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## The impact of TB NICE guidance on resource capacity and contact screening outcomes: a retrospective, observational study within a central London TB centre.

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**Introduction and objectives** Recently published NICE guidance has significantly expanded the approach to adult tuberculosis (TB) contact screening by recommending tuberculin skin testing (TST) for pulmonary and laryngeal contacts only, increasing the age threshold for screening and treatment to 65 years and defining a positive TST as induration ≥5 mm, regardless of BCG vaccination status. Interferon Gamma Release Assay (IGRA) is recommended only in situations where more evidence of infection is needed.

Our institution has previously adopted an approach comprising a chest radiograph, TST and IGRA.

The aim of our study was to evaluate the impact of NICE guidance on screening outcomes and resource capacity by applying the criteria to a well-defined historic cohort of TB contacts.

**Methods** This was a retrospective, observational study carried out at a central London teaching hospital. The study population comprised 593 consecutive, adult TB contacts screened between 1/1/2008 and 31/12/2010. Data was collected through a retrospective review of TST and IGRA tests.

**Results** Of the 593 contacts screened, 358 pulmonary contacts had TST and IGRA results. 56% had a TST  $\geq$ 5 mm, regardless of BCG status, qualifying them for treatment as per the new NICE guidance. Of these, 61% were IGRA negative (discordant) and may therefore include false positive diagnoses, resulting in the potential for over treatment. In those with TST 5–14 mm, discordance rises to 84%. Conversely, 6% of those with TST < 5 mm are IGRA positive representing potentially missed cases.

16% of screened individuals were contacts of extra pulmonary TB. Not screening this group would reduce the demand for outpatient appointments by 151\* in our cohort. In contrast, testing contacts > 35 years would require capacity for an additional 165\* appointments. Furthermore, there were 162 additional LTBI cases in comparison to previous guidance requiring an additional 648\* appointments. 72% of this group were IGRA negative.

## (\*Approximate)

**Conclusions** Our results show the revised guidance will require increased resource capacity largely due to more patients being classified as having latent TB. In addition to workforce planning to meet these demands, further debate is needed to decide if this new approach truly reduces the incidence of active TB or results in unnecessary treatment.