

HUMAN RESOURCE DEVELOPMENT CORPORATION

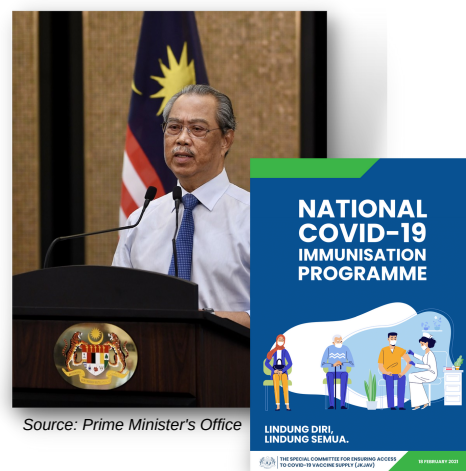


HRD CORP WEBINAR SERIES 2, 2021: THE FUTURE OF WORK IN THE HEALTHCARE INDUSTRY

Following over a year of grappling with the COVID-19 pandemic, the effects on the global economy are undeniable. The International Monetary Fund (IMF) estimated that the global economy has shrunk by 4.4% in 2020. Closer to home, Singapore and Thailand's economies have contracted by 5.4% and 6.1% respectively.

The several waves of infection experienced in Malaysia has also resulted in our own economic slowdown. As reported by the Department of Statistics Malaysia (DOSM) in the Malaysia Economic Fourth Quarter 2020 report, Malaysia's GDP contracted by 5.6% in 2020 compared to a growth of 4.3% in 2019 over the same period.

As we pull through our 3rd Movement Control Order (MCO) and with the National COVID-19 Immunisation Programme well underway, healthcare workers are once again placed front and centre in ensuring the continuity of the country during these challenging times. In the presence of multiple more concerning COVID-19 variants, services provided by our healthcare workers are as crucial as ever before.



Source: Prime Minister's Office

To shed some light on how the healthcare industry has been impacted and shaped by COVID-19 moving forward, the Human Resource Development Corporation (HRD Corp) hosted the second instalment to its 2021 Webinar Series, focusing on the **Future of Work in the Healthcare Industry**. To provide some much-needed insights on this theme, three esteemed panellists were invited to discuss on various topics.



Panellist 1:

Dr. Ahmad Khairil Faizi bin Rosli
Director of Ethics and Legal Division
Malaysian Medical Council (MMC)



Panellist 2:

Datuk Dr. Hishamshah bin Mohd Ibrahim
Deputy Director General of Health (Research & Technical Support)
Ministry of Health (MOH)



Panellist 3:

Ms. Christiane Wiskow
Senior Health Sector Specialist,
Sectoral Policies Department
International Labour Organization (ILO)



Moderator:

Mr. Rony Ambrose Gobilee
Chief Programmes Officer
Human Resource Development Corporation (HRD Corp)

Figure 1: Moderator and Panellist Line-up

1

How COVID-19 Shook the Healthcare Industry: Ethical Challenges Faced by Frontliners



The Malaysian Medical Council (MMC)'s role in regulating the conduct of physicians in light of the challenges caused by COVID-19 was spearheaded by Dr. Faizi as the Director of the Ethics and Legal Division. There were three main ethical challenges faced by frontliners during lockdown.

ETHICAL CHALLENGES FACED BY FRONTLINERS



How do frontliners balance their duties to COVID-19 patients as well as that to the wider community?

How should frontliners respond to the unmet needs of COVID-19 as well as non-COVID-19 patients?

What is the best way to equitably distribute scarce health resources during this pandemic?

When asked by a fellow audience member on the general impact of the pandemic on the healthcare industry, Dr. Faizi explained them clearly as follows.

POSITIVE IMPACT

1

Improved solidarity and gratitude from the public



NEGATIVE IMPACTS

1

Frontliners are more susceptible to public outrage

2

Healthcare workers' individual health issues

3

Overwhelming workload in government hospitals

4

Loss in revenue for private hospitals due to the public fearing increased risk of exposure to the virus

It was clear that in order to balance between relieving public tensions and safeguarding individual interests of patients throughout this pandemic, a solution that is focused on building public trust and solidarity by way of effective and positive communication strategies must be developed. As such, the Ethics and Legal Division headed by Dr. Faizi devised an **Advisory on Virtual Consultations** to guide physicians on their conduct in the absence of prior technological know-how during this pandemic. This Advisory has since been endorsed by the Ministry of Health (MOH).

If you would like to find out more about MMC's Advisory on Virtual Consultations during the Pandemic, please click [here](#)!



2

Surviving in the COVID-19 Pandemic: Technological Advancements in the Healthcare Industry



Datuk Dr. Hisham Shah, the Deputy Director General of Health (Research & Technical Support) from the Ministry of Health (MOH) echoed Dr. Faizi's sentiment that while the pandemic has evidently accelerated technological advancements in our society, the utilisation of such technologies in the healthcare industry is particularly pertinent.

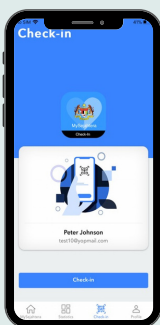
The major areas of technology adoption highlighted during the session can be summarised as follows.

Major areas of technology adoption in the healthcare industry

Digital communication via MySejahtera.

This mobile application allows MOH to disseminate information to the public on their current risk and vaccination status via the following features:-

- Contact tracing via geolocation
- Accurate status characterisation for appropriate management and treatment (e.g. casual contact, close contact, etc.)
- Synchronisation of lab diagnostic data to notify users of their individual COVID-19 test results
- Advertisement for the National COVID-19 Immunisation Programme



Vaccine technology.

- The Pfizer-BioNTech COVID-19 vaccine was the first of its kind to leverage cutting-edge mRNA technology.
- mRNA vaccines can be synthesised faster and adapted quicker to accommodate new variants.



Drones, or Unmanned Aerial Vehicles (UAVs)

Drones have been used for observation of asymptomatic or mildly symptomatic patients in large low-risk quarantine halls.



Autonomous robots.

Portable autonomous equipment were deployed in low-risk quarantine centres & hospitals for sanitisation and serving food.



Big data analytics & predictive modelling.

- Data collected via MySejahtera is transferred to the central cloud-based server to be integrated with laboratory data.
- RO value and forecasting of daily positive cases generated via data analysis and predictive modelling are used to inform legislators and policymakers on the need for lockdowns.
- Epidemiological modelling using hotspot trackers are performed for prevention and control measures.



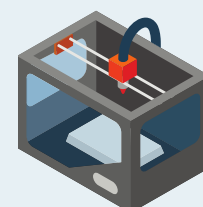
Laboratory diagnostic testing.

- COVID-19 testing has been widely facilitated by the advent of the more advanced Antigen Rapid Test Kit (RTK-Ag) which produces results in a shorter timeframe.
- Local lab capacity has been scaled up to run more diagnostic tests per day.
- With the arrival of new variants, the need for Whole Genome Sequencing has increased. This requires back-end labs to possess high throughputs and data analytics capabilities.



3D Printing, or Additive Manufacturing

The Engineering Division under MOH has 3D-printed working ventilators in anticipation of a global embargo on ventilators.



3

Skills Development During the Pandemic: Skill Set Required for the Healthcare Industry



Representing the Sectoral Policies Department of the International Labour Organisation (ILO), Ms. Christiane who is a Senior Health Sector Specialist, highlighted that a shortage in skilled healthcare staff has been observed even prior to the onset of the pandemic. In 2018, **Asia Pacific recorded a lower proportion of healthcare workers as opposed to the global average** (see below).

Since then, the COVID-19 pandemic has particularly amplified the global shortage of Intensive Care Unit (ICU) staff. Some countries have recruited retired doctors, final year medical and nursing students, and fast-tracked work permits for migrant health workers in an effort to mitigate the labour shortage. This has led to an increase of **quick on-the-job training for healthcare workers to address the ICU skills gap**.

Health and social work workforce as a percentage of total employment by region

Region	Percentage of health and social work workforce (%)
World	3.9
Africa	1.5
Americas	7.6
Arab States	2.8
Asia and the Pacific	2.5
Europe and Central Asia	9.6

Source: ILO calculations based on labour force and household survey microdata (2018)

ILO noted in a 2019 health sector report that with the advancement of technology, traditional job scopes are likely to be challenged as new occupations emerge. Therefore, healthcare workers should receive **sufficient inter-professional training** in line with the growing trends of telehealth.



Despite the disruptions that technology and automation bring to the healthcare sector, the importance of certain skill sets remains – **interpersonal and soft skills** such as those listed below are likely to grow in value as technology advances. The inability of a healthcare professional who comes in regular and direct contact with patients to communicate clearly and effectively will always pose a risk to the patient's health.

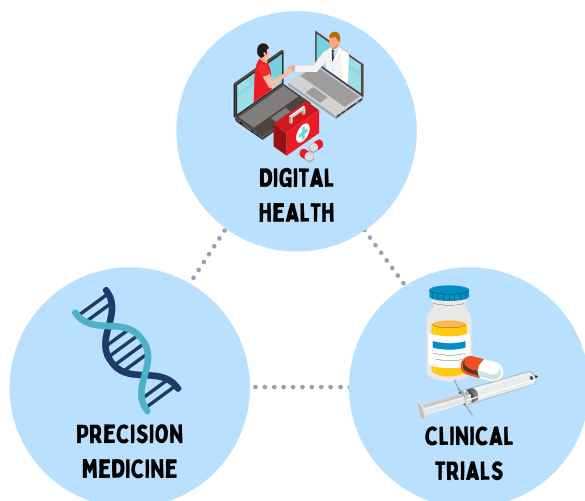


4

Conclusion and Review



Ultimately, it is apparent that while the arrival of the pandemic in Malaysia may have initially caught the healthcare industry off-guard, healthcare professionals and government entities such as MMC and MOH were swift in addressing the challenges presented throughout the multiple MCOs.



The advancement of technology in the field has greatly facilitated Malaysia's fight against the deadly virus. As Datuk Dr. Hishamshah rightly pointed out, healthcare is one of the fastest industries to adopt new technology with MOH spearheading three major areas – **digital health**, **precision medicine**, and **clinical trials**. Regardless of the pandemic's presence, the need for digital transformation in the healthcare industry moving forward is unquestionable. According to Ernst & Young's latest Global Capital Confidence

Barometer, 53% of healthcare Chief Executives believe that their organisations were successful in digital transformation, whereas another 57% indicated that they plan on increasing future investments in digital transformation.

Recognising the current trend of technological advancement within the healthcare industry (e.g. artificial intelligence, genomics and proteomics), the future of work will generally require strategies that ensure **lifelong learning**, **flexible education**, and **training systems** that can anticipate the skills demanded by the health sector. The impact of technology and automation in the health sector can be far-reaching and as such, skills development must occur in tandem with the adoption of such technology. This will ensure that all workers are up-to-speed.

Impact of technology and automation in the health sector



Elimination of a range of jobs
e.g. low-skilled and support jobs
(transport of materials in hospitals)

Creation of new jobs, occupational profiles and new employment paths
e.g. telehealth, e-clinics



As we welcome the Malaysia 5.0 vision (to re-invent Malaysia's digital economy by approaching the Fourth Industrial Revolution more holistically), the shared responsibility of the government, healthcare employers and workers to continuously adapt and upskill themselves in accordance with new technologies remains critical, be it to avoid redundancy in job functions or to address new patient needs.

To learn more on HRD Corp, visit: <https://www.hrdcorp.gov.my/>



@hrdcorp



HRD Corp



@HRD Corp



HRD Corp



HRD Corp