Abstract Group: 10.2. Tuberculosis

Keyword 1: Tuberculosis - management Keyword 2: MDR-TB Keyword 3: Infections

Title: Using virtually observed treatment (VOT) for hard to manage tuberculosis: A pilot study

RN. Sara 1703 Hemming sara.hemming@nhs.net ¹, Dr. Alistair 1704 Story alistairstory@gmail.com ², Ms. Lucia 1705 Possas lucia.possas@nhs.net ¹, RN. Susan 1706 Yates susan.yates@nhs.net ¹, RN. Gloria 1707 Ferenando gferenando@nhs.net ¹, Mr. Philip 1708 Windish philip.windish@nhs.net ², Dr. Rob 1709 Aldridge rob.aldridge@gmail.com MD ¹, Dr. Andrew 1710 Hayward hayward.ac@gmail.com MD ¹, Ms. Elizabeth 1711 Garber e.garber@ucl.ac.uk ¹, Dr. Marc 1712 Lipman marclipman@nhs.net MD ¹ and Prof. John 1718 Watson John.Watson@phe.gov.uk ³. ¹ Research Department of Infection and Population Health, Royal Free Hampstead NHS Trust/University College London, London, United Kingdom, NW3 2PF ; ² Find and Treat, University College London Hospitals, London, United Kingdom, WC1E 6JB and ³ Respiratory Diseases Department, Health Protection Agency Centre for Infections, Colindale, United Kingdom, NW9 5EQ.

Body: Background: DirectlyObserved Treatment (DOT) is recommended in the UK for socially and/or clinically complex cases of tuberculosis (TB). However, it places considerable demand on patients when clinic-based; and can become resource intensive with community outreach. Many people requiring DOT end up self-medicating as it cannot be arranged. We report a pilot study using Virtually Observed Treatment (VOT) for patients who needed DOT but were either unable or unwilling to receive it. Methods: Patients were referred by local London TB services to a Pan-London TB outreach team; and, following assessment, were trained to record and e-mail to healthcare workers using a mobile phone or laptop, date-stamped video-clips of themselves taking medication. Results: 23 patients were referred for possible VOT. 17 were assessed as likely to benefit (mainly due to transport difficulties or time commitments making DOT impractical). 8 were not started on VOT as they were either close to treatment completion or technical issues made it impossible to provide. Nine (53%) commenced VOT (3 females; age 18-38 years; 6 non-UK born). 2 returned no video-clips during the first week and were returned to service for clinic-based DOT. Of the remaining 7 (4 using twice-daily regimens for MDRTB), 6 returned video clips for a minimum of 95% of treatment encounters (median duration 163 days, range 48-257). Overall 86% of scheduled VOT doses were observed to have been taken. Conclusion: Whilst patient selection is important, VOT appears to be a feasible treatment supervision option in many subjects requiring DOT. An RCT directly comparing VOT and DOT is planned to test this hypothesis. Supported by NIHR Programme Grant 0407-10340.