The Fourth Healthcare Revolution: Reimagining the Asia Pacific Healthcare systems when “Living with COVID-19”

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Prelude
COVID-19 and the healthcare sectors in the Asia Pacific
Post-COVID-19 vs “Living with COVID”
COVID-19, 4IR and Reset of Healthcare
Some preliminary suggestions
Epilogue

Note*: This ppt is a snapshot of background paper on same subject.
COVID-19 and the healthcare sector in the Asia Pacific

Figure 1. COVID-19 Deaths in Highly Affected Asia Pacific Countries

India: 433,063
Indonesia: 121,141
Philippines: 30,881
Bangladesh: 24,719
Japan: 15,501
Myanmar: 13,786
Malaysia: 13,302
Nepal: 10,396
Thailand: 8,586
Vietnam: 6,770
Sri Lanka: 6,604
China: 4,636
South Korea: 2,191

Figure 2. COVID-19 Infection in Highly Affected Asia Pacific Countries as of August, 2021

India: 32,320,898
Indonesia: 3,908,247
Philippines: 1,791,003
Malaysia: 1,466,512
Bangladesh: 1,440,644
Japan: 1,202,012
Thailand: 989,859
Nepal: 739,907
Sri Lanka: 369,359
Myanmar: 362,169
Vietnam: 302,101
South Korea: 230,808

Source: Statista 2021
Lesson 1. COVID-19 and the healthcare sectors in the Asia Pacific

Figure 3. ICU beds per 100,000 population

Source: OECD, 2020, (reproduced from latest Health at a Glance: Asia/Pacific 2020 OECD report)
Critical healthcare indicators: Asia Pacific countries

Figure 4. Hospital beds per 1000 population, latest year available

Source: OECD, 2020, (reproduced from latest Health at a Glance: Asia/Pacific 2020 OECD report)
COVID-19 and the healthcare sector in Asia Pacific

Source: OECD, 2020, (reproduced from latest Health at a Glance: Asia/Pacific 2020 OECD report)
Lesson 2: Post-COVID-19 vs “Living with COVID”.
Advancements in AI & ”Post COVID-19 optimism

- Advances in AI for Drug and vaccine developments. Drug repurposing led to fast-track development of vaccines.
Advancements in Biotech and “Post-COVID-19” Era

Source: nature, 2020
Lesson 3: COVID-19 and the Fourth Healthcare revolution
COVID-19 & the Fourth Healthcare Revolution

Telemedicine can be a COVID-19 game-changer. Here's how

- Governments must reimagine healthcare delivery in the face of COVID-19.
Some Preliminary Suggestions
Reimagining Healthcare in Asia Pacific
= Traditional Healthcare systems + Digital healthcare technologies
and in era of pandemics + Vaccines & masks

• The era of hybridtact healthcare –where
digital technologies complement
cTraditional healthcare systems is here
Stages of Digital transformation of Healthcare

- As Figure 9 shows, there are at least four stages in the development of hybrid tact healthcare systems.
- As depicted, the first is Health 1.0, the Health 2.0, then Health 3.0,
- then hybrid tact healthcare systems where we combine the best of online and offline healthcare to improve access to healthcare for all.
Some Preliminary Broad Suggestions
Some Preliminary Suggestions

- Do we need a “Asia Pacific 4IR Healthcare New Deal”- (Each country)? System wide transformation of national healthcare and economies of Asia Pacific healthcare on foundation of 4IR? Not just in South Korea, Singapore, China, Japan etc., which are taking this route, but how about Laos, Cambodia, Philippines, and others in Asia Pacific?

- Do we need new governance and institutional frameworks to scale Healthcare innovations? Some countries have the institutional framework to take advantage of 4IR to create resilient healthcare systems, some other Asia pacific countries, whose economies are on their knees (covid-19) are clearly not able to take advantage of these technologies. They need both large scale funding and new institutional frameworks.

- What practical multi-lateral frameworks are available for increasing access to large scale funding required to develop digital infrastructure and capabilities in APAC healthcare?
  - Asia Development Bank?
  - ASEAN (vaccine passes for example)
Some Preliminary Specific Suggestions
Scaling these 4IR Technologies in Healthcare and other sector for Health 2.0 Countries

Where to start? Some suggestions:

1. **Start with what you have**: All Asia-Pacific countries, including low-income countries, have some building blocks to kick-start the journey towards hybrid tact healthcare systems. E.g., 4G networks, sizeable populations with smart phones, innovation systems etc.

2. **Improve Digital Capabilities**: Similarly, now is the time for such countries to improve investments in their digital capabilities, including training for healthcare providers to use such tools.

3. **Unlocking 4IR innovations**: pursue a “by all means necessary policy” to promote market-oriented innovative players. Countries must start identifying and nurturing start-up ecosystems where such innovations might arise.

4. **Implement innovative healthcare payment/insurance models**: including technology-driven micro-insurance schemes to reduce dependence on out-of-pocket expenditures on healthcare, and encourage digital-enabled pooling of resources and risks.

5. **Unlock data sharing and promotion of interoperability and integration**: Start unlocking the healthcare data in countries with Health 2.0 systems, by providing access to reliable IDs with interoperable capabilities.
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Thank you.
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