Regulatory Agility in a Post-Pandemic World

Marianne Yap Head, Regulatory and Government Affairs, APAC 26 November 2021

In Partnership with the Philippines Association of Medical Device Professionals (PAMDRAP)







My Affair with Regulatory Affairs – 20 Years



About me...on a personal note... UVT 322 **Alcon** siness Use Only | 3 Copyright. Do not reproduce.

About me...on a more serious note...

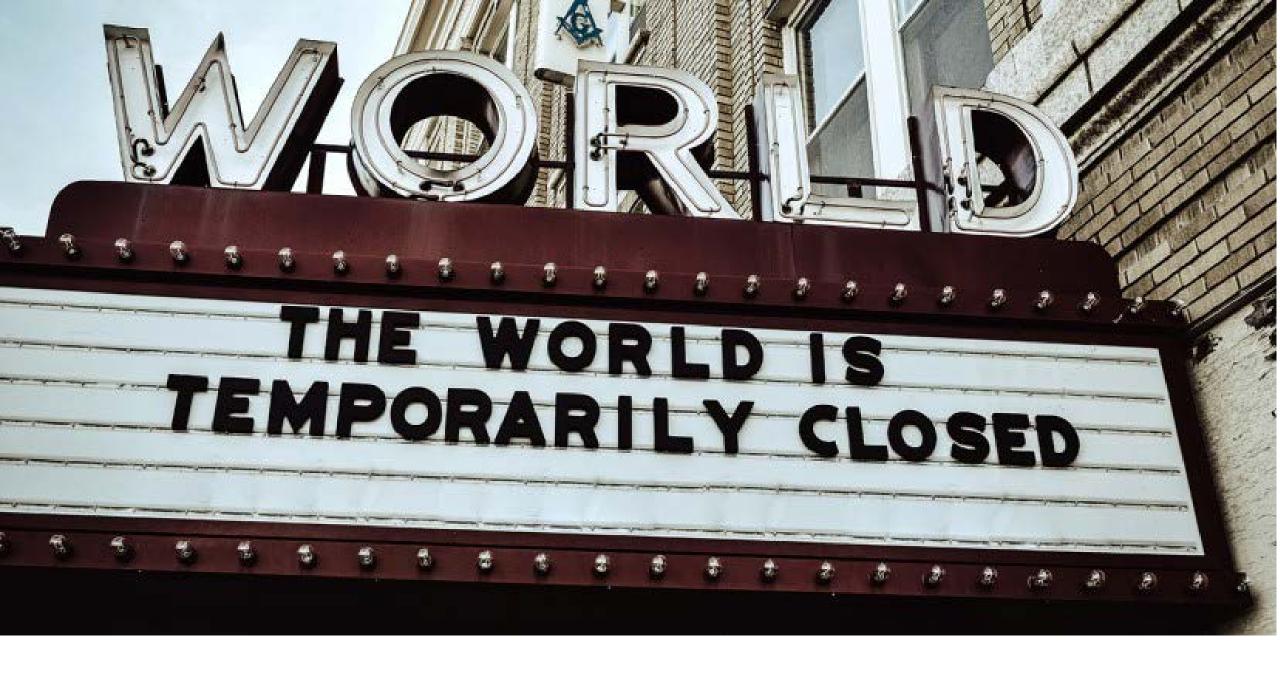


- Drafted the ASEAN Medical Device Directive, ASEAN Common Submission Dossier Template (CSDT)
- Head-of-Delegation (HoD) in the Medical Device Product Working Group (MDPWG)
- Secretariat to the ASEAN Medical Device Technical Committee (MDTC)
- Ex-Chair of Asia Harmonization Working Party (AHWP) Working Groups 1 (Pre-Market Submission and CSDT) and 6 (Capacity Building and Regulatory Training)
- Liaison Member of Study Group 1, Global Harmonization Task Force (GHTF)
- Trainer to regulators/industry under capacity building programs
- Vice Chair, Capacity Building Working Group, APACMed
- Appointed lecturer for the Graduate and Advanced Certificate for Medical Devices Regulatory Affairs Programmes from the National University of Singapore.





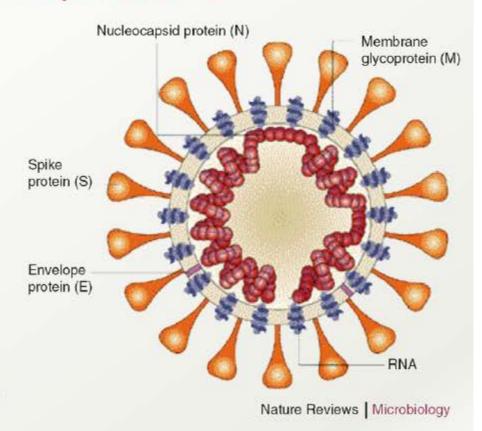




Stage 5

New emerging SARS-CoV-2 variants and their implications

- New SARS-CoV-2 variants:
 - Sept. 2020, a variant emerged in Denmark related to mink farming
 - Variant detected in the United Kingdom in December 2020
 - Variant detected in South Africa in December 2020
 - 9th January 2021, variant detected in Japan among persons coming back from Brazil
- All these variants involve genetic mutations coding for the spike protein
- The spike protein of SARS-CoV-2 is targeted by most vaccines currently approved or in development; mutations of the spike protein are closely monitored



- The mode of transmission of the virus variants has not changed
- The same preventive measures continue to be effective and should continue to be implemented



239 007 759

Confirmed cases

Last update: 14 October 2021, 11:08 pm

GMT+8

4 871 841

Confirmed deaths

Last update: 14 October 2021, 11:08 pm

GMT+8

6 471 051

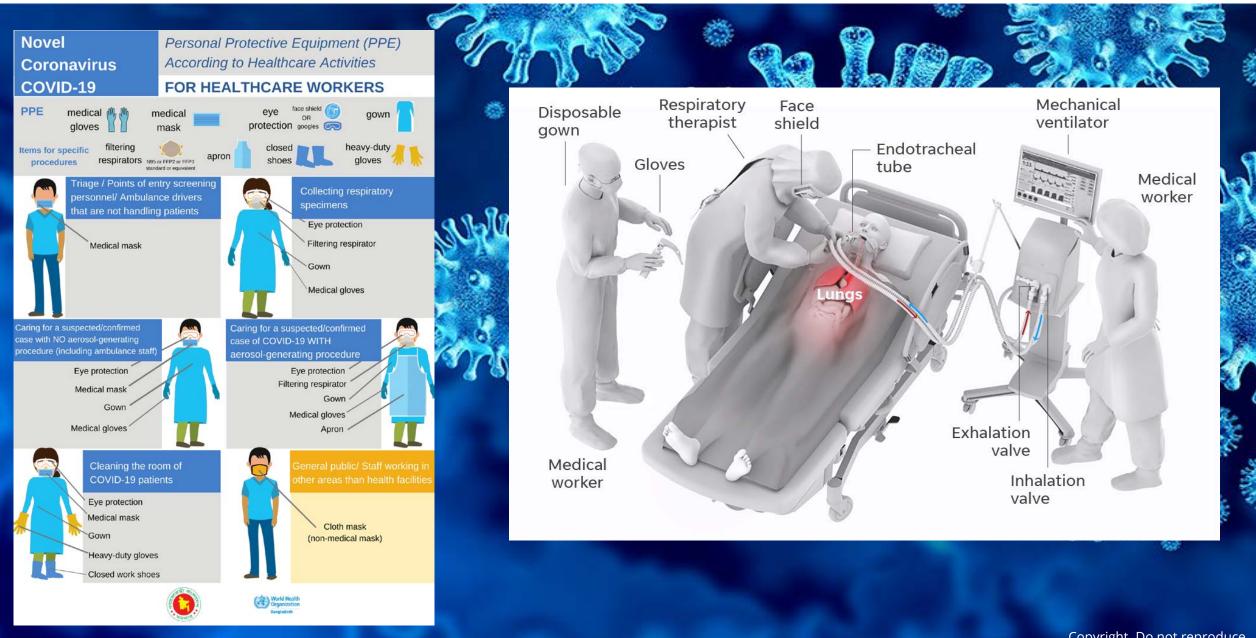
Vacoine doses administered

Last update: 14 October 2021

COVID-19 and the Critical Role of Medtech

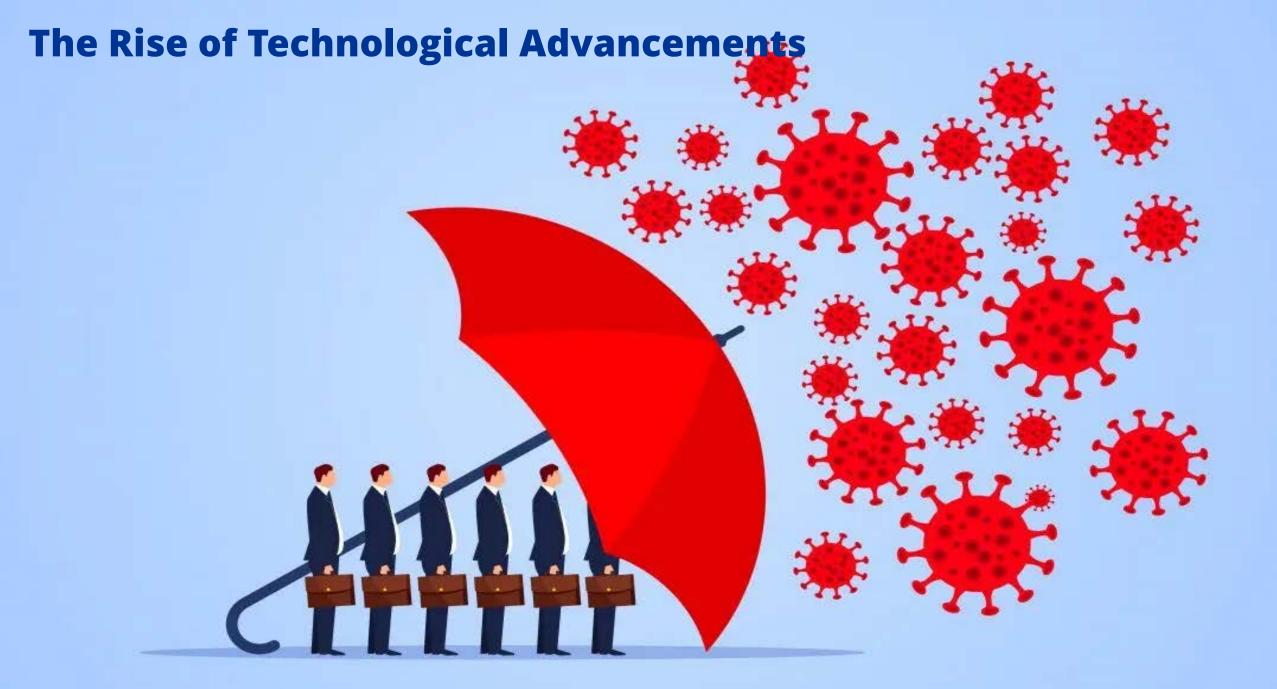


COVID-19 and the Critical Role of Medtech



COVID-19 and the Critical Role of Medtech

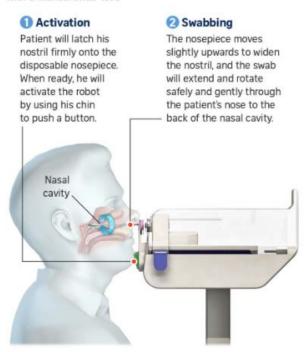




Technologies That Will Shape The Post-Virus World

First patient-controlled nasal swab robot

Clinicians and patients who have used SwabBot say that the machine is safe, faster and more comfortable compared with a manual swab test.



Duration

The whole process takes about 20 seconds.

Safety

The robot has a **built-in feature** that withdraws the swab stick if there is resistance when moving deeper into the nasal cavity. The individual can also terminate the process by moving his head away from the robot.

- Crisis can either be a catalyst or can speed up changes that are on the way.
- It almost can serve as an accelerant.
- Robot That Conducts Swab Tests For Covid-19 Is Safe, Faster And More Comfortable For Patients
- It reduces swabbers' risk of exposure to the virus and the need for training people, standardises the consistency of swabs taken, and increases the efficiency of conducting swab tests.
- This made-in-Singapore bot is the first that allows patients to fully control the swab process so they are more comfortable. Patients can activate and terminate the machine at will.

Sources: NATIONAL CANCER CENTRE, SGH STRAITS TIMES GRAPHICS: LEE HUP KHENG

A New Era for MedTech industry

MORE ON MEDICAL DEVICES

COVID-19 pandemic changing regulatory picture around medical devices, technology in healthcare

Some of these changes have presented opportunities for entrepreneurs and product developers.



Jeff Lagasse, Associate Editor













COVID-19 IS ACCELERATING THE RISE OF THE DIGITAL ECONOMY



Research & Innovation News > How the COVID-19 pandemic will accelerate mobile medtech

Research & Innovation News

How the COVID-19 pandemic will accelerate mobile medtech innovation



A New Era for MedTech industry



"Digitally Transforming Practice"

Covid-19 pandemic: example teledentistry services satisfy the need for social distancing and minimize physical contact

Continuity of care: monitoring patients' progress remotely to ensure their treatment is tracking to plan

Singapore authorizes four COVID-19 antigen rapid test self-use kits

Singapore authorises four COVID-19 antigen rapid test self-use* kits

11 June 2021 | News









HSA is working with the Ministry of Health (MOH) to make these tests widely available through designated local retail pharmacies



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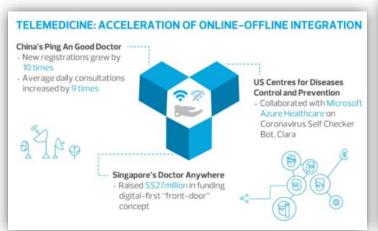
The Health Sciences Authority (HSA) in Singapore has granted interim authorization for four antigen rapid test self-test kits.

 These are antigen rapid tests (ARTs) that can be used by consumers (untrained lay-users) for self-testing to detect active SARS-CoV-2 infection in nasal swab samples. ARTs detect the viral proteins in the nasal swab samples of infected individuals and usually work best in the early stages of infection. ARTs can achieve a sensitivity of about 80% for cases with higher viral loads and a specificity range of 97-100%.

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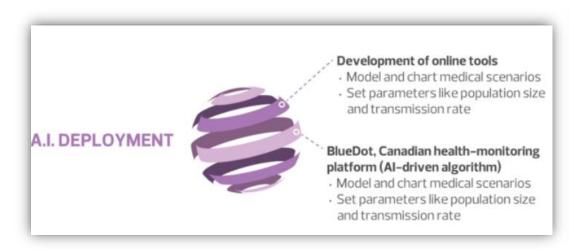
Technological Agility: Fundamental Shifts in a Post Covid-19 World

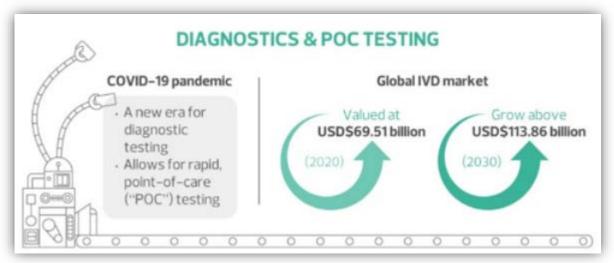
COVID-19 has accelerated the following trends which are reshaping the future of healthcare.













How Singapore is Embracing Innovative Technology and Robots in Healthcare



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When COVID-19 evolved rapidly across the world, hospitals had to leverage new technologies, such as artificial intelligence (AI) and analytics, to develop tools that can be swiftly deployed, and enable teams to find new ways to Business Use Only | 17 combat the virus and manage the situation efficiently

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Harnessing Artificial Intelligence

- Doctors in Singapore developed an AI predictive tool to determine the likelihood of whether a patient
 has mild or severe pneumonia, based on chest x-ray images.
- Intended use: Community- Acquired Pneumonia and COVID-19 Artificial Intelligence Predictive Engine (CAPE), this system alerts doctors to pneumonia patients who are likely to become critically ill.



- Predictive tool used to determine the likelihood of whether a patient has mild or severe pneumonia.
- The risk of patients requiring critical care can be calculated almost instantaneously.
- Doctors at the emergency department and wards can receive an early warning for possible clinical deterioration, and prescribe the appropriate measures to improve patient outcomes.

Source: https://www.singhealth.com.sg/news/singapore-health/embracing-innovative-tech-and-robots-in-healthcare



Robots on the Frontline

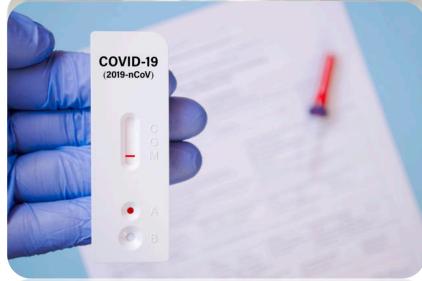
Meet the robots that have been on the frontlines of the COVID-19 battle, "SwabBot" and "temi".





Availability of Antigen Rapid Test (ART) Self Test Kits Over The Counter





Alcon Source: TodayOnline, Yahoo News

Every S'pore household to receive 10 ART Covid-19 self-test kits: MOH



The distribution will be done via SingPost and each household will receive a package containing 10 ART self-test kits, PHOTO: ST FILE



SINGAPORE - The Health Ministry will be conducting another round of distribution of antigen rapid test (ART) kits, as Singapore heads towards a new normal where frequent testing for Covid-19 becomes common.

Catalyst for Regulatory Agility



- Formulate **emergency exemption/approval pathways** (sometimes called provisional/conditional approval) to allow **fast access** with limited preliminary clinical evidence and conditions attached to request for post-authorization submission of ongoing or additional safety and performance evidence.
- Leveraging regulatory reliance models and/or authorizations from overseas reference authorities (such as those in IMDRF member countries or the WHO Emergency Use Listing procedure), to minimise duplication of efforts.

Enablers of Regulatory Agility in Philippines

On the other hand the COB has issued Customs Administrative Order No. 7-2020 ("CAO 7-2020"), which provides that:

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- The importation of health equipment and supplies to carry out the objective of Republic Act No. 11469 shall be exempt from duties, taxes and fees, including:
 - PPE, such as gloves, gowns, masks, goggles, face shields, surgical equipment and supplies;
 - Laboratory equipment and its re-agents;
 - Medical equipment and devices;
 - Support and maintenance for laboratory and medical equipment;
 - Surgical equipment and supplies;
 - Medical supplies, tools and consumables (i.e., alcohol, sanitizers, tissue, thermometers, hand soap, detergent, sodium hydrochloride, cleaning
 materials, povidine iodine, common medicines (e.g., paracetamol tablet and suspension, mefenamic acid, vitamin tabler and suspension,
 hyoscine tablet and suspension, oral rehydration solution, and cetirizine tablet and suspension);
 - COVID-19 testing kits; and
 - Others as may be determined by the DOH.
- Manufacturers included in the Master List of the Department of Trade and Industry and other incentive granting bodies of the National Government
 may avail of the tax and duty free importation under Section 4(o) of Republic Act No. 11469 for their importation of materials necessary for the
 production of health equipment and supplies deemed as critical or needed to carry out the objectives of Republic Act No. 11469.
- Importers of medical equipment and supplies for commercial purposes are exempt from the presentation of Certificate of Product Notification
 ("CPN") or Certificate of Product Registration ("CPR") issued by the FDA prior to release from the BOC provided, that they are able to provide a
 copy of their LTO and proof of application for product notification with the FDA. For ventilators, respirators and their respective accessories imported
 for commercial purposes, importers only need to present a copy of their LTO.
- Foreign donations of PPEs (face masks including N95 Masks, Shoe Covers, Gloves, Head Covers, and Gowns), imported not for commercial
 purposes, and foreign donations of ventilators, respirators and their respective accessories to be used in the treatment of COVID-19 patients, shall
 not be required clearance from the FDA prior to release.
 - Head Covers, and
 - Gowns

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Enablers of Regulatory Agility in USA



Enablers of Regulatory Agility in UK

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	Initiatives to speed up market access	Tenets of Regulatory Mechanisms
	New Mechanism	The MHRA may authorize manufacturers to supply a non-CE marked device in the interest of the protection of health (see here). This will be under regulations 12(5), 26(3) and 39(2) of the Medical Devices Regulations 2002, and is likely to be relevant for manufacturers of ventilators and PPE. The Department of Health and Social Care (DHSC) can grant its approval so that manufacturers may submit applications for exemption from the regulations to the MHRA. The DHSC may grant its approval regarding ventilators as long as they comply with the necessary minimum specifications which have been set out by the UK Government for ventilators.
	Faster Review	The focus has been on a faster review for medicines and medical devices that are related to COVID-19, and the UK's Medicines and Healthcare products Regulatory Agency (MHRA) may authorize manufacturers to supply a non-CE marked device in the interest of the protection of health.
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Enablers of Regulatory Agility in Australia



Therapeutic Goods Administration

An introduction to the work of Australia's regulator of therapeutic goods

Initiatives to speed up market access	Tenets of Regulatory Mechanisms
New Mechanism	 Relaxation from the requirement to obtain marketing approval for COVID-19 diagnostic test kits imported by, supplied to or used by accredited pathology laboratories Relaxation in requirements to obtain marketing approval for certain other medical devices such as face masks, disposable gowns and protective eyewear that are supplied under a contract with the Australian Government for the purposes of the national stockpile; Relaxation of requirements (relating to marketing approval and other technical requirements), for ventilators manufactured in Australia in accordance with minimum technical requirements prescribed by the TGA, provided that such ventilators are only supplied to Australian hospitals; and Manufacture and supply of hand sanitizers.
Faster Review	Expedited approvals for all medical devices associated with the detection, prevention and treatment of COVID-19.

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Enablers of Regulatory Agility in Japan

Initiatives to speed
up market access

Tenets of Regulatory Mechanisms

New Mechanism

- The government has introduced a subsidy to businesses which intend to make investment in facilities to manufacture surgical masks.
- MHLW announced measures to provide manufacturers in non-medical industries with easier access to the medical devices market to promote the manufacture of medical devices for COVID-19 (such as ventilators). The measures include the following:
 - If a manufacturer manufactures only parts of medical devices and supply them to marketing authorization holders of such devices, regulatory procedures will not apply to such manufacturer.
 - If a manufacturer is to be involved in assembly and other important manufacturing processes:
 - regulatory registration as medical devices manufacturer will be handled on a priority and expedited basis; and
 - a change to the product approval resulting from the addition of manufacturing sites will also be handled on a priority and expedited basis and physical QMS inspection of the manufacturing sites will be conducted after the approval of such change.

Faster Review

A foreign-manufactured test kit was approved as an IVD on 27 March on an expedited basis with a small amount of support data but subject to the condition that post-approval clinical assessment be conducted.



Enablers of Regulatory Agility in China



NATIONAL MEDICAL PRODUCTS ADMINISTRATION

国家药品监督管理局

Initiatives to speed up	Tenets of Regulatory Mechanisms
market access	Terrets of Regulatory Mechanisms
New Mechanism	 Emergency approvals have been available under existing regulations to allow expedited market access of medical devices if: (i) they are urgently needed for public health incidents; and (ii) there are no similar products marketed in China, or that any similar products marketed in China are insufficient to meet the particular urgent needs. Under the <i>Opinions on the Urgent Importation of Unregistered Medical Devices</i> issued by the NMPA on 27 January 2020, medical devices that are in compliance with relevant standards in the US, EU, Japan, Australia, Korea and Canada can be urgently imported during the COVID-19 epidemic. Exemption of documents for import. In line with these emergency measures, the PRC Customs also set up a "green channel" under which donated medical devices that tare not registered or recorded in China can be released based on local MPA's approvals.
Faster Review	Urgent approvals have been heavily utilized in response to the COVID-19 pandemic. Examples include the following: a)In vitro testing reagents for COVID-19 virus: A total of 19 testing reagents had received urgent approvals as of 16 March 2020. b)Hospital beds and isolating cabins: The Guangdong Medical Product Administration (MPA) granted conditional urgent approval for an isolating hospital bed and the Jiangsu MPA granted conditional urgent approval for an isolating cabin, both for use in preventing and controlling the spread of COVID-19. In the case of Guangdong, the approval was granted within three days from filing. c)Medical masks and protective clothing: As of 24 February 2020, 153 medical masks and 93 medical protective clothes had been urgently approved. Ilt is worth noting that for personal protective equipment such as masks and protective clothing, the production has stabilized in China and some provincial-level MPAs have already stopped accepting applications for urgent approvals.

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Enablers of Regulatory Agility in Singapore



Initiatives to speed up market access	Tenets of Regulatory Mechanisms
New Mechanism	 From 31 January 2020, importers of the following medical devices will not require an importer's licence from HSA: Surgical masks; Particulate respirators (e.g. N95 masks); Thermometers for measuring human body temperature; and Any protective gear for medical professionals (e.g. isolation gowns and gloves). Importers of such medical devices for commercial purposes (and not personal use) will only need to notify HSA of their intentionat least 24 hours before importation, and provide information on the brand and quantity of the devices to be imported into Singapore. The HSA has also implemented greater regulatory flexibility to manage the increase in demand for respiratory devices for COVID-19 patients. The Pandemic Special Access Route (PSAR) is an interim authorization to supply an "emergency medical device" under regulation 13C of the Health Products (Medical Devices) Regulations.
Faster Review	HSA has created an alternative regulatory pathway where registrants will not need to undergo the standard change notification process for upgrades or modifications made to registered ventilators and accompanying accessories that do not create undue risk to users, or for registration of new models of accessories for use with the registered ventilators. Registrants may implement these changes without waiting for HSA's approval. Copyright. Do not reproduce.

In Summary

Fighting COVID-19 To Build A Global Community Of Health For All



MedTech continues to evolve and develop a risk-based Covid-19 Response Plan

- How to qualify for emergency use authorization?
- **Enhance collaboration amongst stakeholders to enable regulatory agility**





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Source: https://www.greenlight.guru/blog/author/jon-speer

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Embracing the Future: Role of RA Professionals like ikaw at ako



Anticipate Agility Resilience **Empathy Collaboration Advocacy** Game Changer

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