Title: Evaluation of the TB strain typing service in England: Initial findings

Ms. Jessica 15759 Mears jessica.mears@hpa.org.uk † and 15761 The TB Strain Typing Service Evaluation Group p.sonnenberg@ucl.ac.uk †. Department of Infection and Population Health, University College London, United Kingdom.

Body: Background In 2010 a universal Tuberculosis (TB) Strain Typing Service (STS) was initiated across England to contribute to national TB surveillance and control by detecting TB clusters early, informing public health action, and estimating rates of recent transmission (RT) and false positive (false+) TB isolation. A multi-disciplinary evaluation group was formed to prospectively evaluate the STS. We report results of primary outputs along with user satisfaction (UsS) with the service. Methods a) All 24 MIRU-VNTR strain types (ST) between January-December 2010 were used to estimate the proportion of clustered cases in England in the first year of the STS. The n-1 method was used to estimate rates of RT. Regional and demographic differences were explored. b) Prospective data on suspected false+ TB isolates were collected from the TB reference laboratories between October 2010-2011. c) A two-part self-completion survey was implemented in December 2010 and March 2012 to establish change in uptake and UsS with the STS. Results a) 3577 TB patients had at least 22 MIRU-VNTR loci typed. 39.6% (n=1408) were clustered into 422 clusters of at least 2 cases. RT was estimated to be 27.7%. b) 5887 TB isolates were typed. 47 isolates were suspected of being false+ because of their ST. 15 (0.25%) isolates were confirmed false+ by ST. c) 14.7% of the 258 respondents at baseline had not heard of the STS and 23.2% never used it. Of respondents that used the STS, 55.7% found ST data quite useful, 39.7% very useful. A comparative analysis of the surveys will be presented. Conclusions The STS will improve as a public health tool when it is fully-implemented and more data becomes available. The evaluation of the STS is ongoing.