

Title of PhD project / theme	Maintaining engagement to TB regimens utilising digital adherence technology
Supervisory team	<p>Prof Katherine Fielding (LSHTM) Prof Sharon Cox (Nagasaki/LSHTM)</p> <p><i>The supervisory team may also include 1 or more of the following academic staff:</i></p> <p>LSHTM/Nagasaki: Dr Tansy Edwards, Nagasaki: Prof Chris Smith, Prof Satoshi Kaneko</p>
Brief description of project / theme	<p>TB prevention and control remains a priority in the global health agenda. Tackling TB requires innovative approaches and the End TB strategy has formally recognised digital health technologies to target the three areas of the strategy. Monitoring adherence and sustaining engagement to TB regimens (6 months for drug-sensitive TB and longer for drug-resistant TB) is critical for cure and reduce recurrence. Digital adherence technologies (DAT) along with using the data from such technologies to initiate differentiated care may be a pragmatic patient-centric approach to improving patient outcomes. Whilst there is interest in this area, there is still limited research on the best technology and the ideal implementation methodologies in TB affected countries across different health systems (e.g. decentralised) and setting. To address this, a large-scale implementation project (ASCENT; Prof Fielding co-investigator and joint evaluation lead) is being conducted to assess the various DATs on supporting patients to adhere to the long treatment in the Philippines, South Africa, Tanzania and Ukraine. There are opportunities within the evaluation conducted in the Philippines to conduct nested studies to research practical approaches to optimising these DAT interventions, and if these alone are enough to ensure adherence and engagement with TB treatment.</p> <p>Various patient and health systems level factors influence adherence and dis-engagement to treatment. Therefore, it is relevant to understand, how and if these digital platforms might deliver additional technological interventions to improve service delivery (from the patient perspective) and the patient experience</p>

	through their diagnosis and treatment journey, thereby increasing treatment adherence and patient engagement.
Particular <i>prior</i> educational requirements for a student undertaking this project	Experience in public health, research management and in global digital health projects is essential. Knowledge of the field of digital health is essential along with experience in drafting research protocols, academic reports and in the collection and management of data on human volunteers. Awareness of mixed-methods designs and implementation science would be highly desirable.
Skills we expect a student to develop/acquire whilst pursuing this project	Field epidemiology, data management and analysis, and more specialised skills in digital health and evaluation of complex interventions.