Tuberculosis services during the COVID-19 Pandemic

The current COVID-19 pandemic is causing providers of TB services to be stretched as a result of staff illness and redeployment. This is causing increasing disruption to the established clinical pathways that are core components of a TB service. NHSE have circulated a guidance note on the components that should continue to be provided during this difficult period: (https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2020/04/C0032-Maintenance-of-TB-services_26-March-FINAL-Amended).

In this document, we offer further information on necessary TB service provision. The main priorities are to continue to offer rapid diagnostic and treatment pathways for suspected active TB patients, allow latent TB infection to be treated in the most vulnerable, and to ensure patient and staff safety through infection control including use of appropriate PPE, careful selection of cough-associated and potentially aerosol-generating diagnostic procedures, and minimising hospital visits.

We recognise that in some lower incidence settings, providers with smaller numbers of healthcare staff will find this period particularly challenging especially when their TB service covers a large geographic area.

The role of the TB nurse specialist is critical in ensuring appropriate patient support and contact. Their time should be protected, rather than re-deployed especially when the service is reliant on a small number of healthcare staff. This also applies to clerical and social care team members.

Experienced senior medical support must be available to ensure the service can respond promptly and effectively to patient issues as they arise.

Diagnostic pathways:

- Patients with TB and COVID-19 may have a similar presentation with cough and fever. TB services must ensure that their staff are adequately protected. This may include stopping walk-in services, and assessing patients being seen in clinics or the community for risk of viral infection prior to face to face review. In these circumstances, services need to consider how they will manage patients with a new or likely diagnosis of TB who require rapid diagnostic assessment.
- For patients with suspected active TB there are currently limitations on aerosol-generating procedures which include bronchoscopy, sputum induction and endobronchial ultrasound.
- In this setting, there is a case for utilising rapid PCR in all sputum samples to optimise the yield while these restrictions on such procedures are in place.
- There will also need to be local arrangements regarding whether a limited diagnostic service can continue to provide bronchoscopy and induced sputum within a safe environment and using appropriate PPE. This may be, for example, through joint working with 2 week wait lung cancer services; or pooling local resource across a number of TB services.
- There may need to be a change to the threshold for empirically commencing treatment while waiting for culture results in high pre-test probability cases when there would have been additional sampling taken previously.

- TB referral pathways should be maintained to ensure that plain films or CT scans that indicate possible TB are still followed up by a TB clinic rather than devolved to primary care.
- There is a continued need in a small number of cases to admit when there is a risk to the public or patient as the individual cannot safely self-isolate or they are unstable medically:
    - Homelessness
    - MDR TB
    - Advanced disease
    - Complex disease including medication issues

Therapeutic pathways:

- Active TB cases should continue to have treatment commenced, continuously supplied and carefully monitored in addition to risk assessment of adherence to treatment.
- Local units should utilise outreach services and postal delivery of TB medications.
- Virtual clinics should be used where possible in place of face to face clinics to initiate treatment/ case manage and for medical reviews.
- Imaging of these cases is still important and agreement from radiology should be obtained to ensure urgent scans and plain imaging are maintained.
- There is a need to maintain DOT and VOT. The latter reduces the need for face to face review though this needs to be weighed against the resulting reduced (potentially important) patient contact.
- All MDR cases should be discussed with the BTS Clinical Advice Service which continues to provide expert review.

Latent TB

- The national new entrant screening programme is currently paused pending a return to more favourable conditions (see https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2020/04/C0032-Maintenance-of-TB-services_26-March-FINAL-Amended.pdf). However any individual already screened and symptomatic should still be investigated as a potential active TB case.
- Using an IGRA as a single step screen test in adults may be considered in place of an initial TST approach to minimise visits.
- Priority LTBI screening and treatment should be continued for paediatric contacts and those with additional risk factors (e.g. immunosuppressed/ renal failure), given the excess risk in this population.
- Adult non-high risk contacts may be assessed, registered and treatment deferred till return to normal service with clear advice on contacting the team if they become symptomatic before this occurs.
- Screening of patients requiring urgent biological therapies should continue but all non-urgent patients can be deferred till capacity returns. All clinical teams should ensure the pathway for referrals continues and a risk assessment made to decide on a case by case basis which need prioritising. This should include working with other specialist teams to continue to provide this service (e.g. Inflammatory Bowel Disease specialist nurses).

- Each TB incident should be assessed on a case by case basis taking into account level of infectiousness of the index case and vulnerability of the contacts. This should be done in conjunction with local Health Protection teams when possible.

Ongoing patient contact:

- In order to maximise the outpatient management of TB patients, close contact with patients will be required.
- TB teams will need to provide ad-hoc patient face-to-face assessment (where absolutely necessary), remote assessment of symptoms, medication and managing patient expectations/concerns. Testing for liver function by using alternative testing (eg blood spot testing by postal delivery and home testing or community phlebotomy) should be explored to minimise attendance to hospitals

BCG neonatal scheme provision

Childhood vaccination programmes are continuing, including neonatal BCG. Therefore, maternity providers should continue to vaccinate with BCG before discharge of mother and baby (see https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2020/04/C0032-Maintenance-of-TB-services_26-March-FINAL-Amended.pdf).

Drug shortages

There continue to be challenging drug supply issues nationally. The Medicines Supply Notification by the Medicines Supply Team at the Department of Health and Social Care should be accessed and close liaison with local pharmacies maintained. Where possible prospective planning should be undertaken to anticipate and manage potential shortages and to consider alternative supplies and preparations.

Surveillance & Notification

Reporting of TB cases to PHE should continue. If there are issues with administration, TB services should use the NHSE directive to leverage local support from their Trust

Professor Onn Min Kon
Dr Martin Dedicoat
Jacqui White, Lead TB Nurse
Professor Marc Lipman

British Thoracic Society
V 1.0 24 April 2020