Primary Health Care is the first point of contact for healthcare.

The best-known example are GPs who help diagnose patients, prescribe medication and make hospital referrals.

During the COVID-19 pandemic, GP consultations have had to move online.

Remote consultations pose many challenges. They rely upon technology that may not work 100% of the time. Most importantly, it is impossible to undertake a full examination remotely, including for symptoms of COVID-19.

A physical examination for COVID-19 involves taking a patient’s temperature, pulse and blood pressure, looking into their mouth and throat, listening to their lungs using a stethoscope, and using an oximeter to estimate blood oxygen levels – things that cannot be done remotely.

This is where Professor Trish Greenhalgh steps in. She is Professor of Primary Care Health Sciences at the University of Oxford’s Medical Sciences Division.

Trish is a GP as well as an expert in academic primary health care.
During the pandemic, she has helped the NHS adapt by researching how to make its Remote-by-Default Care system as effective as possible.

In a study called RECAP (Remote COVID-19 Assessment in Primary Care), Trish worked with other researchers to develop an ‘early warning score’ – a series of questions that GPs can ask to accurately identify seriously unwell patients.

The questions cover the history of illness, current symptoms, and some elements of physical examination that the patient can do themselves.

The RECAP team devised a list of severity indicators and produced a 10-item score.

It investigated whether the patient’s answers would be helpful as severity indicators. For example, could a description of ‘feeling hot and shivery’ replace a thermometer reading to confirm a fever?

Questions such as ‘How breathless are you feeling compared to yesterday?’ seemed to be as accurate in identifying serious illness as so-called ‘objective’ measurements such as respiratory rate.

This qualitative data is useful for individual diagnoses, but it is difficult to process on a large scale. Trish’s team had to convert it to quantitative data.

Each response to the 10-item score is coded. For example, ‘same or better than yesterday’, ‘worse than yesterday’, or ‘significant deterioration in the last hour’, are each assigned a different code.

Once the responses of several thousand patients have been coded in this way, they start to form useful datasets for spotting trends.

Trish and the team use data linkage to see how the codes correlate with the key outcomes they are interested in: hospital admission, intensive care unit admission, and death within 28 days.
Teamwork and collaboration are vital for this type of research.

Laiba Husain is a PhD student who works closely with Trish.

On the Remote-by-Default Care project, Laiba explored the interactions of vulnerable populations – such as refugees and migrants – and digital inclusion.

For her PhD, Laiba is now looking at the barriers to remote consultations, especially for BAME, low-income, and older people. She is looking at how the health care service can work in partnership with patients to overcome these barriers.

Trish and Laiba are striving to make the health care service work the best it can for everyone.

What could you contribute to academic primary health care?