolve? How useful is technology in reducing development costs?
k. What is the current mix of drugs in the company's development pipeline, in terms of therapies that require critical care or chronic care or aesthetic use?

10. How significant are sales and marketing efforts in driving the company's revenue?

a. How important is the sales role in determining which drugs are prescribed by physicians to patients?
b. How capable is the company's sales team and how influential are they with physicians?
c. How are the effectiveness of the sales force and the return on marketing expenditure measured?
d. How does the company expect sales costs to evolve? How do the company's sales costs compare with peers, if known?
e. Does the company intend to expand or restructure its sales team? If so, what are the reasons behind this?
f. Is any expansion of the sales force planned to support new drug launches?

11. Who determines demand and pays for drugs in key markets and segments?

a. What proportion of medical costs are paid by any form of insurance and how much do patients pay out of their pocket?
b. Are there any gatekeepers of demand such as Pharma Benefit Managers (PBMs), which influence demand and pricing? If so, please discuss the extent of their presence and influence.
c. How much pressure on pricing is faced face due to aggregation and intermediation of demand by PBMs?

12. Are any regulatory developments anticipated that are likely to affect the company's ongoing business?

a. Are any changes in the drug approval process/guidelines expected from regulatory agencies (FDA, EMA etc) that might affect future drug launches?
b. Are any political / consumer headwinds for drug prices faced in key markets?
c. Are there any moves to reduce spending in markets where the government is the major spender?
d. Are there any other developments with potential downside risk for drug prices.

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Generic Drug Companies

13. What is the company's strategy for identifying and launching drugs and associated risks?

a. Are there any specific therapeutic areas the company focuses on? If so, how are these identified?
b. What is the strategy to identify which drugs to target?
c. How quickly is the company able to launch generic versions of drugs coming off patents?
d. What is the scale of liabilities faced relating to at-risk launches?

14. What is the scale of the company's current operations?

a. What is the company's manufacturing approach? Are facilities owned or are contract manufacturing agreements in place?
b. How many different drugs can be manufactured within owned facilities?
c. What would be the incremental cost of scaling up the production of key drugs?
d. What would be the additional cost of commencing production of new drugs?
e. What competitive advantages are derived from the scale of the company's operations/production?
f. What is the cost structure of key drugs at different production levels? How does profitability at lower volumes compare with that at higher volumes?
g. What are the different factors currently driving costs? What other factors are expected to become relevant in future?
h. How well is the company able to maintain costs? How are costs expected to evolve and how does this compare with peers, if known?
i. If contract manufacturing is utilized, how does the company ensure quality standards are maintained?
j. How well has the company (or contractors) been able to adhere to good manufacturing practices?
k. How have the company's (or contractors') facilities typically fared during regulatory inspections?

Over-The-Counter & Consumer Products

15. What is the shape of the company's current off-prescription product portfolio?

a. What are the company's over-the-counter (OTC) and consumer products?
b. How many of these are drugs versus non-drugs?
c. Can these products be used across age groups?

16. What purpose are these products used for?

a. What conditions do these products treat?
b. How frequently do these conditions occur among the population in the company's key markets?
c. How many of these conditions occur seasonally? During what time of year do the conditions occur and for how long?
d. What is the typical duration and dosage of use of these products?
e. How long have these products have been off-prescription?

17. Does the company have products in the health foods and nutraceuticals segment?

a. Which products are available in this segment of the company's portfolio?
b. Are these products for regular consumption? If so, at what frequency?
c. How aware are consumers in key markets about health issues and how is this evolving?
d. What impact on its products does the company anticipate as awareness of health issues increases?
e. What is the sugar content of the company's products? What is the likely extent of demand changes due to the increasingly negative perception of sugar?
f. How are consumption habits changing in key markets? What is the resulting impact on the company's products?

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18. How strong are the company's brands perceived to be in this segment?

a. What is the market share of the company's brands in their respective segments?
b. Has the company been able to grow and maintain its market share?
c. Does the company have any brands with dominant market shares in their respective segments?
d. What is the positioning and value proposition of the company's brands?
e. Has the company attempted to extend the brand range into related categories? If so, how successful have these efforts been?
f. What is the size and geographic spread of the company's distribution network?

19. Please describe the company's operational and financial performance? How do key metrics compare to peers?

a. What is the company's current accounts receivable turnover in terms of numbers of days?
b. How much of the company's revenue growth is attributable to organic expansion?
c. How effectively have costs been controlled? What is the current cost of goods sold ratio?
d. What percentage of sales is spent on advertising and brand promotion?

Medical Device Companies

20. How much non-discretionary demand do the company's products have?

a. How many of the company's products can be classified as critical or life-saving versus for aesthetic use?
b. What alternatives to the company's products do patients have? How long can customers postpone using the company's products?

21. What are the long-term trends relating to ageing and life expectancy in key markets?

a. How are ageing and changing life expectancies expected to translate to structural demand for the company's products?
b. What kind of devices are likely to see increased demand as a result of these trends?
c. What are the implications of these trends for the company's current product portfolio?
d. How does the company intend to leverage these trends?

22. The company's product portfolio.

a. How diversified is the current product portfolio?
b. What is the pace of evolution in the company's product segments? Does this occur organically over time, or through rapid advancements?
c. How does the company's product development strategy tie in with structural trends outlined earlier?
d. How do product development costs compare with those of peers, if known?

23. How effective is the sales team and how influential are they with surgeons?

a. How much impact does the sales force have in determining what drugs physicians prescribe to patients?
b. How effective is the sales team and how influential are they with surgeons?
c. How are the effectiveness of the sales force and the return on spending measured?
d. Does the company plan on expanding or restructuring its sales team? If so, for what reasons?
c. Is any expansion of the sales team planned to support new-drug launches?

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Healthcare Equipment Providers

24. Details of the current product portfolio.

a. How many of the company's products are used to perform diagnosis?
b. How many and what therapeutic areas/conditions / diseases are these products used to diagnose?
c. How many of the company's products are used to provide or support treatments and clinical procedures?
d. How many and what therapeutic areas/conditions / diseases are these products used to treat?
e. What is the company's estimate of the number of times these procedures are performed in a given period?
f. How is the demand for these procedures expected to evolve?
g. Are these procedures typically performed on older patients, or across all age groups?
h. Are any consumables used while performing these procedures? If so, what are those and in what quantities are they used?
i. Does the company have a dominant market share in any/all of its equipment types? How easy is it for new entrants to venture into this space?
j. Are cheaper substitutes available for these equipment types?
k. What differentiates the company's offerings from competing products and cheaper substitutes?

25. The lifecycle and technology aspects of the company's products.

a. What has been the typical lifetime of these products before they have to be replaced or upgraded? How does the company expect this to evolve in the future?
b. How fast is the technology associated with these diagnostic/therapeutic products evolving?
c. Does the firm intend to utilize emerging technologies, such as Artificial Intelligence? If so, what benefits are envisaged?

26. How are the company's products marketed?

a. What different sales models are employed – outright sale versus financing versus lease versus rental? What is the current mix?
b. Does the company provide financing/lease / rental agreements directly, or through third parties?
c. How does the company evaluate the credit profile of buyers?
d. How are credit terms determined?
e. Does the company provide service contracts? If so, what are the terms of these contracts?
f. What is the revenue mix from equipment, supplies and service? How do the margins from each segment compare?

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Medical Supplies Providers

27. What products form part of the company's current portfolio?

a. Which of the company's products are used during diagnosis compared with during treatment?

b. During which diagnostic or therapeutic procedures are the company's products used?

c. How frequently are these procedures performed? Is this expected to remain constant, or are any changes anticipated?

d. Which of the company's products can be described as consumables (e.g. bandages) versus non-consumables (e.g. surgical instruments)?

e. Which of the company's products are single use (e.g. disposable syringed) versus reusable (e.g. waist belts)?

f. Does the company have any products with no known direct substitutes in the market?

g. Does the company have powerful brands in any of the supplies produced?

h. Which of the company's products have cheaper substitutes available in the market? How are the company's products differentiated from these alternatives?

28. The company's operational and financial performance – how do key metrics compare with peers?

a. What is the size and geographic spread of the company's distribution network?

b. Does the firm have long-term contracts to supply major diagnostic/hospital chains?

c. What organic volume growth has been achieved?

d. What is the company's accounts receivable turnover in terms of numbers of days?

e. How well are costs able to be controlled? What is the company's Cost Of Goods Sold ratio?

Managed Care Providers

29. What are the factors affecting healthcare spending in key markets?

a. What is the share of healthcare spending by different type of payers (government, insurance, out of pocket)?

b. What dynamics govern demand from each of these payers?

c. Which is the most and least price-sensitive payer category?

30. Is the company's hospital the only facility in the area?

a. What is the company's population coverage in key markets? What alternative treatment centres are available to these populations?

b. Does the company offer any specialized treatment or therapy that is not available elsewhere?

c. If the company operates a chain of hospitals, please provide details of major centres.

31. What ageing and life expectancy trends exist in key markets

a. How does the company expect ageing and changing life expectancies to affect demand for its services?

b. How does the company expect the market to evolve in terms of demand for in-hospital treatment versus at-home treatment?

c. If the population in key markets is getting older, how strong are the company's capabilities and offerings in geriatric care?

32. The company's cost structure.

a. What is the medical loss ratio (MLR) incurred? How does this compare relative to peers, if known?

b. Is there a mandatory floor on MLR?

c. What is the company's current SG&A expense ratio? How does this compare with that of peers, if known?