Supplementary data: Further description of methods

Interviews were conducted by female researchers LDH, SLR and WJ. LDH and SLR were both social science degree majors qualified in the fields of medicine and teaching respectively. WJ is a medical doctor with a specialist qualification in public health medicine. SLR and LDH were employed full-time on the project. LDH had been employed as a clinician in the DR-TB, HIV and family medicine programs in two of the study provinces (KwaZulu-Natal and the Western Cape). Prior to the study SLR had been lecturing in Industrial Communication at a vocational college.

There was no formal relationship established prior to the study, except some familiarity between the clinicians. LDH and WJ had an informal relationship prior to study. The participants were aware of research aims and objectives and the names of the researchers and principal investigators. The participants were aware that the researchers were interested in health systems research around DR-TB disease in South Africa. WJ had a special interest in understanding implementation of the MDR-TB decentralisation policy in different contexts in South Africa.

The study intended to use a realist approach as a starting point to explore factors relating to champions, i.e., the strategies (mechanisms) they use and the contextual factors that influence the outcomes linked to the effective implementation of the policy for decentralised DR-TB care. This analysis included in-depth interviews with DR-TB stakeholders and healthcare workers involved in the DR-TB program to unpack their experiences. Data was re-examined and analysed through the lens of a realist approach by organising themes into contextual factors, mechanisms and outcomes.

The participants were purposively selected to include broad categories of health care providers in the multidisciplinary team working with DR-TB patients in each sampled facility. Participants were contacted via email. A total of 47 participants (34 in phase 2 and 13 in phase

3) were approached via email. There were no refusals to participate in the study and no withdrawals. Interviews were conducted at the workplace in person, except for eight interviews being conducted telephonically by WJ. Phase 3, included two panel interviews with more than one participant present Appointments were scheduled prior to the facility visit and only the researchers and participant/s were present during interviews. Participants included DR-TB clinicians, TB nurses, pharmacists, district and subdistrict coordinators and facility managers. There were equal numbers of males and females interviewed. Most participants had been working in DR-TB for more than 5 years. Interviews took place in 2018.

Questions guides were not provided by the authors. Only one participant was interviewed twice during the study. The participant was initially interviewed as part of 34 participants during the first phase of data collection. During the second data collection phase (13 participants) this participant was interviewed again to obtain further information.

Interviews were conducted in English, audio recordings were obtained, except in the case of a correctional services facility, where recording was not permitted and notes were made during the interview. The duration of the interviews ranged from 30-60 minutes, depending on occupational time constraints of participants and on data saturation. Transcription was done verbatim by a team member and was not returned for comment or correction.

SLR and LDH coded the data and described the data tree. Themes were identified from the data. Nvivo 12 software was utilised to manage the data. The participants were given an opportunity to comment on findings during stakeholder feedback sessions at the end of the study (not discussed in this manuscript).