

NHG DIAGNOSTICS

National Healthcare Group Diagnostics (NHGD) played a key role in Singapore's battle against COVID-19. It added three units to the nation's Mobile X-ray fleet, extending X-ray services to Community Care Facilities (CCFs) across the island. In April 2020, NHGD's Mobile X-ray trailer (MX1) was deployed to the CCF@EXPO to provide timely X-ray diagnosis of patients with acute respiratory symptoms.



MOBILE X-RAY ON THE FRONTLINE

With increased demand for on-site X-ray services at CCFs, NHGD converted its Mobile Bone Mineral Densitometry (BMD) trailer into a second Mobile X-ray (MX2) trailer in late April 2020, and deployed it to CCF@Tuas South. The Mobile BMD was retrofitted with a new mobile X-ray system within 12 days despite the global supply chain disruption and manpower restrictions during the Circuit Breaker.

The other two units, designed and built in collaboration with Temasek Foundation, were the first in Singapore to be equipped with a Negative Pressure System (NPS). The Mobile X-ray services helped ease the COVID-19 patient load for X-rays in hospitals, and minimised risk of cross-infection.



X-RAY SERVICES AT MIGRANT WORKER ONBOARDING CENTRES

In March 2021, the MX1 was deployed to the Migrant Worker Onboarding Centre (MWOC) @ Punggol to provide on-site X-rays. Two months later, it was deployed to the MWOC @ Eunos. The MWOC was a one-stop service that integrated Stay-Home Notice (SHN) with medical examinations and a "settling-in" programme for migrant workers before they started work in Singapore. It minimised community infection from COVID-19 cases and brought convenience to employers. NHGD radiographers performed chest X-rays for the workers, a medical requirement in application for a work pass.

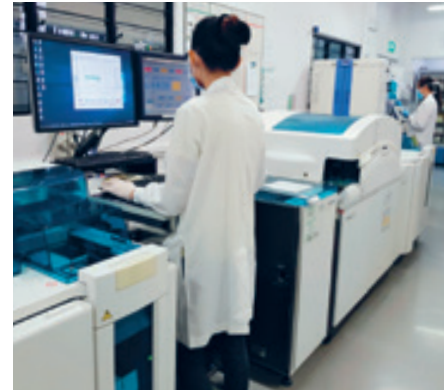


Mobile X-ray at MWOC@Punggol.

NHG DIAGNOSTICS

LABORATORY SUPPORT FOR NATION'S COVID-19 TESTING EFFORTS

To boost nationwide COVID-19 laboratory testing capabilities, NHGD carried out swab sample delivery, blood sample collection, and antibody testing.



COVID-19 antibody testing at an NHGD laboratory.



Above: NHGD staff volunteers at NHG Pharmacy.

Volunteering at NHG Institutions

About 10 per cent of NHGD clinicians and administration staff volunteered at NHG institutions that were facing manpower needs. Allied health professionals were deployed to reinforce X-ray and laboratory operations at Tan Tock Seng Hospital (TTSH)/National Centre for Infectious Diseases (NCID), CCFs, as well as dormitories for serology testing. NHGD staff also supported operations at NHG Pharmacy, where medication had to be packed for home delivery and for medical posts at dormitories.



Augmenting national COVID-19 antibody testing capacity

In June 2020, NHGD implemented COVID-19 antibody testing at its laboratory at Buangkok Green Medical Park, where up to 400 tests were conducted each day.

Delivering swab samples from polyclinics to COVID-19 testing laboratories

When the polyclinics started to conduct swab tests in early 2020, NHGD medical couriers were activated to deliver swab samples safely and quickly from the polyclinics to COVID-19 testing laboratories located in hospitals for timely processing. Strict infection control measures were put in place to safeguard the safety of staff and members of the public, as well as to maintain the integrity of the samples.

BOOSTING TRAINING CAPACITY FOR RADIOGRAPHY STUDENTS

In June 2020, there was a national shortage of radiography clinical postings, as hospitals had to reduce their intake of undergraduate students to cope with the COVID-19 crisis. In view of this, NHGD helped fulfil the students' graduation requirements by hosting its largest cohort of radiography students and increasing placement sites. This exercise concluded successfully as students gave good feedback on their experiences.



Supporting serology testing at migrant worker dormitories

In May 2020, NHGD led a team of phlebotomists to support serology testing operations by NHG for some 30,000 migrant workers at the dormitories. NHGD helped recruit and coordinate manpower, ran competency checks, and trained more than 20 phlebotomists, who were volunteers from public/private organisations and locums. NHGD also established workflows and guidelines to ensure the implementation of infection control measures on-site. For more than 1.5 months, the team drew some 1,200 blood samples daily, which were subsequently sent to hospital laboratories for COVID-19 antibody testing. This operation facilitated the early return of migrant workers to work.

“COVID-19 has disrupted our lives. Yet, it has created new opportunities, fuelled development and progress, and uncovered exciting potential that we may not have known before as individuals or as a team.”

Ms Lim Soh Har Executive Director, NHG Diagnostics

INNOVATIONS AND DIGITAL TRANSFORMATION

NHGD embarked on various innovations and digitalisation projects to meet the evolving needs arising from the pandemic.

New self-service appointment system increases screening uptake

In September 2020, NHGD implemented a new 24/7 self-service Interactive Voice Response System that improved access to appointment booking for preventive health screenings such as mammograms and bone mineral density tests. The number of bookings made via e-forms increased by 70 per cent within the first month of the launch.



New Electronic Collection Module supports NGEMR “Go-Live” in polyclinics

NHGD implemented a new Electronic Collection Module (ECM), a one-stop system for collection of laboratory test orders, to support the “Go-Live” of Next Generation Electronic Medical Record (NGEMR) in polyclinics. The ECM generated ready-to-use specimen labels and had in-built verification checks. This ensured the labels corroborated with the right patients.

Faster and safer scans with a new X-ray system at Geylang Polyclinic

In November 2020, NHGD upgraded the static X-ray system at Geylang Polyclinic. The new ceiling-suspended full-digital radiography system with a height-adjustable examination table allowed patients to remain in their wheelchair or trolley bed for most X-ray examinations, thus cutting down examination turnaround time and minimising discomfort. The risk of injury to staff was also reduced as no additional manpower was required to transfer the patient to the examination table.



Mammovest simulator for safe training during the pandemic

When mammogram services were suspended during the Circuit Breaker, NHGD mammographers enhanced their training with Mammovest, a breast simulator made of soft silicone that mimics the anatomy and feel of a real breast. Thus, even without real-life patients, training demonstrations could be conducted in a safe and timely manner.

NHGD AWARDS CEREMONY 2021

The NHGD Awards Ceremony 2021 was held during the inaugural virtual New Year Party in January 2021, where 100 frontline and backroom staff were recognised for their efforts and contributions toward the COVID-19 pandemic. These included operations support at CCFs, dormitories, TTSH/NCID and NHG Pharmacy, logistics support for the mobile fleet, and procurement support for medical/infection control supplies.

