



Healthcare



Research Team

Saniya Tauseef | Senior Manager Research
Ayesha Wajih | Supervising Senior Research
Maham Ali | Associate Research Analyst



Contents	Pg.	Contents	Pg.
Introduction	1	Local Pricing	11
Global Expenditure	2	Private vs. Public Preference	12
Global Government Expenditure	3	Business risk	13
Global Hospitals	4	Business Risk Margins	14
Overview Local	5	Financial Risk Leverage and Interest Coverage	15
Industry Snapshot Local	6	Financial Risk Working Capital	16
Local Expenditure	7	Financial Risk Borrowing Mix	17
Local Demand	8	SWOT	18
Supply Overview	9	Outlook: Stable	19
Local Province-wise Supply	10	Bibliography	20

Healthcare

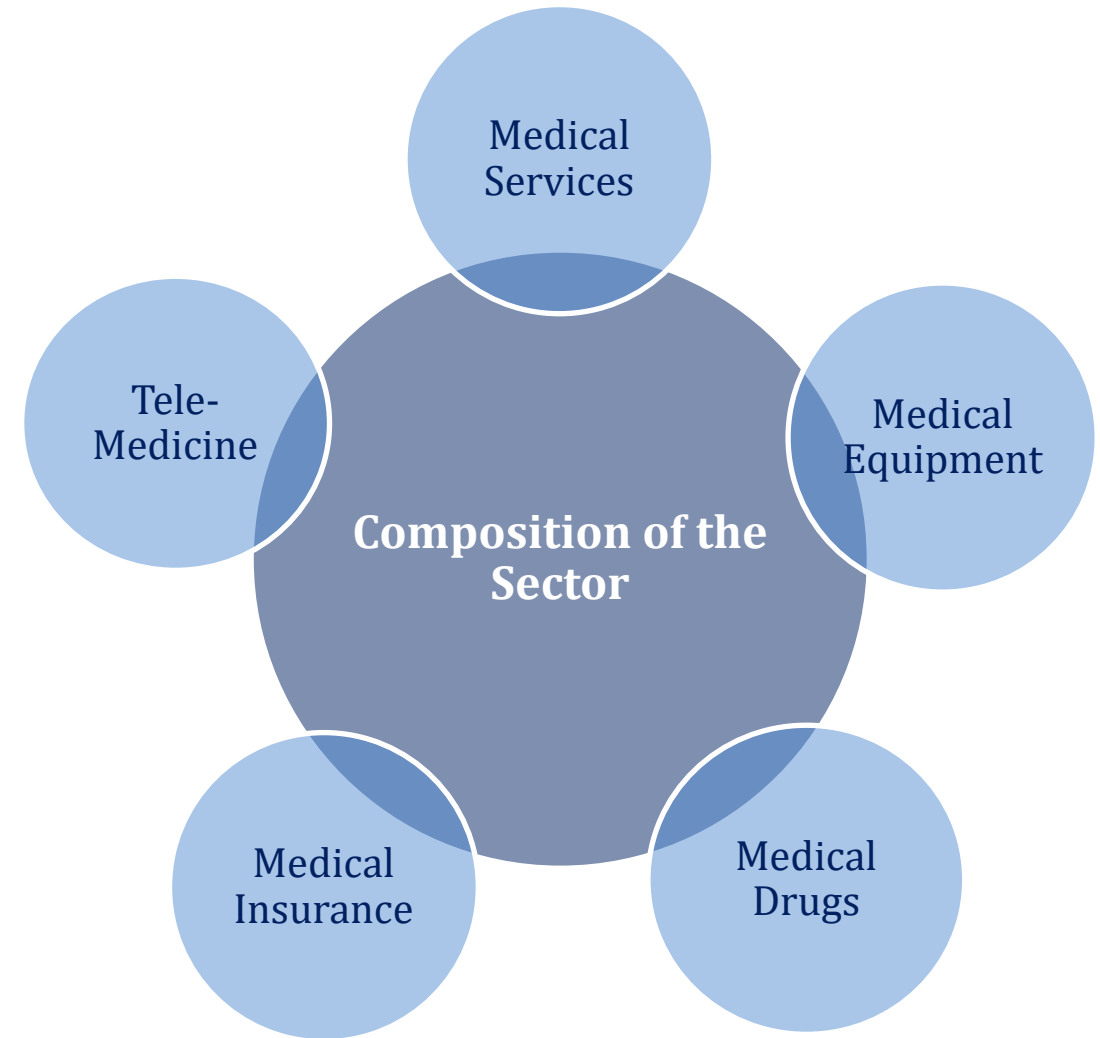
Introduction

Healthcare broadly includes the myriad health and medical services which the Healthcare system offers in order to help people recover. Services in the Healthcare industry include those that advance health, mitigate health issues, identify and treat illnesses to cure them and enhance the quality of life in general.

It can sometimes be restricted to the medical care provided by doctors or it can also include care provided by nurses, therapists and other patient care providers. Overall, it refers to the diagnosis and treatment provided to patients.

- Globally, the Healthcare industry size increased to USD~7,976bln from USD~7,500bln in CY22 at a CAGR of ~6.3%. By CY27, the Healthcare industry is projected to reach USD~9,817bln, at a CAGR of ~5.3%.
- In CY22, North America was the largest regional market for the Healthcare industry accounting for ~44.2% of the global Healthcare industry market share. It is followed by Asia-Pacific and West Europe, accounting for ~22.2% and ~21.4% of the market share, respectively.

This study focuses on Healthcare services, and does not include Manufacture/Sale of Drugs (covered separately in the Pharmaceutical sector report).

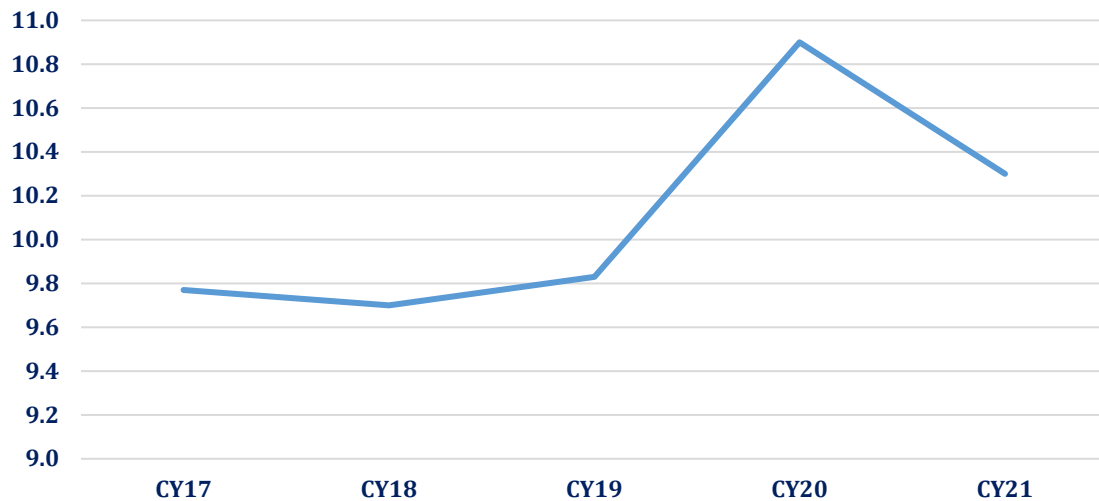


Healthcare

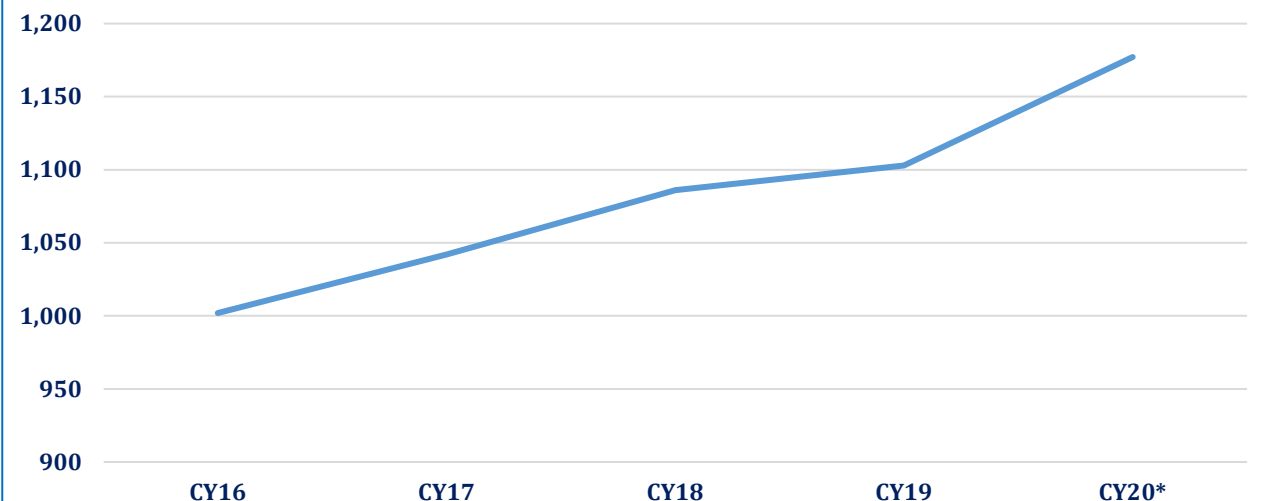
Global | Expenditure

- The outbreak of COVID-19 in CY20 resulted in significant increases in health spending, especially from governments seeking to contain and mitigate the pandemic's consequences. Global health spending reached USD~9.8tln in CY21 (~10.3% of the world GDP). There was a significant imbalance in the distribution of health spending worldwide as ~79% of health spending was concentrated in high-income nations, which accounted for less than ~16% of the world's population.
- The average per capita growth in Healthcare expenditure rose to ~3.3% annually between CY19-22, peaking in CY21. After accounting for variations in the buying power, the average per capita health spending in OECD nations was projected to have approached USD~5,000 in CY22. It came to the equivalent of USD~12,555 for each citizen in the U.S. Switzerland and Germany ranked second and third, respectively, with spending levels at USD~8,000 per capita.

Healthcare Expenditure as a % of GDP



Healthcare Expenditure per Capita (USD)

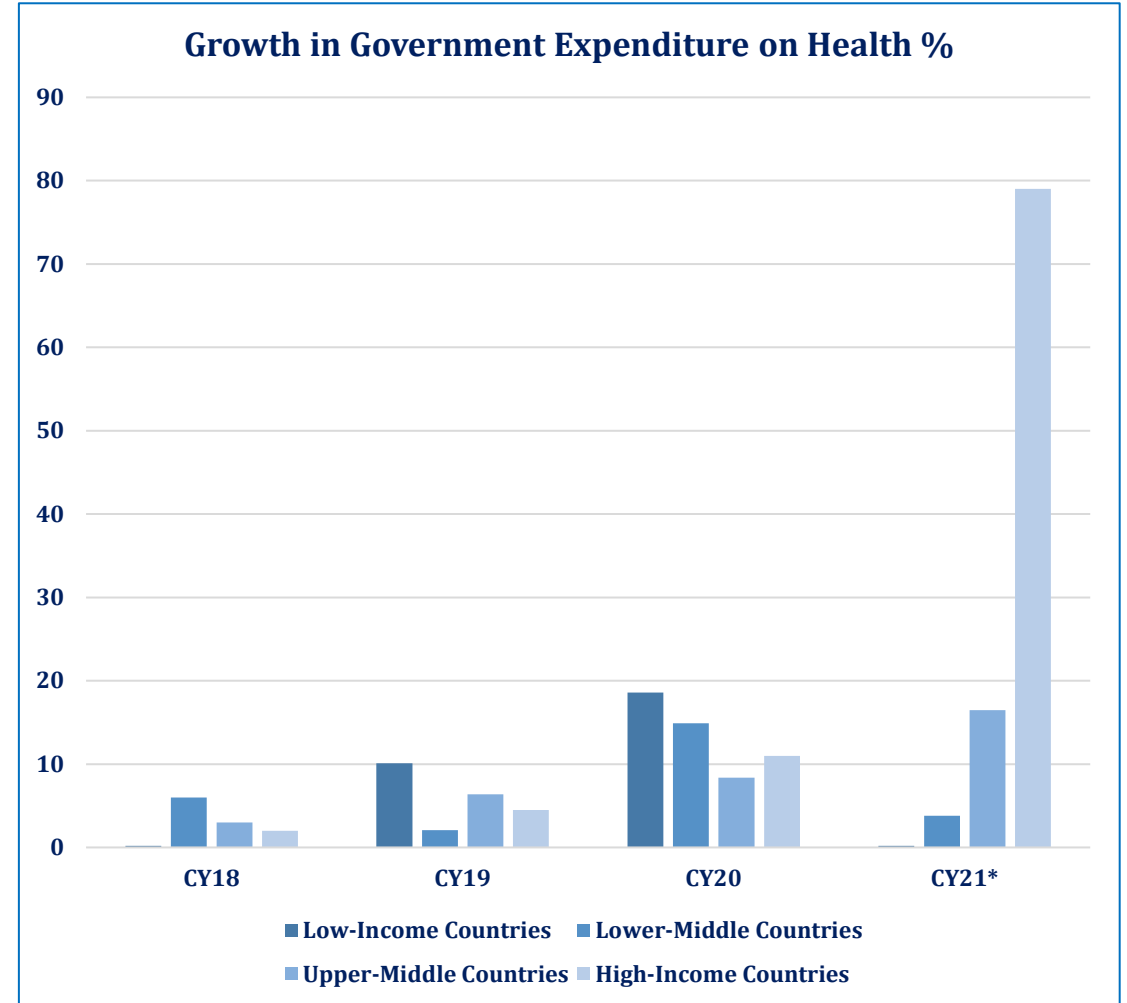


*Latest available data

Healthcare

Global | Government Expenditure

- The share of global Healthcare expenditure of USD~ at ~10.3% in CY21 contrasts with ~16.5% in upper-middle income, ~3.8% in lower-middle income and only ~0.2% in low-income nations. However, there is a massive surge in terms of growth in government expenditure in high-income countries in CY21 as it increased to ~79% of the global GDP allocated to Healthcare (~618% YoY increase). This was majorly due to the emergence of the Covid-19 pandemic.
- For the purpose of this analysis, upper-middle income nations have a GNI per capita ranging between USD~4,096-12,695, lower-middle income nations USD~1,046-4,095, low-income nations USD~1,045 or lower and high-income USD~12,695 or above.
- For CY21, the average health spending per capita in high-income nations was USD~4,001, which is ~8x (USD~531) in upper-middle income countries, ~27x (USD~146) in lower-middle income countries and ~89x (USD~45) in low-income countries.
- All income categories had a rise in average Healthcare spending per capita, with the exception of low-income and lower-middle income nations, where it decreased. This decrease possibly occurred as a result of government expenditure on Healthcare not increasing at the same rate as overall government spending.

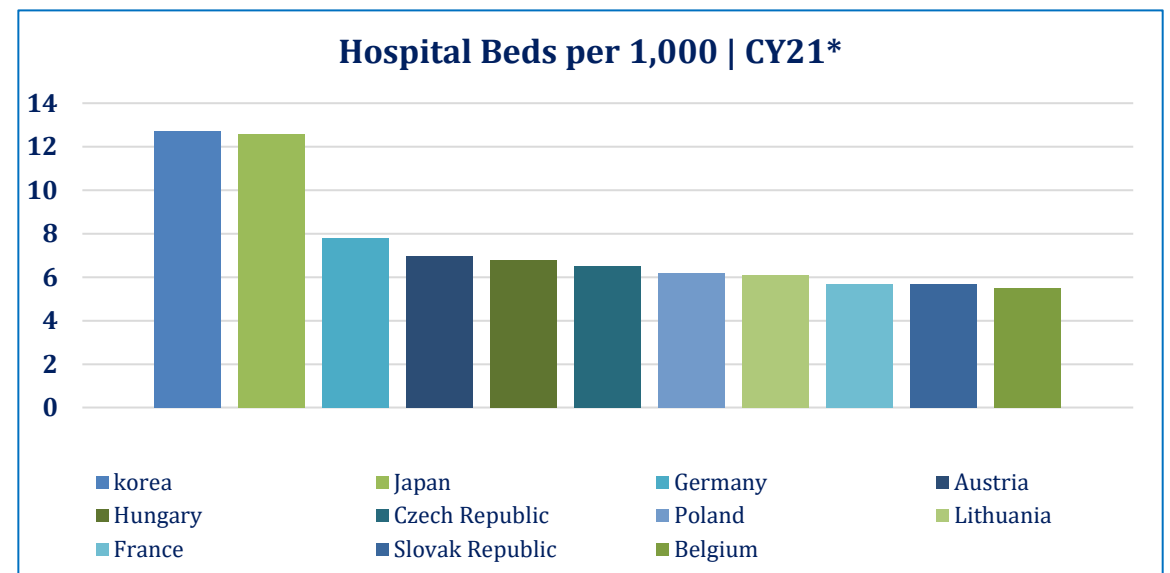
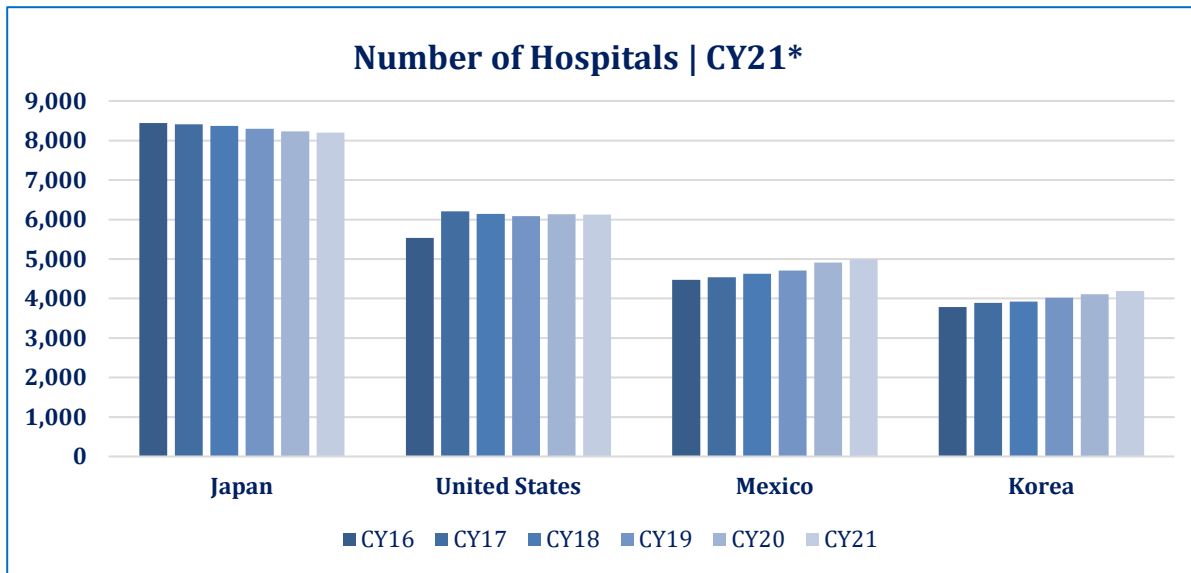


*Latest available data,

Healthcare

Global | Hospitals

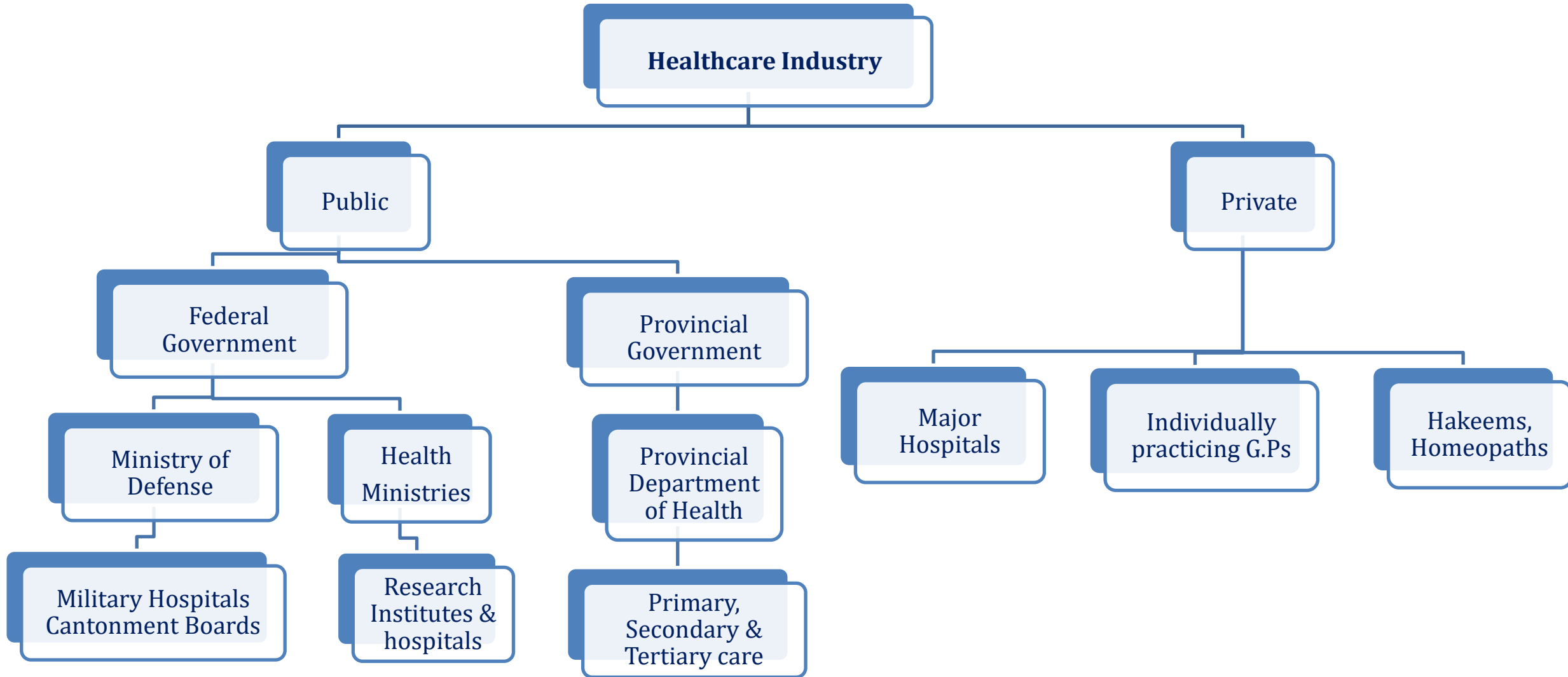
- As of CY21, there are ~165,000 hospitals in the world. With ~100,000 hospitals (~61% of all hospitals worldwide), Asia leads globally in terms of the hospital count. Europe comes in second with over ~30,000 hospitals (~18%) and North America with over ~7,000 hospitals (~4%). Africa has the fewest hospitals overall, with only over ~8,000 hospitals (~5%). There are ~3,500 hospitals in Oceania and ~15,000 in South America (~9% and ~2%, respectively). Country wise, in CY21, Japan had the highest number of hospitals at ~8,205 (SPLY: ~8,238) followed by the U.S. ~6,129 (SPLY: ~6,133).
- In terms of hospital beds per 1,000 people, South Korea and Japan led with ~13 beds per 1,000 people, followed by Germany with ~8 beds per 1,000 people. It is worth noting that these nations have a lower annual population growth rate (CY21: ~(0.2)% Korea, ~(0.5)% Japan, ~0% Germany) and are relatively advanced economies (CY21 GDP for Korea, Japan and Germany was recorded at USD~1.8tln, USD~4.9tln and USD~4.3tln, respectively).
- Between CY22-27, the size of the global hospital beds market is predicted to increase by USD~2,324mln, exhibiting~10% CAGR. The increase in infectious illnesses, the expansion of hospitals and the aging population are some of the factors driving the market growth.



*Latest available data

Healthcare

Local | Overview



Healthcare

Local | Snapshot

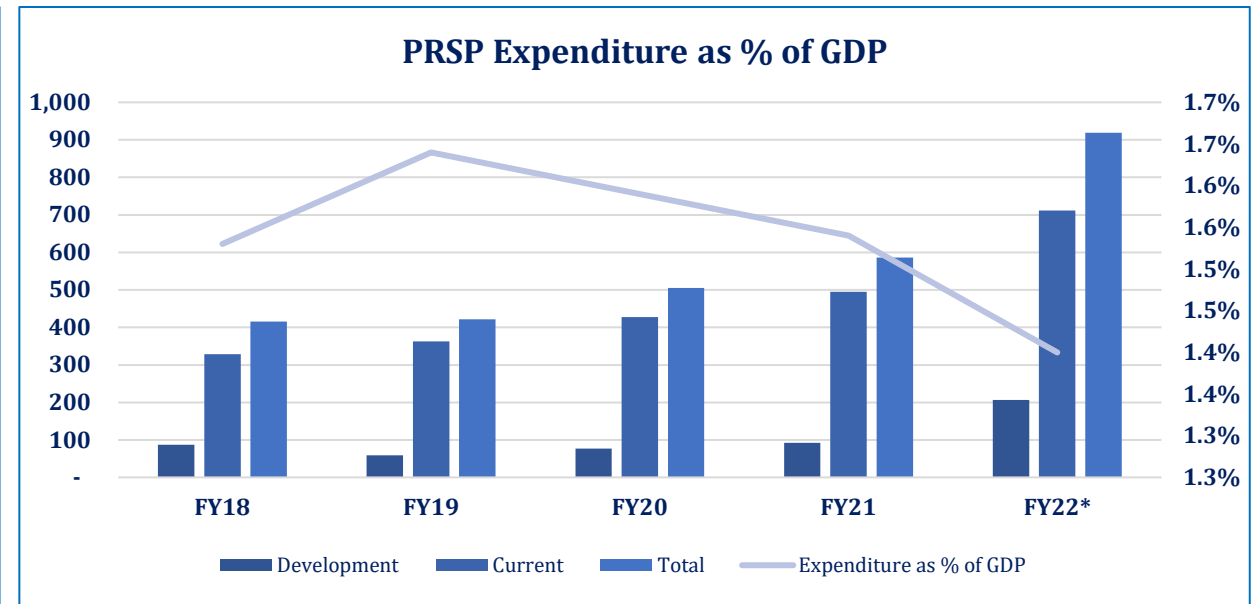
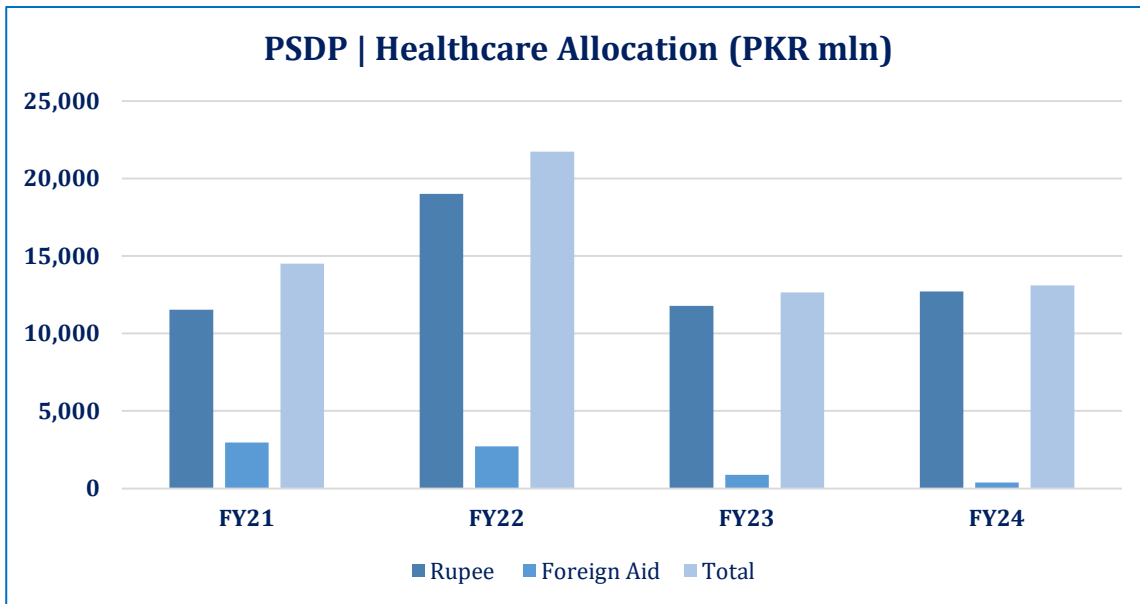
- Pakistan's Healthcare sector is divided between the public and private sectors. The provincial government is mainly in charge of health under the constitution, with the exception of regions that are under federal administration.
- Physical infrastructure and labor force have both steadily developed in support of public health initiatives. A total of ~146,053 beds are estimated to be available in these Healthcare institutions which include ~1,276 hospitals, ~5,559 Basic Health Units (BHUs), ~736 Rural Health Centers, ~5,832 Dispensaries, ~781 Maternity & Child Health Centers, and ~416 TB centers. Additionally, via the health homes, ~70,132 Lady Health Workers offer primary Healthcare services to the population.
- Healthcare expenditure in FY22 increased ~56.8% YoY, likely owing to new initiatives undertaken by the GoP (e.g. Sehat Sahulat Program). However, its share in GDP remained consistent at ~1.4%, resulting from ~6.1% growth in GDP.

Particulars	FY20	FY21	FY22*
Population (mln)	227	231	235
Population 0-24 age group (%)	60.1	58.8	
Population 25-54 age group (%)	24.5	32.8	
Population 55+ age group (%)	11.2	8.5	
Population Growth Rate	1.9%	1.9%	2.6%
Expenditure on Healthcare (PKR mln)	584,633	586,270	919,418
Expenditure on Healthcare as a %age of GDP	1.6%	1.5%	1.4%
Number of Hospitals	1,289	1,276	1,276
Number of Doctors and Dentists	273,347	296,931	285,539
Number of Nurses	116,659	121,245	127,855
Other Healthcare Workers	64,489	67,101	70,132

Healthcare

Local | Expenditure

- Relative to other developing nations, Pakistan spent a relatively small USD~23 per capita on Healthcare in FY22 (FY21: USD~16 per capita). Scarcity of medical supplies, qualified personnel, medications and Healthcare infrastructure is a problem resulting from inadequate funding for the Pakistan Healthcare Sector.
- There was a ~50% YoY surge in PSDP Healthcare allocation in FY22 owing to prevalent variants of COVID-19. During FY23, key Healthcare industry initiatives undertaken by the GoP included, but not limited to, Integrated Disease Surveillance Response System (IDSRS), National Health Support Program (NHSP) and Universal Health Coverage-Benefit Package (UHC-BP).
- In terms of PRSP (Poverty Reduction Strategies Project), the expenditure as a percentage of GDP fell to ~1.4% in FY22 from 1.5% in FY21. The PSDP Health Allocation also decreased to PKR~12.7bln in FY23, a YoY decrease of ~41.8%.

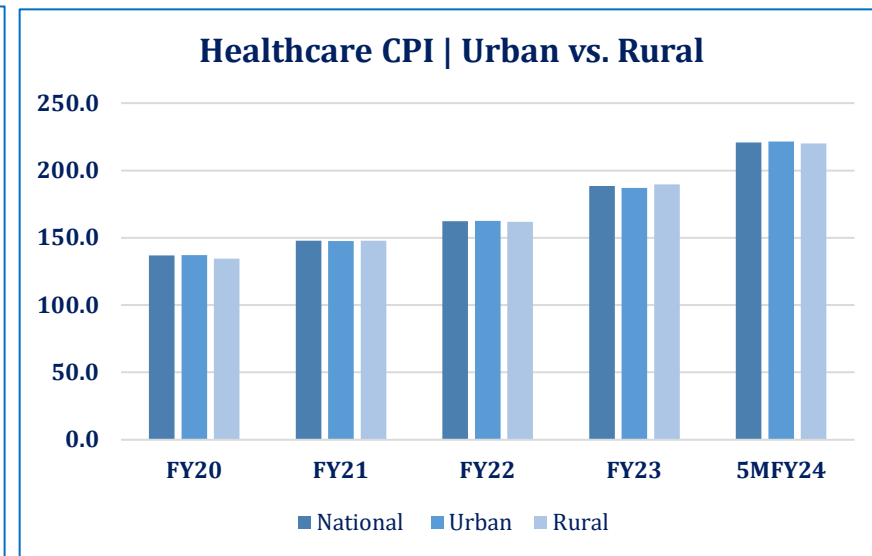
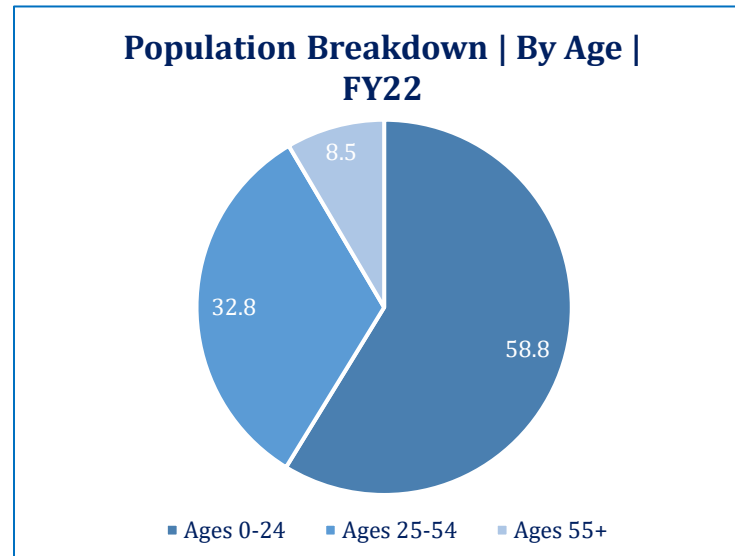
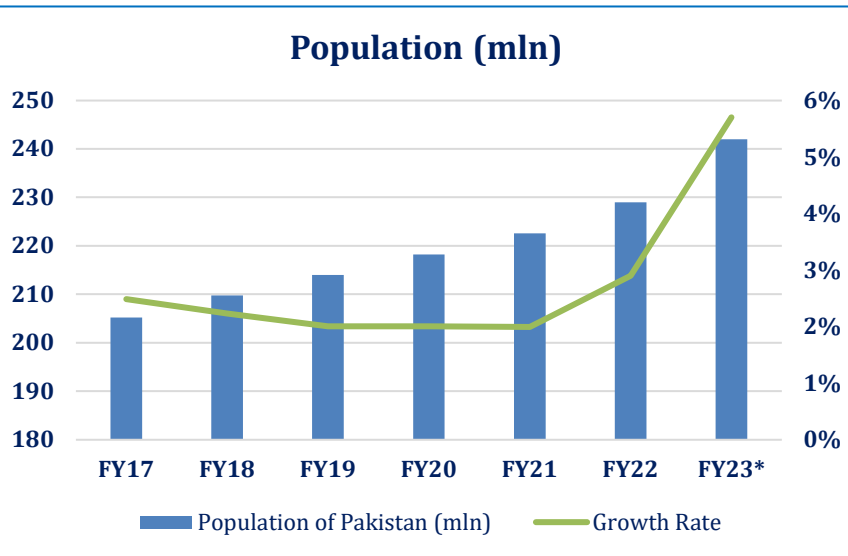


Note: Data of PRSP budgetary expenditure updated as of Jun'23 and includes provincial and federal health expenditure. PSDP allocation pertains to National Health Services Regulation & Coordination. PRSP is short for Poverty Reduction Strategy Program.

Healthcare

Local | Demand

- Pakistan's population recorded at ~242mln during FY23. Annual population growth rate of the country is ~2.6% in CY23, ~2.5x the global growth rate of ~1.0%. Pakistan's CY23 life expectancy is expected to be ~67.8 years, up ~0.23% YoY, whereas the infant mortality rate is expected to be ~55.8 deaths per 1,000 live births, down ~2.0% from CY22. Further, over ~40% of the country's under-five years of age children are stunted, as compared against South Asian average of ~31%.
- Other factors like climate change have also increased the demand for the Healthcare industry. It is estimated that environmental causes in Pakistan account for ~200 fatalities out of every ~100,000 people. Moreover, indoor air pollution causes ~40mln instances of acute respiratory illnesses and ~28,000 deaths per year in Pakistan, while outdoor air pollution causes ~22,000 premature adult deaths.
- The CPI for Healthcare industry shows an increasing trend over the years, averaging ~188.4 at the national level in FY23, a ~16.4% YoY increase. The common citizen is under pressure to cover higher expenses for Healthcare services in both urban and rural areas due to the increasing price of Healthcare.



Note: Data of PRSP budgetary expenditure updated as of Jun'23 and includes provincial and federal health expenditure. PSDP allocation pertains to National Health Services Regulation & Coordination. PRSP is short for Poverty Reduction Strategy Program.

Healthcare

Supply | Overview

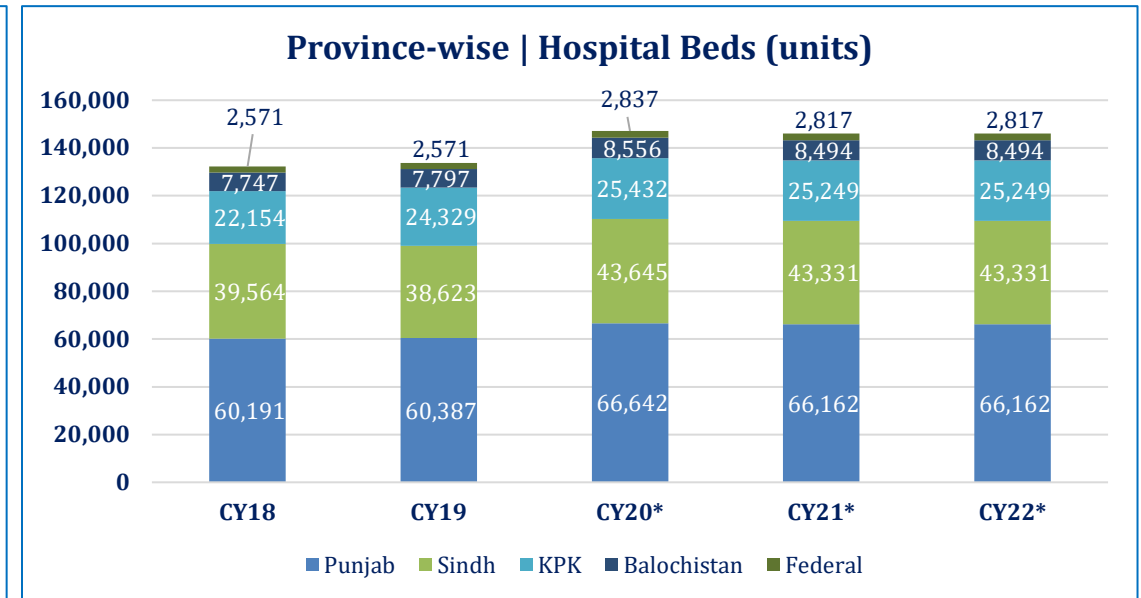
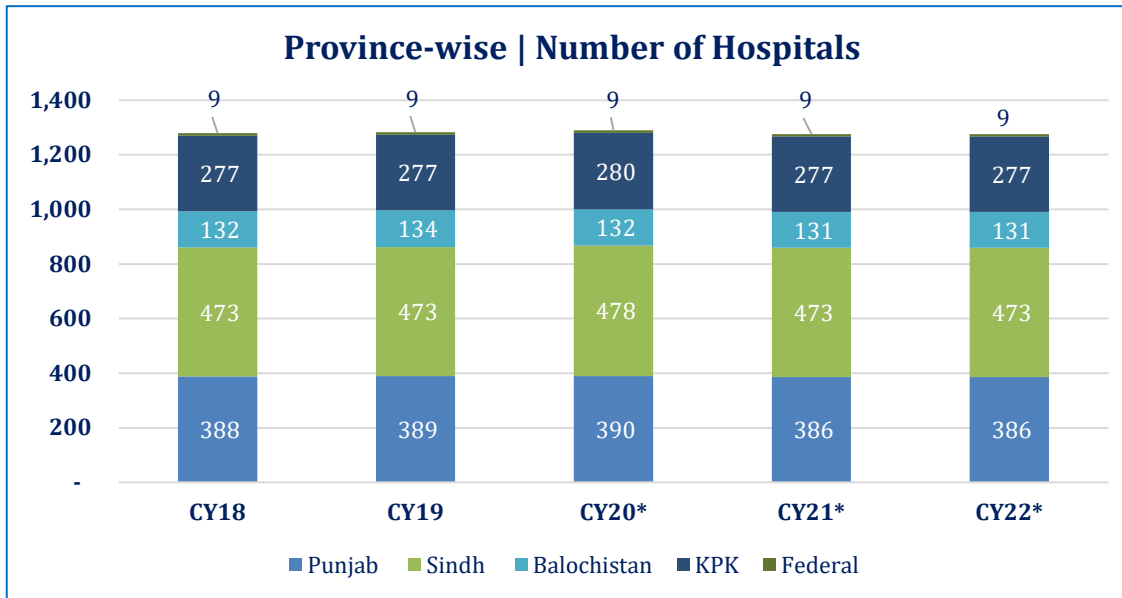
Healthcare Infrastructure	CY17	CY18	CY19	CY20	CY21	CY22*
Hospitals	1,264	1,279	1,282	1,289	1,276	1,276
Dispensaries	5,654	5,671	5,743	5,849	5,832	5,832
TB Clinics	431	441	412	410	416	416
Basic Health Units (BHUs)	5,505	5,527	5,472	5,561	5,559	5,559
M.C.H Centres	727	747	752	752	781	781
Number of Institutions (Total)	13,581	13,665	13,661	13,861	13,864	13,864
Number of Beds (Total)	131,049	132,227	133,707	147,112	146,053	146,053
Healthcare Manpower						
Doctors	208,007	220,829	233,261	245,987	266,430	282,383
Nurses	103,777	108,474	112,123	116,659	121,245	127,855
Midwives	38,060	40,272	41,810	43,129	44,693	46,110
Dentists	20,463	22,595	24,930	27,360	30,501	33,156
Lady Health workers	18,400	19,910	20,565	21,360	22,408	24,022
Total	388,707	412,080	432,689	454,495	485,277	513,526

*Latest available data

Healthcare

Local | Province-wise Supply

- As of CY22, the total number of Healthcare infrastructure facilities in Pakistan was recorded at ~13,864, with a total of ~1,276 hospitals and ~146,053 hospital beds across the country. The ratio of beds per 1,000 people stood at ~0.63 during the year. A regional comparison in CY17 reveals that Pakistan has ~0.6 hospital beds per 1,000 people compared to India ~0.5 and Bangladesh ~0.8. With ~4.2 hospital beds per 1000 people, Sri Lanka has more beds than the other three nations combined. Similarly, with respect to the number of physicians per 1,000 people, during CY19, Pakistan recorded ~1.1 physicians per 1,000 people, compared to India (~0.7), Bangladesh (~0.7), and Sri Lanka (~1.2).
- As of CY19, of a total of ~1,282 hospitals, majority of them were located in the provinces of Sindh (~37.1%) and Punjab (~30.2%), while ~20% of the hospitals were located in KPK, followed by ~10% of the hospitals in Balochistan. There were only ~9 hospitals in the entire country that were under the Federal government.
- However, in terms of number of beds per hospital, federal hospitals were the largest in terms of capacity with an average of ~286 beds per hospital. This was followed by Punjab with an average of ~155 beds per hospital.

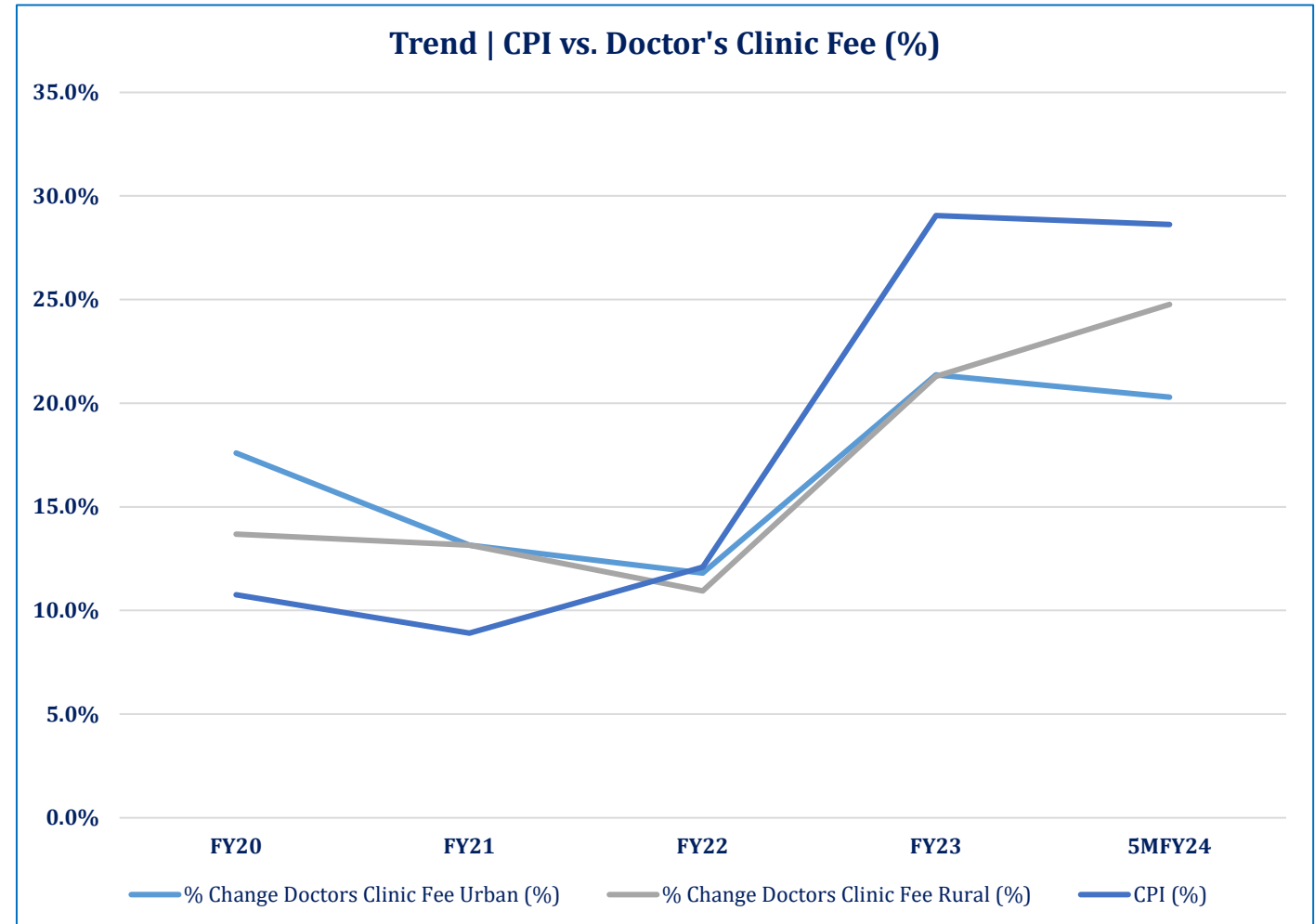


*CY20,21,22 provincial breakdown calculated using previous averages.

Healthcare

Local | Pricing

- In FY23, the average doctors' Clinic fee increased ~21.3% YoY for both rural and urban population (SPLY: ~11.0% and ~1.9% YoY growth, respectively). Meanwhile, national CPI averaged ~29.1% during the year.
- In Nov'23, the Doctors' Clinic Fee for rural settlements increased ~24.8% YoY while that for urban population declined ~20.3% YoY.
- When observed, the general increase in doctor consultation fees is in line with inflation in the country. However, it can be observed that, post-FY22, the increase in fees for both rural and urban populations is outpaced by the recorded inflation levels in the country.



Healthcare

Private vs. Public Preference

- It was observed that ~53% of the Healthcare consultations in urban areas were done by the private Healthcare facilities, whereas only ~29% were done by the public Healthcare facilities. BHU carried out 1.5% and Hakeems, Homeopaths and Pharmacy together carried out 5.1% of the consultations.
- The scenario for rural areas was not very different, where ~55% of the Healthcare consultations were done by private facilities whereas ~27% were done by public institutions. BHUs carried out ~9.5% and Hakeems, Homeopaths and Pharmacy together carried out ~7.1% of the consultations.
- The preference between public and private has tilted towards private institutions as can be seen by the data. This is due to the consensus amongst the population that private Healthcare facilities provide better Healthcare services with improved modern procedures using up to date safe techniques.
- Due to the price delta in Healthcare charges, Private Hospitals are able to provide better facilities, with lower wait times, safer operations, a better environment and are able to provide more qualified personnel trained in targeted procedures.

% Distribution Of Health Consultations By Type of Health Provider Consulted FY20*			
	Urban	Rural	Total
Private	62.9	54.8	58.1
Public	29.5	27.0	28.0
BHU	1.5	9.5	6.3
Hakeem	0.9	1.3	1.1
Homeopath	0.6	0.3	0.4
Pharmacy	3.6	5.5	4.7
Other	1.0	1.7	1.4
Total	100.0	100.0	100.0

*Latest available data

Healthcare

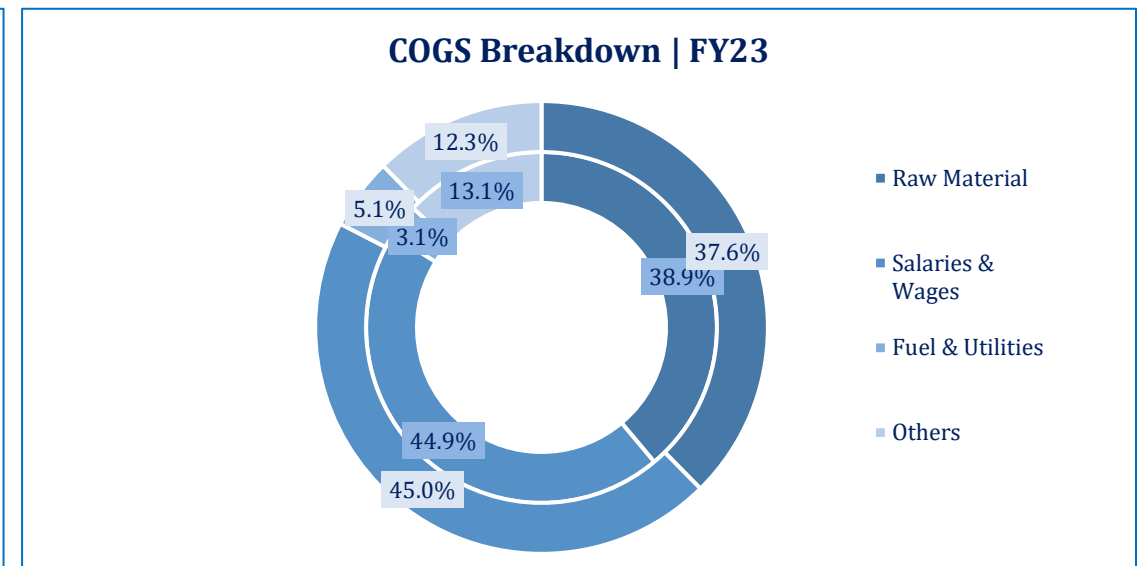
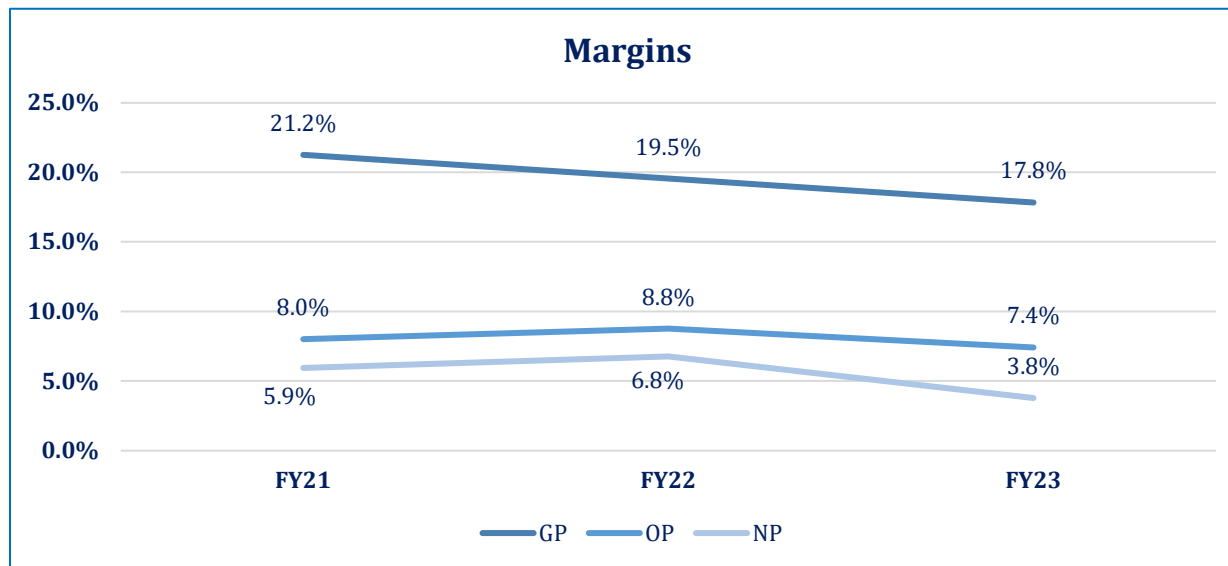
Business Risk

Identified Risk Factors	Description
Poor Infrastructure	➤ Healthcare infrastructure remains inadequate in terms of the population size. The ratio of beds per 1,000 people stood at ~0.6 during CY17. Rural hospitals frequently lack necessary facilities, which adds to the large Healthcare gap between urban and rural populations
Shortage of Medicines/ Machinery	➤ There are recurring shortages within the pharmaceutical sector of essential medications . Moreover. medical equipment is either outdated or nonexistent.
Reliance on Imported Machinery	➤ The Healthcare industry is mostly dependent on imported machinery since there is a scarcity of local manufacturers.
Inadequate Policy Framework	➤ Pakistan devotes a very small portion of its GDP (~1.4% in FY22) on Healthcare which hinders Sector’s development.
Poor Management	➤ Hospitals can be unclean and unsanitary, have inadequate security, provide subpar patient care, frequently run out of medications and supplies, have fraudulent staff who demand bribes from patients, and sometimes even lack basic utilities like fuel, power and water.
Low Awareness	➤ The general public frequently lacks knowledge about preventative Healthcare practices, which increases the burden of avoidable illnesses on the Healthcare system.
Work Overload for Healthcare Providers	➤ Healthcare personnel frequently deal with excessive workloads as a result of staffing shortages, which can affect patient care and cause burnout and diminished efficiency. Statistically, there is ~1 doctor per 1,000 persons as of CY22.
Lack of Digitization	➤ Inadequate digitalization of the Healthcare sector leads to inefficiencies, makes it hard to keep patient information up to date and makes it impossible to implement new Healthcare technology that will improve patient care.
Recurrent Natural Shocks	➤ Natural catastrophes like earthquakes and floods are a serious danger to the infrastructure supporting the Healthcare sector, since they can cause service disruptions and aggravate pre-existing problems.

Healthcare

Business Risk | Margins

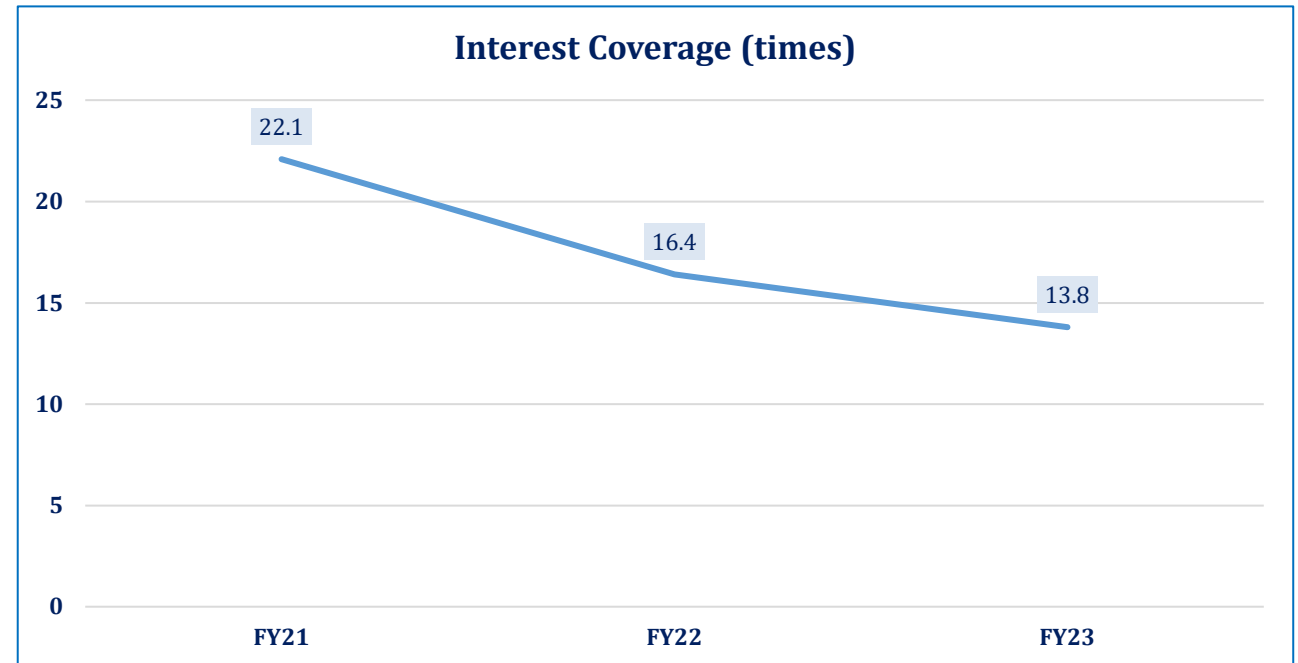
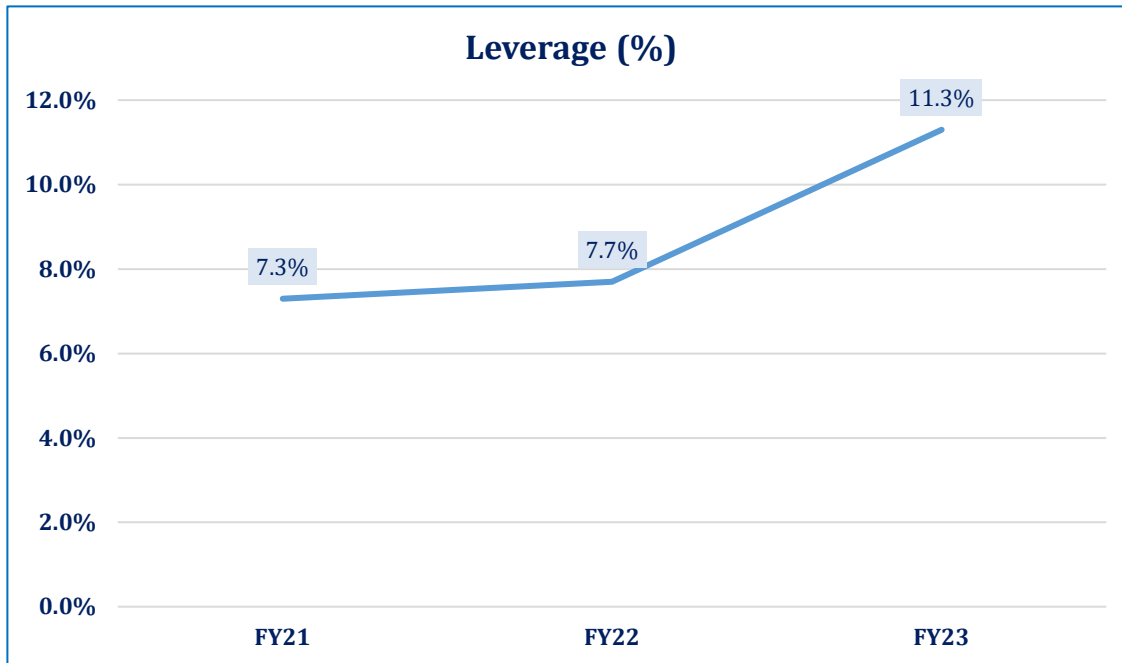
- The Sector majorly derives its revenue from hospital billings, i.e., ~99.3% in FY23. These can further be categorized into academia ~50.2% (the sector player owns two university campuses) and the actual hospital ~48.8%. Meanwhile, room service charges and other incomes comprised of ~0.7% of the revenue during FY23.
- Sector's revenue increased ~14.3% YoY in FY23. The Sector's margins have remained rangebound in the recent years (FY21-23) with gross margins averaging ~19.7%. However, gross margins declined to ~17.9% in FY23, owing to increasing cost of sales for the sector, which increased by ~16.5% YoY. Similarly, operating margin declined to ~7.4% due to increased operating expenses, which rose ~11.1% during the year. Net margins recorded at ~3.8% from ~6.8% in FY22. This was likely due to increasing finance costs.
- Salaries and wages constitute the largest component within direct costs at ~45%, remained rangebound SPLY. Raw material cost makes up the second largest component at ~37.6% during FY23 (SPLY: ~38.9%), where these comprise medicines (~42.7%) of the total raw material and surgical/general goods (~55.0%).



Healthcare

Financial Risk | Leverage and Interest Coverage

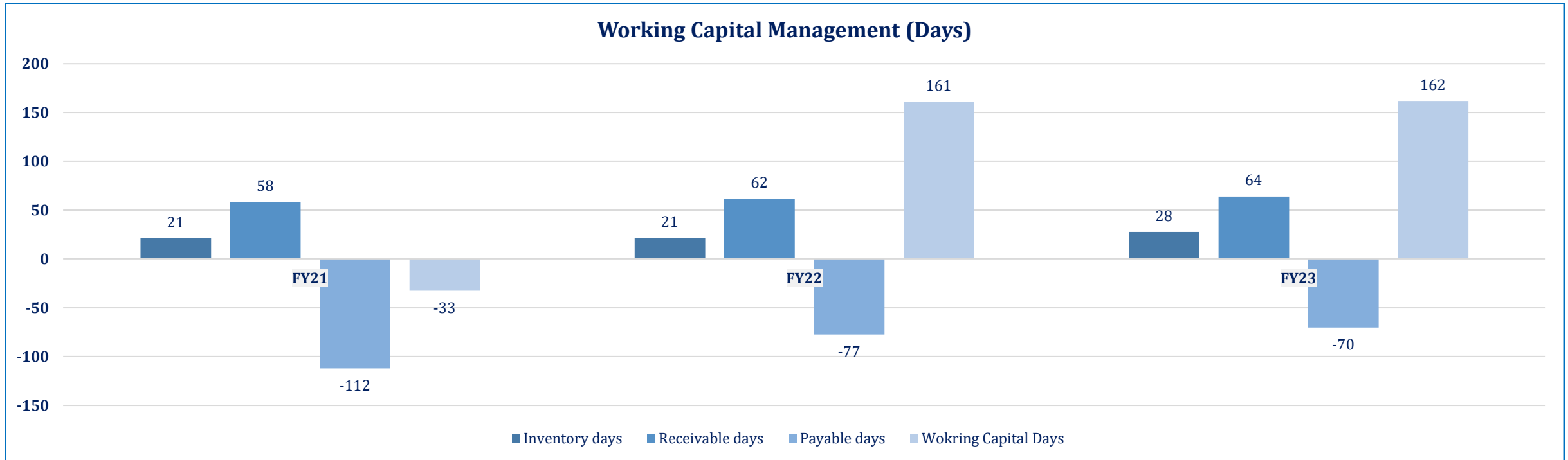
- The sector’s debt-to-equity ratio in FY23 was recorded at ~11.3%, possibly due to an increase in the borrowings to the tune of ~58.8% increase YoY. This increase can be associated with the sector player’s expansion plans for FY24, along with meeting its working capital requirements.
- The Sector’s borrowing mix during the year reflected that short-term borrowing comprised ~76.0% of the borrowing mix and increased ~42.2% YoY, whereas long-term borrowing comprised ~23.0% of the borrowing mix and increased ~127% YoY.
- The overall coverages decreased to ~13.8x in FY23. The coverages of the sector stood at moderate level mainly on the back of subsidized borrowings from SBP.



Healthcare

Financial Risk | Working Capital

- The sector effectively manages working capital using short-term borrowings and internal cashflows. The sector’s working capital is largely a function of accounts payable and trade receivables. The sector’s average net working capital cycle is ~97 days during FY23.
- The Sector’s inventory days stood at ~28 days in FY23, compared to ~21 days in FY22. In FY23, receivable days have increased to ~64 days (FY22:~62 days), with a YoY increase of ~2 days. Receivables of the sector comprise debtors including clients (most likely, corporate customers and room rental charges). The largest part of the corporate billings was ~20% outstanding for over a year and ~1/4th of the corporate aging was paid in cash. The payable days stood at ~70 days (FY22: ~77 days).

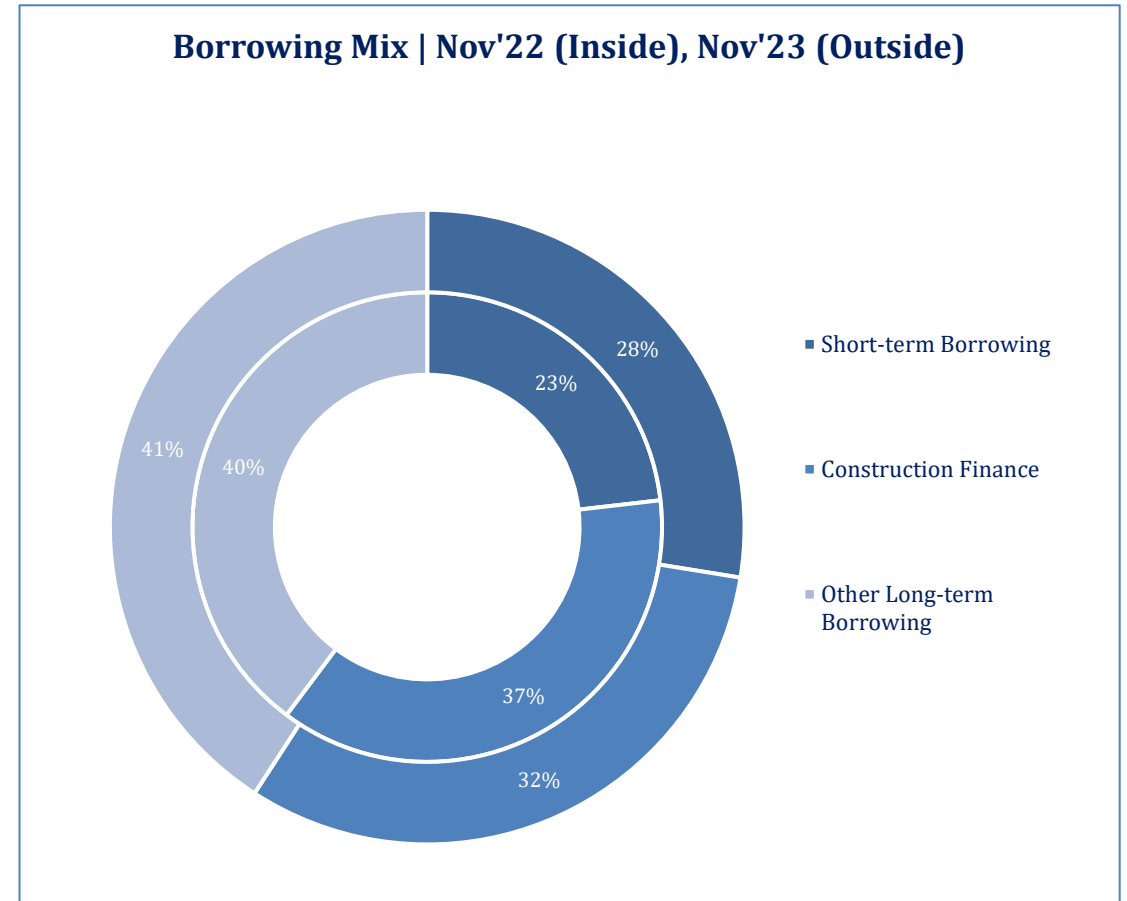


Note: Data is reflective of ~1 Sector player

Healthcare

Financial Risk | Borrowing Mix

- The overall Healthcare industry’s borrowings, defined as “Hospital Activities” stood at PKR~12.2bln as at End-Nov’23, as compared to PKR~14.5bln as at End-Nov’22, a YoY decrease of ~16%.
- The largest component within the Sector’s borrowing mix was Other Long-term borrowings which stood at ~4,979mln in Nov’23, marking a YoY decline of ~14%.
- Construction finance stood at ~3,854% in Nov’23, a decrease of ~28% YoY. Meanwhile, short-term borrowings did not exhibit much change as it stood at PKR~3,358mln (SPLY: PKR~3,363mln), recording a YoY dip of ~0.14% in Nov’23.



Healthcare

SWOT Analysis

- Steadily increasing demand due to increasing population
- Demand is extremely in-elastic
- High reliance of customer to continue treatments
- Fixed returns
- No check in prices by government

- Only 1.5% of the GDP is invested into Healthcare sector, lower than the suggested 5%
- Lower allocated budget for Healthcare
- High Cost of Healthcare services
- An over all ~21% increase in inflation in the Healthcare sector



- Increasing popularity of Tele-medicine provides as a threat towards out-patient revenue focused hospitals
- Increasing trend of qualified Healthcare workers leaving the country
- High level of competition
- Family planning and general decrease in the growth of population can decrease the increasing demand
- Improving standards of living decrease the chances of reliance towards Healthcare.

- With the introduction of programs like Sehat Sahulat Program, reluctance towards utilizing Healthcare by a huge proportion of the population has decreased
- Huge percentage of population without access to proper Healthcare are potential customers
- Room of research and development to improve existing treatments and find new ones.

Outlook: Stable

- Pakistan's economy posted a real GDP contraction of ~0.17% in FY23 (FY22: ~6.1%), while the LSM declined by ~10.3% (FY22: ~11.8%), owing majorly to supply-chain disruptions which resulted from SBP-imposed import restrictions, along with the flash floods of Aug'22, and consequent sluggish demand across major industrial sectors of the country.
- In FY23, the sector's revenue grew ~14.3% YoY. In recent years (FY21-23), the sector's margins have been rangebound, with average gross margins of ~ 19.7%. Rising operating expenses, which grew by ~11.1% YoY, caused the operating margin to drop to ~7.4%. Net margins decreased to ~3.8% in FY23 from ~6.8% in FY22, on account of rising finance costs. The sector's debt-to-equity ratio in FY23 was recorded at ~11.3 and the overall borrowing of the Healthcare sector decreased ~16% increase YoY.
- In terms of PRSP, the expenditure fell to ~1.4% of the GDP in FY22 from ~1.5% in FY21. Moreover, the PSDP Health Allocation also decreased to PKR~12.7mln in FY23, a YoY decrease of ~41.8%. Simultaneously, the demand for Healthcare services is ever-increasing, keeping in view the population growth rate of ~2% during FY22. The rising population pressure on state health institutions has allowed the private sector to bridge the gap of rising demand and limited public health facilities.
- The CPI for Healthcare has an increasing trend over the years, averaging at ~188.4 at the national level in FY23, a ~16.4% YoY increase. Moreover, in FY23, Doctors' Clinic fee increased ~21.3% YoY for both rural and urban populations (SPLY: ~11.0% and ~1.9% YoY growth, respectively). Meanwhile, national CPI averaged ~29.1% during the year. Post-FY22, the increase in fees for both rural and urban populations is outpaced by the recorded inflation levels in the country.
- There is an urgent need to reform policies and budget allocation so as to improve spending on health across the country. The government has been pursuing PSDP projects actively, such as Sehat Sahulat Program, Expanded Program on Immunization, Polio Eradication Initiative (PEI) Programme and Malaria Control Program, amongst others. However, there is still a need to improve the sector's infrastructure, governance, cross-sectional linkages, information systems and research and the overall health financing.
- Going forward, the Healthcare industry is expected to remain focused on the digitization aspect. Forecasts indicate that worldwide expenditure on mobile mental health applications, which recorded a ~32% annual growth to USD~269mln in 10MCY20 from USD~203mln in SPLY, will persist at a rate of ~20% per annum.

Bibliography

- World Bank
- WHO
- OECD
- Globalwire
- Pakistan Economic Survey
- State Bank of Pakistan
- Ministry of Finance
- Pakistan Bureau of Statistics
- PACRA Internal Database

Research Team	Saniya Tauseef <i>Senior Manager</i> saniya.tauseef@pacra.com	Ayesha Wajih <i>Supervising Senior</i> ayesha.wajih@pacra.com	Maham Ali <i>Associate Research Analyst</i> maham.ali@pacra.com
Contact Number: +92 42 35869504			

DISCLAIMER

PACRA has used due care in preparation of this document. Our information has been obtained from sources we consider to be reliable but its accuracy or completeness is not guaranteed. The information in this document may be copied or otherwise reproduced, in whole or in part, provided the source is duly acknowledged. The presentation should not be relied upon as professional advice.