

\$1.2m study to improve patient care for asthma and COPD

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A three-year local study, which aims to improve the care of Singapore's asthma and chronic obstructive pulmonary disease (COPD) patients, started on Monday.

The \$1.2 million study aims to create a database for research into respiratory diseases by accelerating the digitisation and integration of records of patients who suffer from asthma and COPD – a serious disease that limits airflow to the lungs.

Research is being conducted by a team of clinicians and researchers from the SingHealth Duke-NUS Academic Medical Centre (AMC) and pharmaceutical firm GSK, with GSK funding the study.

The data collected will be used by researchers to create electronic dashboards to track the management of patients with asthma and COPD, such as the risk of hospital readmission and treatment plans, for healthcare institutions to use.

The dashboards will enable healthcare professionals to predict the outcomes and risks of the two diseases, and hence improve intervention and patient education, said SingHealth. For example, doctors will be able to identify high-risk asthma or COPD patients and provide more intensive or tailored treatment for them. The dashboards will be available for healthcare institutions such as the Singapore General Hospital (SGH) and SingHealth Polyclinics to use.

Each year, data from about 13,000 respiratory patients from Singapore will be collected for the study, which is SingHealth Duke-NUS Health Services Research Institute's first large-scale public-private research collaboration.

"Asthma and COPD can be life-threatening if not managed properly, but with the right interventions and management, complications and deaths are preventable and patients can enjoy a good quality of life," said Associate Professor Loo Chian Min, chief medical informatics officer for SingHealth and senior consultant at SGH's department of respiratory and critical care medicine. "A study of this size should give us ample data to analyse so that we can improve the care management and clinical outcomes."

Singapore has one of the highest asthma prevalence rates in the world, with around one in five children and 5 per cent of adults diagnosed with the condition. Singapore's asthma mortality rate is also three times that of other developed countries like the United States, due to a variety of factors.

Last year, COPD was the 10th leading cause of death and hospital admissions here. Current challenges include lack of disease awareness, late detection and diagnosis, and poor adherence to medication.

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