Impact of COVID-19 on the MedTech industry in India

December 2020
1. India’s macroeconomic environment

2. Looking back: The impact of COVID-19
   2.1 Hospital
   2.2 Health insurance
   2.3 MedTech

3. Looking ahead: Recovery outlook
   3.1 Hospital
   3.2 MedTech
   3.3 Why is India’s recovery likely to be different?

4. Recommendations
India’s macroeconomic environment
Indian economy was slowing in FY20 and saw a sharp contraction in Q1 FY21; however, there are signs of economic recovery with increasing tax collections in recent months.

### India’s GDP Growth Rate (%)

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1FY19</td>
<td>7.1%</td>
</tr>
<tr>
<td>Q2FY19</td>
<td>6.2%</td>
</tr>
<tr>
<td>Q3FY19</td>
<td>5.6%</td>
</tr>
<tr>
<td>Q4FY19</td>
<td>5.7%</td>
</tr>
<tr>
<td>Q1FY20</td>
<td>5.2%</td>
</tr>
<tr>
<td>Q2FY20</td>
<td>4.4%</td>
</tr>
<tr>
<td>Q3FY20</td>
<td>4.1%</td>
</tr>
<tr>
<td>Q4FY20</td>
<td>3.1%</td>
</tr>
<tr>
<td>Q1FY21</td>
<td>-9.8%</td>
</tr>
<tr>
<td>Q2FY21E</td>
<td>-5.6%</td>
</tr>
<tr>
<td>Q3FY21E</td>
<td>-5.6%</td>
</tr>
<tr>
<td>Q4FY21E</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

*Source: RBI*

### GST Collection (’000 Cr)

<table>
<thead>
<tr>
<th>Month</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>August</th>
<th>September</th>
<th>October</th>
<th>November</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth</td>
<td>113.9</td>
<td>32.3</td>
<td>100.3</td>
<td>62.0</td>
<td>99.9</td>
<td>90.9</td>
<td>102.1</td>
<td>87.4</td>
</tr>
<tr>
<td>Growth</td>
<td>98.2</td>
<td>86.4</td>
<td>91.9</td>
<td>95.5</td>
<td>95.4</td>
<td>105.2</td>
<td>103.5</td>
<td>105.0</td>
</tr>
</tbody>
</table>

*Source: PIB, GOI*

### Passenger Vehicle Sales Data

<table>
<thead>
<tr>
<th>Month</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>August</th>
<th>September</th>
<th>October</th>
<th>November</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>226,975</td>
<td>209,522</td>
<td>190,115</td>
<td>189,129</td>
<td>215,124</td>
<td>272,027</td>
<td>310,294</td>
</tr>
<tr>
<td>Sales</td>
<td>33,546</td>
<td>105,617</td>
<td>152,779</td>
<td>215,916</td>
<td>310,294</td>
<td>253,139</td>
<td>264,898</td>
</tr>
</tbody>
</table>

*Source: SIAM*

### India Unemployment Rate %

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>6.0%</td>
<td>6.0%</td>
<td>6.9%</td>
<td>5.4%</td>
<td>6.4%</td>
<td>5.5%</td>
<td>5.5%</td>
<td>5.9%</td>
<td>6.3%</td>
<td>6.3%</td>
<td>6.3%</td>
<td>6.3%</td>
<td>6.3%</td>
<td>6.3%</td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>9.6%</td>
<td>9.0%</td>
<td>8.9%</td>
<td>8.4%</td>
<td>8.4%</td>
<td>8.4%</td>
<td>8.4%</td>
<td>8.4%</td>
<td>8.4%</td>
<td>8.4%</td>
<td>8.4%</td>
<td>8.4%</td>
<td>8.4%</td>
<td>8.4%</td>
<td></td>
</tr>
</tbody>
</table>

*Source: CMIE*

- As per the RBI, India’s economy will contract by 9.8% in Q2 of FY21, but it is poised to see near-positive growth at the end of the financial year.¹
- Industrial activity remained in the negative zone for the sixth consecutive month, contracting 8.0% in August 2020 as against the downwardly revised 10.8% fall in industrial output recorded in the previous month.²
- India’s export growth turned positive in September mainly due to increased exports of drugs, pharmaceuticals and garments.³
- The country’s unemployment rate reached its highest point at the end of the lockdown; conditions have improved after the economy opened up, reducing joblessness.⁴
- FMCG and passenger vehicle sales have picked up and reached pre-COVID levels, indicating recovery in spending.
- GST collections have started picking up gradually.
- The RBI has maintained that it will have an accommodative monetary policy to help ease liquidity conditions.

¹ Source: RBI
², 3 Source: CII
⁴ Source: CMIE
Although the RBI’s consumer confidence survey spelt immediate pessimism, future expectations are positive.

![Overall Consumer Sentiment Index](chart)

**What does the population think about the situation?**

- In the current situation, consumer confidence has taken a drastic hit. However, the Future Expectation Index (FEI) has seen a rebound after touching a multi-year low in April.
- In the current situation, perceptions on income, employment and overall economic situation have taken a hit.
- The same parameters are expected to improve in the coming year. Owing to a lower base in the current year, the growth next year can be on the higher side.
- Positive sentiments around spending will see the economy back on track faster than expected.

**Summary based on net responses**

<table>
<thead>
<tr>
<th>Main variables</th>
<th>Current perception compared with previous-year data</th>
<th>Next-year expectations compared with current situation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Jul 20</td>
<td>Sep 20</td>
</tr>
<tr>
<td>Economic situation</td>
<td>-65.9</td>
<td>-70.6</td>
</tr>
<tr>
<td>Employment</td>
<td>-65.1</td>
<td>-71.6</td>
</tr>
<tr>
<td>Price level</td>
<td>-76.2</td>
<td>-80.4</td>
</tr>
<tr>
<td>Income</td>
<td>-54.5</td>
<td>-53.8</td>
</tr>
<tr>
<td>Spending</td>
<td>30.8</td>
<td>26.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Positive sentiments with signs of improvement compared to last round</th>
<th>Negative sentiments with signs of improvement compared to last round</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive sentiments with signs of deterioration compared to last round</td>
<td>Negative sentiments with signs of deterioration compared to last round</td>
</tr>
</tbody>
</table>

Source: RBI Consumer Confidence Survey; Survey Month - September 2020
The Impact of COVID-19
2.1 Hospital
Restrictions on patient movement and fear of contagion had significant impact on hospital operations - visiting patient volumes and bed occupancy both dipped by ~80% during the lockdown.

- The drop in procedures was more in case of planned/elective procedures as compared to ailments where treatment is unplanned and/or of an emergency nature.
- Hospitals are still not performing elective surgeries or taking admissions in full flow, which is impacting the overall occupancy.
- With restrictions on inter-state and global travel, medical tourism has also taken a hit as the flow of visiting patients from neighbouring states and other countries have come to a halt.
- Overall, the situation has led to a drop in both OPD volume and occupancy, resulting in a significant drop in revenues across all cities, irrespective of tier types.


Note: Pre-COVID: January 1 to March 15; During lockdown: 25 March to 2 June.
After Unlock-1 in June, occupancy rose to 60% largely due to the high occupancy of COVID-19 beds; Oncology, Gynaecology and Dialysis facilities have picked up faster, whereas disciplines like Orthopaedics are recovering slowly.

Average OPD footfall Apr–Jun (NHA assessment)

<table>
<thead>
<tr>
<th>X – OPD Volumes Pre- COVID</th>
<th>0.56 X</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>0.15 X</td>
</tr>
<tr>
<td>May</td>
<td>0.28 X</td>
</tr>
<tr>
<td>June</td>
<td></td>
</tr>
</tbody>
</table>

Average occupancy Apr–Jun (NHA assessment)

<table>
<thead>
<tr>
<th>X – Occupancy Pre- COVID</th>
<th>0.82 X</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>0.2 X</td>
</tr>
<tr>
<td>May</td>
<td>0.3 X</td>
</tr>
<tr>
<td>June</td>
<td></td>
</tr>
</tbody>
</table>

Other key insights from our primary market research (PMR)

Recovery in occupancy driven by COVID-19 beds
- Leading standalone hospital had 50% bed occupancy in September with COVID-19 bed occupancy at 100% and non-COVID-19 bed at 35%
- Leading private hospital chain had 60% bed occupancy in September with 80% bed occupancy for COVID-19 beds

The impact and recovery has been different across various segments

1. **At a leading private chain in India:**
   - Joint replacement saw 85% decline in April and 65% decline in July
   - Rise in gynaecology procedures as small hospitals were not functional
   - Oncology saw 50% decline in April and 90% recovery in July
   - Oncology, nephrology, acute neurosciences and trauma volume recovered much faster

2. **At a leading standalone hospital (Sep)**
   - Complete recovery in dialysis facilities
   - Bypass surgeries and neuro surgery for critical cases, as well as orthopedics emergency surgery started
   - Radiology and cardiology saw slow recovery

- While there was a significant dip in OPD footfall and occupancy during the lockdown, the volumes have improved considerably to reach ~60% of the Pre-COVID-19 scenario.
- With elective surgeries being postponed, there is a dip in occupancy of hospitals.
- Experienced doctors are part of the high-risk population due to their vulnerable age. Hence, there was low doctor confidence to perform surgeries
- The Central Government began Unlock-1 in June after 68 days of nationwide lockdown. State governments and local authorities further continued to impose lockdown/ restrictions. These restrictions severely impacted the hospitals’ volumes.
- Medicines segment is recovering through video consults/ OPD/ dengue cases etc.
- Surgical cases are witnessing slow recovery due to low patient and doctor confidence.
- Medical tourism is yet to recover due to restrictions on international travel.

Source: PwC analysis of interviews with leading hospitals in India; Bed occupancy at hospitals up at 60% of pre-lockdown days. Times of India. July 2020

Note: NHA – National Health Authority
In addition to a decline in the number of patients, private hospitals are facing challenges around price control, higher operational costs, diminished cash flow and lower profitability.

**Hospital capacity**
- Private hospitals allotted beds and additional manpower for COVID-19 treatment
- Some state governments reserved beds in private hospitals for COVID-19 treatment
- The Maharashtra Government reserved 80% beds in private hospitals and nursing homes for COVID-19 treatment
- In September 2020, the Odisha government asked all private hospitals in major cities and towns to reserve 50% beds for COVID-19 treatment
- As a measure of relief, some state governments also allowed for increase in capacity

**Price control**
- Government steps brought in price control even before COVID-19
- Some state governments capped COVID-19 testing and treatment charges
- The Maharashtra Government also capped charges for 80% of the non-COVID-19 beds till August; charges for 50% of the non-COVID-19 beds were capped after September

**Operational costs**
- Private hospitals set up isolation wards and quarantine centres, bought new equipment, created separate patient flows, set up temporary structures to screen staff/patients and converted their premises into hybrid facilities for COVID-19 and non-COVID-19 treatment, all of which led to a surge in capital expenditure
- Operation costs increased due to adopted infection control measures for healthcare workers and patient (e.g. disposables use, staff training, shift management, tech deployment, staff insurance coverage, disinfection procedures, lodging and transport of staff etc.)
- Manpower and material costs have increased

**Cash flow and profitability**
- Decline in revenue and increased operational expense led to cash flow challenges and reduced profitability
- Government released payment dues of CGHS (Central Government Health Scheme) and ECHS (Ex-Servicemen Contributory Health Scheme) that helped ease the cash flow burden
- Private insurance companies are demanding hospitals to charge rates set by government
2.2 Health insurance
The health insurance sector has been growing at a brisk pace with government schemes driving growth; With COVID-19, a wide range of new insurance products has been introduced, as well as higher premium rates are being charged.

COVID-19 will change the insurance industry at a faster pace

- Health insurance in India has grown rapidly at a CAGR of 20% since FY16.
- There is further potential for growth, since retail health policies (non-government sponsored) cover only 3% of the total population of India.
- Judging from the experience in other countries during the SARS and MERS epidemics, the ongoing crisis will likely lead to a substantial increase in insurance penetration.
- Average premium payments have consistently grown in the past and are expected to increase in future on account of medical inflation and higher treatment costs.
- COVID-19 related payouts are higher than other infectious disease payouts.
- As a direct impact of COVID-19, the costs of other treatments have also increased.
- Customers are demanding cashless facilities, a higher range of ailment coverage and competitive premium amounts, translating into higher healthcare spending in the future.
- Home healthcare as a concept may soon be covered under insurance policies.
- While most of the premiums and claims come from urban areas, rural penetration shall increase in the future.
- Certain TPAs have changed during the pandemic, directly impacting the agreed tariff with the provider.
- The COVID-19 crisis will likely push insurers to digitize processes related to claim settlements. Insurers covering the disease have already started digitizing their processes, which will help make sure that their performance is not affected by a spike in demand.
- While disease-specific products have shown growth, it is yet to be seen if customers opt for comprehensive plans.

Source: PwC analysis of interviews with leading health insurance providers in India; PwC white paper: Health Insurance Consumer Pulse Survey
2.3 MedTech
Compared to the previous year, the sale of medical devices dropped to 20% in April ’20; the recovery since then has been slow, with sales in Aug ’20 at 35% of the Aug’19 levels.

- The government directive to put a hold on elective surgeries for the first 30 days, and the subsequent low patient and doctor confidence, led to a significant decline in MedTech volumes in April and May. Recovery started around the month of June.
- Decline in revenue and cash flow challenges led to hospitals deferring CapEx and expansion plans, delaying payments and driving efficient procurement.
- The government’s procurement focus was on COVID-19-related treatment products.
- Demand trends varied across states based on the spread of COVID-19 infection cases.
- Demand for medical devices was severely impacted in Delhi and Mumbai.
- The majority of players did not launch any new product.
- Non-metro cities opened up and performed better than the metros. Sales in Delhi improved for a period, but declined again as COVID-19 cases surged.
- South India was initially recovering, but with subsequent increase in cases in mid-June, the recovery slowed and became at par with other states.
- Performance in the western states like Maharashtra and Gujarat suffered due to stricter lockdown measures.

In the months of April–June 2020, estimated decline in revenue was as given below:
- Cardiology: up to 60%
- Orthopaedics: up to 85%
- Ophthalmology: up to 75%
- Critical care device: up to 50%

Source: 1. PwC analysis of interviews with medical devices companies in India
2. The medical device industry suffers up to an 85% drop in revenues from April to June: MTal. Economic Times. August 5, 2020
Apart from the decline in volumes, the MedTech ecosystem is also facing challenges on various fronts, including government policies, hospital/doctor engagement, disruptions to supply chains and increased financial distress.

**Government policies**

- Health cess on imported products impacted the profitability of the companies, since they were unable to pass on the cost to hospitals or patients. The hospital industry is also under financial stress.
- Price control on stents and knee implants, coupled with reduced number of surgeries under this segment further impacted the revenues.
- Revis ed public procurement policy will not allow global innovators and local suppliers not catering to the specified local content to apply for procurement tenders, thereby reducing their revenues.
- Government procurement is expected to focus on COVID-19 treatment in FY21.
- More than 10% increase in prices is not allowed, since medical devices are classified as drugs (now under regulation).
- Policies such as price control will inhibit the availability of innovative products in India.

**Hospital/doctor engagement**

- Hospitals have restricted access of representatives from medical devices companies.
- Doctor engagements are being conducted through digital medium.
- Product demos are being conducted virtually. Product demos are an integral part of the sales process. It has been a key challenge in the current scenario.
- Some hospitals have delayed payment, deviated from contracts and sought discounts.

**Disrupted supply chain — manufacturing and logistics**

- International and local freight costs have significantly increased.
- During the lockdown period, the industry has faced issues related to permits, delay in imports, freight issues, warehouses in containment zones etc.
- In some cases, manufacturing plants were temporarily shut down due to uncertain lockdown regulations imposed by the state governments and local authorities.
- Medical devices companies also faced issues with finding available packaging material, output delays and low line efficiencies.
- Infection control measures in the plants added to the overall cost. Plants have had to establish new norms for batch planning, line planning etc. as part of the COVID-19 infection control measures.

**Stressed P&L and working capital**

- Liquidity challenges have developed due to a weakened rupee, rise in inventory costs and working capital costs.
- Cash flow challenges are seen among stakeholders including MedTech distributors, MedTech and hospitals. Outstanding payments from distributors and hospitals led to reduction in working capital.
- With demand remaining weak, fixed cost absorption and maintaining channel inventory has also become challenging.

Companies are managing these challenges by...
Looking ahead: recovery outlook
3.1 Hospital
Hospital recovery is likely to be slow, with revenues to reach pre-COVID levels by Q2 of 2021

We interviewed three leading hospital groups in India, who estimated the expected timeline for recovery (defined as reaching 2019 volumes and revenues), as described below:

**Domestic volume: Q1 CY2021**
**Revenue: Q2 CY2021**
**Medical tourism volume unlikely to recover in the near future**

**Insights around recovery**

- Medical tourism volume is unlikely to recover in the near future.
- Recovery scale will be varied across therapy segments.
  - Medical is recovering faster than surgical segment.
  - Among medical segments, Oncology and Dialysis are recovering faster. Oncology recovered by more than 90% in August.
  - Among surgical segments, cardiac and neuro-surgeries are recovering faster than other segments. Orthopaedics surgeries may take longer to recover, since these can be postponed.
  - Leading private hospitals may witness growth in the Gynaecology and Obstetrics segment with local hospital/nursing homes shut down or non-functional.
- In the near future, COVID-19 beds will continue to see high occupancy and drive overall occupancy levels. As cases rise, the government is likely to continue reserving a certain percentage of beds for COVID-19 treatment. Private payers are also demanding to charge government-established rates.
- The government disbursed due payments for CGHS/SGHS, which helped hospitals manage their cash flows.

**Emerging trends**

**Home healthcare and telehealth**

- The home healthcare segment is likely to witness growth
- Hospital chains are partnering with home healthcare firms or launching their own services
- COVID-19-related treatment packages are showing tremendous growth
- Hospitals launched teleconsultations, and experienced doctors are running OPDs through teleconsultation

**Patient safety**

- Hospitals are taking initiatives to ensure patient safety such as screening at entry, separate patient flow, discontinuing visiting hours etc.
- Rapid recovery protocols are likely to be developed as patients will prefer home care over staying at hospitals
- They are driving patient awareness around current safety measures

**Staff safety**

- New protocols are being developed for surgeries
- COVID-19 test for patients before surgery has been made mandatory
- Screening of staff at entry is being conducted

**CapEx**

- CapEx investment on infrastructure, expansion and renovation is postponed
- For larger capital equipment, demand for replacement and new technology still exist

**Procurement**

- Hospitals are looking for alternative vendors to optimize costs
- They are looking for longer credit periods in order to cope with strained cash flow
- Earlier, the revenue mix was 50% surgical and 50% pharma; with reduced occupancy, the mix is 30% surgical and 70% pharma
3.2 MedTech
MedTech recovery is likely to lag behind hospital recovery and reach pre-COVID levels by Q4 of 2021

We interviewed ten leading MedTech players in India who estimated the expected timeline for recovery (defined as reaching 2019 volumes and revenues), as described below:

**Revenue: Q3 or Q4 CY2021**

**Insights around recovery**

- Different segments are likely to have different recovery patterns. High priority elective procedures such as cardiac are likely to resume and recover to pre-2020 levels before segments such as Orthopaedics.
- Recovery shape can look like a ‘W’ or a ‘Nike swoosh’
- Recovery will vary across states based on the progression of the COVID-19 cases.
- Non-metro cities seem to be recovering faster than the metros.
- Replacement sales are seeing faster recovery.
- The consumables sector is likely to recover faster.
- Medical tourism volume is unlikely to recover in the near future.
- Majority players did not launch any new product in the current environment

**Emerging trends**

**Single-use product**
- Single-use products may witness high demand due to stringent safety norms in the current pandemic. Cost pressure may reduce demand in the future.

**Home management devices**
- Patients might prefer home management instead of going to hospitals/doctors for less complex issues, leading to an increase in the purchase of home management devices and lesser footfall in hospitals.

**Doctor engagement**
- Companies are adopting innovative ways of engaging with doctors such as via webinar, webcast, emails/calls etc.
- MedTech players are launching initiatives for upskilling surgeons.

**Credit/Warranties**
- Select players offered extended credit and warranty timelines to distributors or hospitals. The entire value chain is facing cash flow challenges.

**Government demand**
- The industry might see a more subdued demand from the government sector, since the government spend will focus on COVID-19 treatment.

**Select examples of other initiatives**

**Low priced product**
- A company saw the successful launch of low-priced lenses in the consumer market.

**Spot orders**
- Select players started to aggressively capture opportunities in spot businesses.
3.3 Why is India’s recovery likely to be different?
We have assessed the challenges impacting recovery across four key levers:

- COVID-19 progression and policies
- Affordability
- Access
- Government healthcare policies
COVID-19 cases in India rose rapidly; Select government measures are likely to impact hospitals and the MedTech industry

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>10123778</td>
</tr>
<tr>
<td>Active</td>
<td>283849</td>
</tr>
<tr>
<td>Discharged</td>
<td>9693173</td>
</tr>
<tr>
<td>Deaths</td>
<td>146756</td>
</tr>
</tbody>
</table>

- With 19 lakh total cases, Maharashtra has the highest number of cases among all states
- The total cases in Delhi are 6 lakh
- India has been in varying levels of lockdown since March, with phased “unlocks” being gradually introduced

Key regulatory policies being adopted by the government that impact MedTech:

**Restricted movement — lockdown**
- India was under lockdown from the March 24 to June 1, when the first phase of “unlock” was announced
- State governments/local authorities continued imposing movement restrictions based on the spread of COVID-19

**Postponing elective surgeries**
- Elective surgeries were initially put on hold, leading to a significant reduction in revenue for MedTech companies

**International travel restrictions**
- International travel restrictions were implemented worldwide and led to a reduction in medical tourism revenue

**Taking up private-hospital capacity**
- Private hospitals had to reserve amenities for COVID-19 patients, which reduced their capacity to treat other patients; Maharashtra had 80% of the hospital beds reserved for COVID-19 patients at government rates

**Price caps**
- State governments put price caps on COVID-19 treatment costs and testing at private hospitals and labs
- Maharashtra government also capped the charges for 80% of the non-COVID-19 beds until August; charges for 50% of the non-COVID-19 beds were capped September onwards


PwC Impact of COVID-19 on the MedTech industry in India
The COVID-19 crisis further increased access challenges in India, with hospital expansion projects shelved or postponed

<table>
<thead>
<tr>
<th>Per 1000 population</th>
<th>WHO recommendation</th>
<th>India</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital beds</td>
<td>5</td>
<td>1.3</td>
</tr>
<tr>
<td>Doctors (Allopathy)</td>
<td>1</td>
<td>0.69</td>
</tr>
</tbody>
</table>

**Access challenges**

**COVID-19**
- Capacity of private players were held up for COVID-19 treatment; Maharashtra government took over 80% beds in private hospitals
- Hampered patient movement due to lockdown, night curfews, international flight restrictions etc.
- Senior doctors are part of the high-risk population; low confidence on visiting hospitals and performing surgeries safely

**Others**
- Density of hospital beds and doctors is below WHO recommendation
- Being highly concentrated in urban areas and dominated by private players, accessibility to quality health infrastructure is a challenge

**Impact**

**Short term**
- Access to treatment for other ailments might be a challenge for patients
- Private hospital profitability will be impacted due to change in case mix and high operational expenses; bed occupancy will be driven by COVID-19 patients

**Long term**
- In the current COVID-19 crisis, the government has started the “Mission Begin Again”, adding new beds, increasing the capacity of ICUs, recruiting medical practitioners on contract, weighing in on extending the serving period for retiring doctors and nurses, which will increase access to healthcare in the long run
- However, projects to increase access have been hampered by the pandemic and could potentially see delays

Source:
2. [Distributional health workers in rural areas anaemic Study](https://www.thehindubusinessline.com/economy/distribution-of-health-workers-in-rural-areas-anaemic-study/article27278201.ece)
Healthcare affordability of the middle-class population in India has reduced due to economy slump and job losses

**Slowdown in economy**

COVID-19 impact | The Indian Economy will contract by 10–15% — Fitch, Moody’s and Goldman Sachs

Jan–March 2019 growth rate: 6.1%
Jan–March 2020 growth rate: 3.1% (government advance estimates: 5%)

**Job loss most severe immediate impact of COVID-19:** Survey

Unemployment rate (May 17, 2020): 24%
Unemployment rate (June 2020): 10.18%
The CMIE reported the loss of nearly 6 million white collar (engineers, teachers, physicians) jobs in the four months preceding August.

**India has high OOPE and low government investment in health**

<table>
<thead>
<tr>
<th>Country</th>
<th>OOPE % of health expenditure (in %, 2017)</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>11</td>
</tr>
<tr>
<td>Brazil</td>
<td>27</td>
</tr>
<tr>
<td>China</td>
<td>36</td>
</tr>
<tr>
<td>Mexico</td>
<td>41</td>
</tr>
<tr>
<td>India</td>
<td>63</td>
</tr>
</tbody>
</table>

**Public expenditure on health (% of GDP)**

<table>
<thead>
<tr>
<th>Country</th>
<th>Public expenditure on health (% of GDP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>14.3</td>
</tr>
<tr>
<td>Brazil</td>
<td>3.9</td>
</tr>
<tr>
<td>China</td>
<td>2.9</td>
</tr>
<tr>
<td>Mexico</td>
<td>2.7</td>
</tr>
<tr>
<td>India</td>
<td>1.3</td>
</tr>
</tbody>
</table>

**The middle class is struggling to pay for their health**

Can afford high out-of-pocket expenses (OOPE)

Low insurance coverage

Covered by the government under PMJAY

- The middle class struggles to pay for their health expenses
- Individuals might defer elective surgeries and curtail health expenditures
- The NHA approved the Ayushman Bharat coverage for middle-class families, however, the implementation of the same will take time

Sources:
1. World Bank
2. Worldometer
3. Healthdata
### Government initiatives will have a mixed impact on the MedTech industry in India

<table>
<thead>
<tr>
<th>Government policies</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ayushman Bharat</strong></td>
<td>• Increased government spending (~$1.9 billion)&lt;br&gt;• ~US$ 7,000 insurance coverage per family&lt;br&gt;• Extending coverage to middle-class families, which was previously a major gap. Implementation is likely to take time to roll out</td>
</tr>
<tr>
<td><strong>Public-private partnership</strong></td>
<td>• Niti Aayog proposed guidelines for private providers on diagnosis and treatment of NCDs in district hospitals&lt;br&gt;• Proposed to be a 30-year contract to upgrade and operate facilities in district hospitals</td>
</tr>
<tr>
<td><strong>National digital health policy</strong></td>
<td>• Creation of a complete digital health ecosystem including four facets — a unique health ID, personalised health records, Digi Doctor and health facility registry&lt;br&gt;• The platform will be available as an app and a website; prescriptions can be provided digitally, if needed</td>
</tr>
<tr>
<td><strong>Medical device rules</strong></td>
<td>• Risk-based classification of medical devices&lt;br&gt;• Product quality standards defined&lt;br&gt;• Risk management for product recall&lt;br&gt;• Third party conformity assessment and certification</td>
</tr>
<tr>
<td><strong>MedTech parks</strong></td>
<td>• Dedicated MedTech parks in India to promote local manufacturing&lt;br&gt;• The Kalam Institute of Technology has received 100% financial support from Department of Biotechnology</td>
</tr>
<tr>
<td><strong>Government spending</strong></td>
<td>• Government spending may reduce for non-COVID treatment products and services till 2021, since the government will focus on COVID-19 treatment&lt;br&gt;• Government hospital procurement may be postponed</td>
</tr>
<tr>
<td><strong>Self reliance</strong></td>
<td>• Higher import duties/cess on imports&lt;br&gt;• Production-linked incentive for select medical devices</td>
</tr>
<tr>
<td><strong>Public procurement</strong></td>
<td>• Defines domestic value addition percentage for public procurement</td>
</tr>
<tr>
<td><strong>Price and margin control</strong></td>
<td>• In 2017, the government introduced price controls for medical devices&lt;br&gt;• Government is capping COVID-19 treatment and testing charges at private hospitals</td>
</tr>
</tbody>
</table>

**Access and affordability**

<table>
<thead>
<tr>
<th>Regulations</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td></td>
</tr>
</tbody>
</table>

**Unfavourable**

**Favourable**
The MedTech industry is likely to witness a slow recovery in the near future

The medical technology industry is likely to recover to 2019 values in Q3 or Q4 CY2021, with the level of recovery varying across the different segments. The challenges to a smooth recovery are as follows:

**Government policies**
Government policies like the introduction of health cess, margin controls and preferential public procurement will impact the MedTech sector; demand from public hospitals might also reduce, since the focus will be on COVID-19 treatment.

**Affordability**
India healthcare spend is largely out of pocket; poor economic growth, increased unemployment and the lack of a safety net will severely impact affordability. The Ayushman Bharat scheme for the middle-class population will take time to get fully implemented.

**Hospital CapEx and procurement**
Hospitals have put on hold or deferred CapEx due to uncertain demand and financial stress. Hospitals may also look at alternative suppliers to improve costs.

**COVID-19 cases**
India’s COVID-19 cases rose rapidly, with around 101 lakh cases as on 24 December 2020, 08:00 IST.

**Government initiatives**
Government initiatives such as price caps on COVID-19 related care, bed reservation and travel restrictions will adversely impact the hospital segment. This will in turn impact the MedTech industry.

**Patient and doctor confidence**
- Low confidence of patients on hospital visits
- Low confidence of doctors, particularly the more experienced ones; they are reluctant to perform surgeries or provide face-to-face consultations.
Recommendations
Key steps to be taken by stakeholders on the road to recovery

**Government**

- Support the hospital sector to remain financially viable (e.g., taxation relief for a limited period of time, concessions, an extension on the renewal of various licenses that add to huge administrative cost and the availability of credit lines from the banks at lower interest rates)
- Timely disbursements of payments to hospitals, distributors and MedTech companies
- Drive initiatives to increase patient confidence; spread awareness among patients to help them refrain from self-treatment and visit hospitals instead
- Facilitate a stable regulatory environment for the MedTech industry over the next eight to nine months
- Strengthen the MedTech R&D and manufacturing ecosystem in the country to drive self reliance
- Enable transparency in deriving pricing for price capping
- Review price control to help improve quality and access to innovation
- Closely monitor the quality of the medical devices products sold in the market
- Help establish uniform regulations for healthcare across the country (currently, it varies across states)
- Increase healthcare expenditure to drive better access to quality and affordable healthcare

**MedTech players**

- Support hospitals through a financing mechanism; international companies can look at some development banks/agencies to provide financing; this will be relevant for the next 3–5 years
- Medical devices companies need to look at value products, since many hospitals may not be able to procure premium products in the current scenario
- Conduct specialised training programs to upskill junior doctors faster in the current scenario
- Collaborate with hospitals using innovative business models to help expand their reach
- In future instances of price control, hospital and medical devices companies can jointly discuss with the government so that price control does not affect the patients’ and doctors’ choice of products and MedTech players’ investment in development/innovation
- Collaborate with medical devices players for clinical research
- Hospitals need to train their team on key latest insurance products and their regulations
- Drive patient and doctor confidence

**Hospitals**

- Assess inclusion of home healthcare, outpatient care, medicines, diagnostics etc. as part of insurance cover
- In future, hospitals may develop rapid recovery protocols to reduce the length of stay in hospitals and consequently the chances of infection; insurance players may need to evaluate modifying the terms and conditions around the duration of stay based on this trend
- Review the policies on health insurance and whether hospitals can be incentivised in helping patients discharge faster

**Payers**

- In future instances of price control, hospital and medical devices companies can jointly discuss with the government so that price control does not affect the patients’ and doctors’ choice of products and MedTech players’ investment in development/innovation
- Collaborate with medical devices players for clinical research
- Hospitals need to train their team on key latest insurance products and their regulations
- Drive patient and doctor confidence
About PwC

At PwC, our purpose is to build trust in society and solve important problems. We’re a network of firms in 155 countries with over 284,000 people who are committed to delivering quality in assurance, advisory and tax services. PwC refers to the PwC network and/or one or more of its member firms, each of which is a separate legal entity. Please see www.pwc.com/structure for further details.

Find out more about PwC India and tell us what matters to you by visiting us at www.pwc.in.

pwc.in

Data Classification: DC0 (Public)

In this document, PwC refers to PricewaterhouseCoopers Private Limited (a limited liability company in India having Corporate Identity Number or CIN : U74140WB1983PTC036093), which is a member firm of PricewaterhouseCoopers International Limited (PwCIL), each member firm of which is a separate legal entity.

This document does not constitute professional advice. The information in this document has been obtained or derived from sources believed by PricewaterhouseCoopers Private Limited (PwCPL) to be reliable but PwCPL does not represent that this information is accurate or complete. Any opinions or estimates contained in this document represent the judgment of PwCPL at this time and are subject to change without notice. Readers of this publication are advised to seek their own professional advice before taking any course of action or decision, for which they are entirely responsible, based on the contents of this publication. PwCPL neither accepts or assumes any responsibility or liability to any reader of this publication in respect of the information contained within it or for any decisions readers may take or decide not to or fail to take.

© 2020 PricewaterhouseCoopers Private Limited. All rights reserved.
SG/December 2020-M&C10285