Table 3. Proposed TB program performance indicators specific to First Nations populations. Dark green indicates indicators considered high priorities during the group discussion; no colour indicates lower priority indicator.

Domain	Indicator group		Priority	Potential Indicator	Additional Stratification (beyond age & sex)	Rationale	Extra Notes
Incidence and Inequalities (Stratify by age, sex, registered status, self-identification)	Higher-Risk Groups - Enhanced						
	Inequalities			Number of people living in a bedroom / household		Difficult to quantify since the official number of people could be different than the true number of people living there	Challenge: Obtaining an appropriate measure (i.e. deprivation score, community-well-being index etc.); Potential stigma issues surrounding scores
	ADDED- Comorbidity			Proportion of individuals with Diabetes	well-managed vs uncontrolled diabetes	Diabetes is an important comorbidity for First Nations communities	
	ADDED- Women of child-bearing age/pregnant					Women of child-bearing age/women who are pregnant are often around children (a high-risk population); An important group that is often missed;	
Lab Reporting	ADDED- Lab reporting package	Timely Lab arrival				Information could be rolled up from local programs to the national level as a combined indicator (through the use of a yes/no checkbox form) to facilitate information collection Diagnostic delay is an implementable measure if well-defined; Could provide a form with check boxes (yes/no) and define criteria to break down where the delay is (patient, HCP, or administrative) so that you know where to target	
		Timely Smear					Need sensitive engagement for populations as certain aspects of TB (for example, sputum collection) can be routed in trauma and colonial history; Not all programs have access to NAAT (i.e. GeneXpert) which could lead to potential failures for implementation
		Timely NAAT					**Potential benchmark:** Ideally performed on Day 1 following a positive smear result
		Timely Report back					
		Genotyping					
		DST					
		Diagnostic delay					
	Culture-during treatment			Indicator described by Heffernan & Long			To be included in "Evaluation package during treatment"
Case Management and Treatment	ADDED - Evaluation package- during treatment					Information should be rolled up from local programs to the national level as a combined indicator (through the use of a yes/no checkbox form) to facilitate information collection Include culture-during treatment, sputum and chest x-ray at treatment initiation as well as sputum and chest x-ray at the end of the treatment phase	

Domain	Indicator group		Priority	Potential Indicator	Additional Stratification (beyond age & sex)	Rationale	Extra Notes
Case Management and Treatment (continued)	Early Diagnosis-Smear positive						
	Early Diagnosis-symptoms-to-treatment						An indicator based on symptoms is challenging since it can be subjective
	Treatment completion			Indicator described by WHO (within 12 months for drug susceptible);	Drug susceptible, drug resistant and LTBI cases	Need to stratify since each type of TB will have different treatment length requirements	
	DOT						
	Underserved populations						Difficult to quantify because needs to encompass physical, social and emotional aspects
	HIV serologic testing						Part of the "Evaluation/Completion of Investigative tests" package which could be rolled up Nationally from local programs
	ADDED- Completion of investigative tests			Proportion of patients that completed the full investigation package (identified using a checkbox format)? Or what percent of patients had a complete assessment?		Information should be rolled up from local programs to the national level as a combined indicator (through the use of a yes/no checkbox form) which could facilitate data collection Include information on chest x-ray, AFB, culture, HIV serologic testing, hemoglobin A1CC [diabetes], ALT [liver function], and renal function	
Contacts	Contact investigation Information should be rolled up from local programs to the national level as a combined indicator (LTBI identification, treatment recommended, initiated, completed)	Contact - LTBI identification		Proportion of priority contacts invited; proportion you have reached; proportion of completeness of those contacts	High priority/high risk contacts (children < 5 years old, HIV, women of childbearing age/pregnant and those with high exposure)	Prioritize high priority contacts to focus resources	Potential benchmark: Household contacts and children < 5 years old should be admitted to program for symptom assessment within 48 hours.
		Contact- LTBI treatment recommend					
		Contact- LTBI treatment initiated					
		Contact- LTBI treatment completion					
	Contact Identification						

Domain	Indicator group	Priority	Potential Indicator	Additional Stratification (beyond age & sex)	Rationale	Extra Notes
Contacts (continued)	Contacts - Close		Indicator by Heffernan & Long but modified it to, "Number of close contacts of active TB cases diagnosed in (year)";	Household vs non-household contacts	Prioritize high risk contacts (individuals with risk factors, close contacts, children < 5 years old, etc.);	When contact investigations are incomplete, can miss a large group of people that don't enter into LTBI cascade Challenging to examine all contacts –see shared indicator for high-priority contacts
	Contacts - LTBI Treatment Recommended (offered)					Not every case is high risk and should be a priority for treatment;
	Contacts - LTBI Treatment Acceptance					
	ADDED- Contacts- Secondary cases		Proportion of children who are household contacts that have progressed to disease by the time they are tested		Using secondary contacts as an indicator allows the program to assess how well its doing at preventing transmission	
	EXTRA NOTES	Data collection is a challenge as a lot of information is not currently systematically collected				
Screening and Follow up	People Living with HIV					Difficult for Public Health and TB programs to monitor since many people are managed by primary care
	People with Impaired Immunity					Organizational challenges and difficulty with follow-ups due to lack of manpower
Other programmatic	BCG - Community				Relevant at the local level	
	BCG - Administered				Relevant at the local level	
	BCG - Eligible				Relevant at the local level	
	BCG - Adverse Reactions				Relevant at the local level	
	Outbreaks - New				Relevant at the local level	
	Ongoing Outbreak - Active Cases				Relevant at the local level	
	Evaluation and Strategic Planning		Indicator described by Fanning & Orr Potential indicator specific for FNIHB/FNHA/NITHA and could report quarterly (like FNHA)		Can ask high incidence communities if they felt that they had meaningful engagement in their TB program; Programs have a duty to engage communities to participate in program decision making;	**Note**: Specific for community consultation activities; Need to consider that communities are fluid and should think of them as community areas;
	Education- Health care provider				Relevant at the local level	
	Education - Community		Proportion of schools that have TB in their curriculum		Relevant at the local level	
	Ethics		Indicator described by Fanning & Orr selected			May look different for different communities/regions; Reconciliation and nation-to-nation are essential practices; Need to determine a data-sharing agreement and where data should be kept

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Determinants	ADDED- Partnerships		What is the relationship between the program and the community? (details to be determined)		Need to have a way to measure community partnerships since these partnerships are essential for success of the program; Creates a mechanism to advocate for self-determination	
	ADDED- Community Resources		Is there a capitation system in place to access the amount and appropriateness of resources for the community		Communities need to be properly resourced to deal with TB;	
	ADDED - Employment/ unemployment					
	ADDED – Education (attainment and quality of primary and secondary education)					
	ADDED - Community wellness indicator		Indicator to measure self-assessed status (i.e. nourishment, tobacco smoking etc.) (details to be determined)			
	ADDED - Catastrophic costs		Proportion of cases that became unemployed during treatment; OR measure homelessness/isolation (details to be determined)		If the "cost" of TB is known (social, mental, physical, and economical) this may help acquire funding for disease management and prevention	**Challenge**: Difficult to define and capture.
	ADDED- Stigma reduction		How are physicians normalizing TB care to reduce stigmatization?			**Challenge**: Finding a meaningful "high level measurement"