Providing TB Preventive Treatment to People in CARGs: Feasibility & Acceptability in Zimbabwe

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HIV LEARNING NETWORK
The CQUIN Project for Differentiated Service Delivery

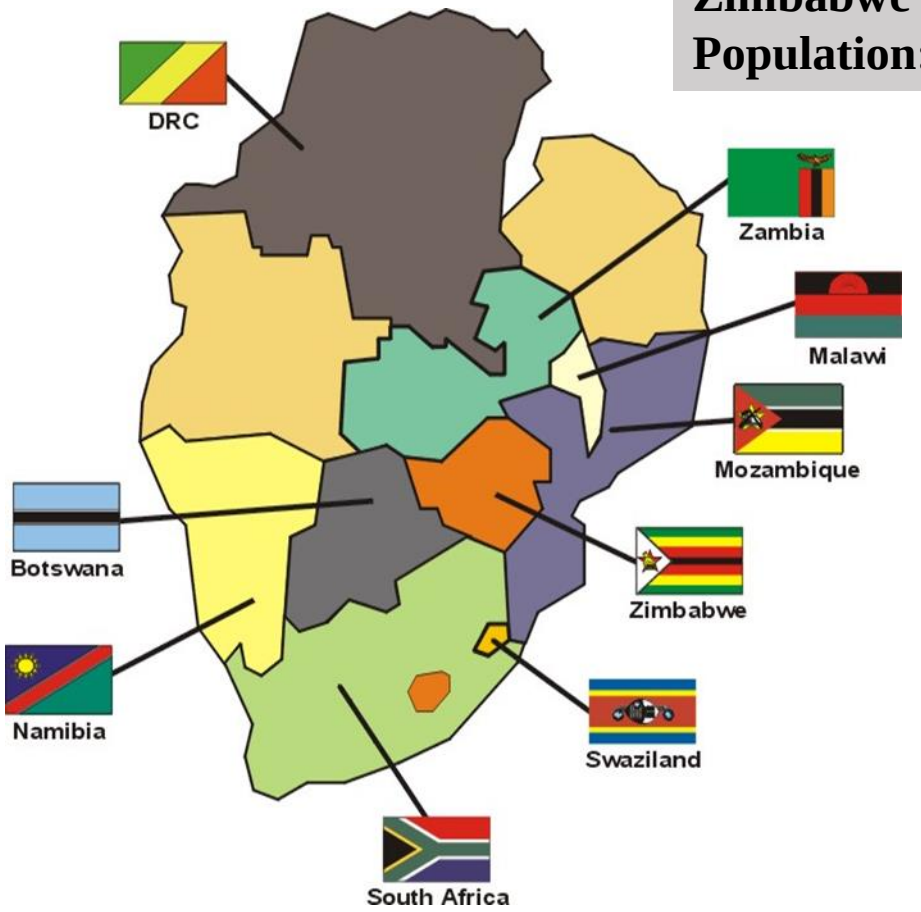
Outline

- **Background**
- **Methods**
- **Results**
- **Conclusions**

Country Context

- Zimbabwe remains one of top 8 countries in Africa on world's top 30 list of countries heavily burdened by **TB, TB/HIV and MDR-TB**
  - HIV prevalence of 14,6% (***ZIMPHIA, 2016***)
  - Clients on ART 1,155 251 mil (**June, 2019**)
  - TB prevalence of 221 /100,000 population
  - TB/HIV co- infection rate of 63% (***Global TB Report, 2018***)

Zimbabwe Population:13+ M



Background – 1

- Of the 57,826 initiated on ART between Jan – Jun 2019; 5,606 (8%) were initiated on TPT
- Completion rates by Dec, 2018 – 77%
- DSDM such as community antiretroviral refill groups (CARGs) may provide an opportunity to expand TPT coverage and enhance TPT completion, but the feasibility and acceptability of this strategy is unknown

Background – 2

- ICAP partnered with MoHCC, HRSA, CDC and ZNNP+ to conduct a very rapid assessment of the feasibility and acceptability of integrating TPT into CARGs
- The objective was to provide timely, practical and policy-relevant findings to inform the scale-up of TPT services for people living with HIV in Zimbabwe
- Data were collected from March – September, 2019

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Methods: Data Collection

25 Key Informant Interviews with "Central Level" Informants

- Program and policy stakeholders with experience in TB prevention and treatment
- ~20 closed-ended questions (tablets); ~20 open-ended questions (all audio recorded)
- Approximately 1 hour
- English (Shona as needed)

20 Key Informant Interviews with CARG Leaders

- CARG leaders from participating health facilities
- ~25 closed-ended questions (tablets); ~25 open-ended questions (all audio recorded)
- Approximately 1 hour
- Shona

16 Focus Group Discussions with a total of 136 CARG Members

- Mix of urban and rural sites:
- 8 FGD with ppts who had previously received TPT
- 8 FGD with ppts who had not received TPT
- 136 CARG members total (6-12 CARG members/FGD)
- Approximately 90 minutes
- Shona

8 CARG Observations / Time-Motion Studies with 64 CARG members

- Observe CARG meetings/activities
- Trained interviewers collected time-motion data and documented activities
- 64 CARG members total (4-10 CARG members/ observation)
- Approximately 30-75 minutes

Methods: Data Analysis

- **Qualitative data** (KIIs and FGDs):
  - Audio recordings were transcribed and translated to English from Shona by bilingual research assistants and reviewed for completeness
  - Entered, cleaned, and analyzed using Dedoose software package
  - Data were then coded by question and theme and content analysis was conducted
- **Quantitative data** (close-ended questions from KIIs and field-based observations):
  - Entered onto tablets that uploaded the data to a central SurveyCTO server
  - Data was downloaded from the server and cleaned and analyzed using STATA
  - Time-motion data not yet analyzed

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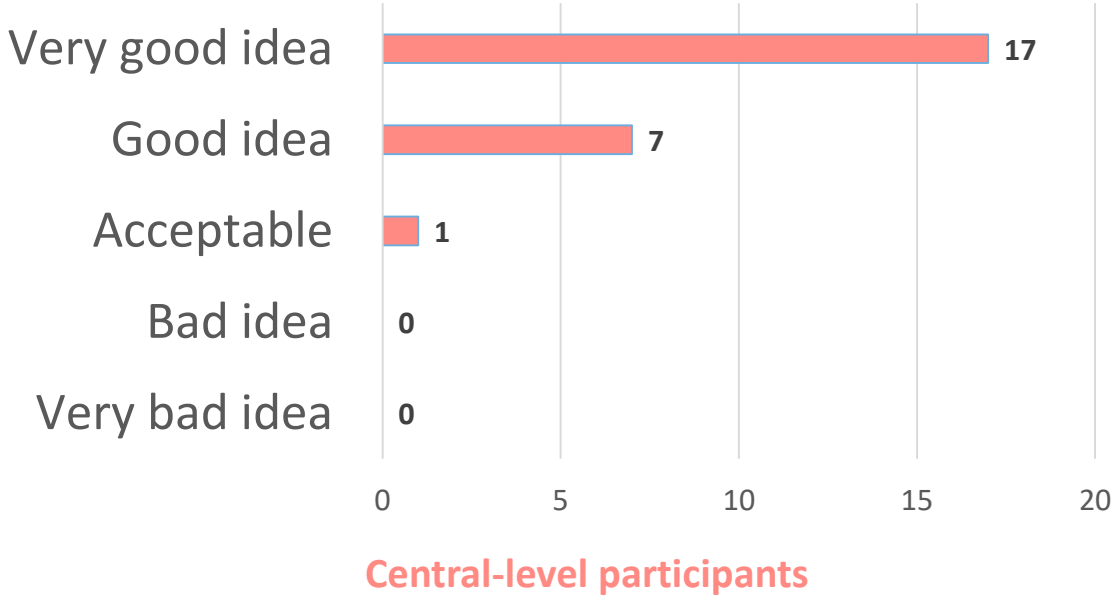
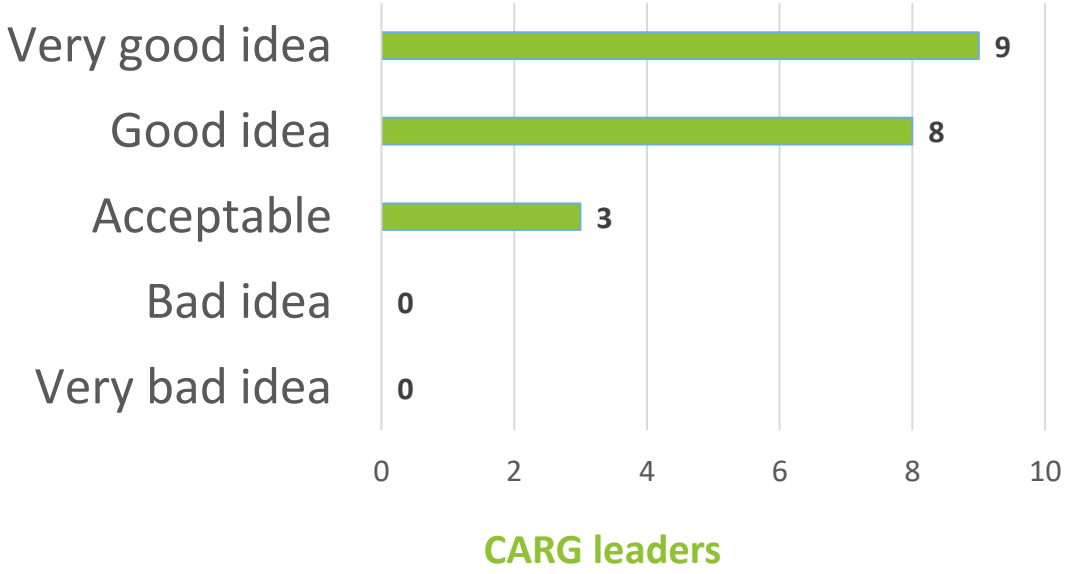
Results: Overall Acceptability of Providing TPT via CARGs

24/25 (96%) central-level informants felt it was a "very good" or "good" idea

17/20 (85%) CARG leaders felt it was a "very good" or "good" idea





Results: Perceived Advantages of Providing TPT via CARGs

- **Utilizing system already in place**
  - Empower patients
  - Empower CARG leaders
- **Psychosocial support for members**
  - Share experiences of taking TPT
- **Promotes adherence**
  - TPT and ART
- **Saves time and money**
  - Fewer clinic visits
  - Lower transportation costs
- **Reduces workload for health facility staff**

"The same advantages found in ART distribution through CARGs are a replica of INH being distributed through CARGs. Monitoring for drugs toxicity, helping in adherence, in their small group communities to ensure that members take their INH over the entire INH course."
(Central Level Informant)

"The advantages are for health care workers they don't get extremely busy because most of the time when we come to collect our medication we normally arrive and its packed already so you won't disturb others..."
(CARG Leader)

"I think it is good because when a person is on this treatment, and they experience those side effects that we mentioned, one person may decide to default, but when we are as a group, we will encourage each other to endure."
(CARG Member)

Results: Perceived Disadvantages of Providing TPT via CARGs

- **Potential coordination challenges:**
  - Could complicate dispensing by health facility
  - Could complicate collection by CARG members
- **Potential medication stockouts:**
  - Multi-month dispensing of INH may be challenging in the context of drug shortages
- **Unknown impact on TPT adherence:**
  - Shifting adherence monitoring and support to the CARG setting might not be effective
  - Multi-month prescribing of TPT might lead to intermittent adherence
- **Unknown impact on TPT safety**
  - Can CARG leaders monitor for side effects as effectively as healthcare workers?
- **Additional training and education needed**

"…I think it will just create a logistics nightmare in terms of being able to account for the medicine right down at that level and then that is where the main issues are..."
(Central-level Informant)

"…if there is no knowledge because these pills will be too many, a person is taking cotri, s/he takes ARV again okay. So s/he needs time to be educated in order to take these pills…because someone might skip some pills and will develop problems."
(CARG Leader)

"A potential challenge is maybe coming here and being told that there is no medication in stock because everything else is alright."
(CARG Member)

Results: TPT Demand Generation Approaches

We tested opinions about two TPT demand generation strategies:

In both, CARG leaders would receive training and job aides, and share information about TPT with CARG members

- In approach #1, CARG members who have not had TPT would be encouraged to ask for it at their *next scheduled clinic visit*
- In approach #2, CARG members who have not had TPT would be encouraged to *return to the clinic right away* to request TPT

Central level informants slightly preferred approach 1 and **CARG leaders** slightly preferred approach 2

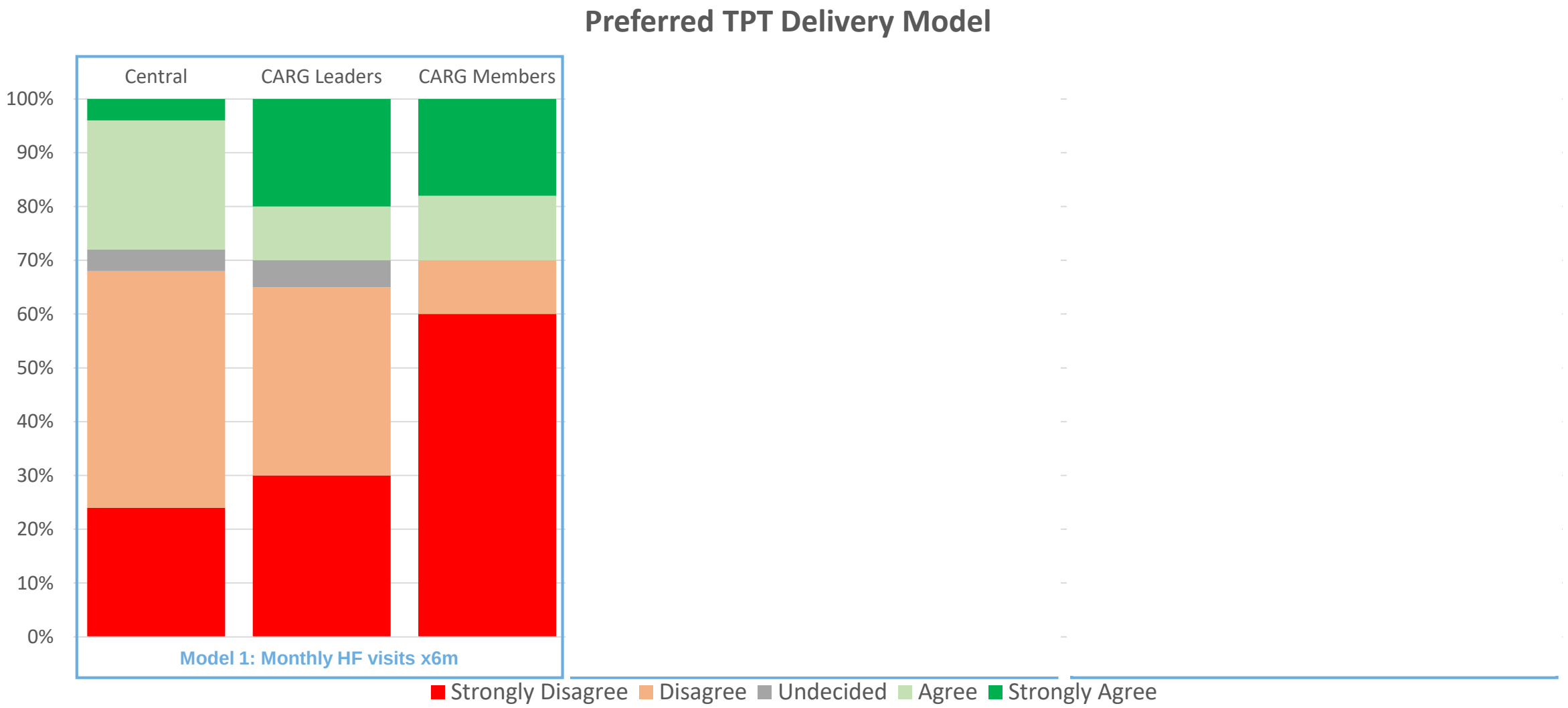
Results: TPT Service Delivery Models

We tested opinions about three TPT service delivery models:

- **Model #1 (leave the CARG for the duration of TPT):**
  - Once a person in a CARG initiated TPT, s/he leaves the CARG and is seen at the clinic monthly for the duration of TPT. S/he would receive one month of TPT and ART at a time, with monthly clinical examinations while taking TPT. Once s/he completes the full course of TPT, s/he returns to the CARG model.
- **Model #2 (hybrid):**
  - Once a person in a CARG initiates TPT, s/he makes monthly visits to the clinic for the first three months. Then, if doing well, s/he receives three months of TPT and three months of ART and returns to the CARG model
- **Model #3 (TPT given entirely within the CARG):**
  - TPT is initiated at the clinic but administered entirely within the CARG. The person would not be seen at clinic following initiation but would receive 3 months of TPT and ART at a time and be monitored by the CARG leader

Model 3 was generally preferred by **central level informants**, **CARG leaders** and **CARG members**, although all noted some concerns about safety

Results: Preferred TPT Delivery Model



Results: Reasons Participants AGREE & DISAGREE with Model #3

Reasons participants agree with Model #3

- Less workload for healthcare staff
- Less frequent clinic visits (than models #1 & #2)
- Belief that monitoring within a CARG is feasible
- Keeps CARGs intact and takes advantage of the benefits of CARG membership (*e.g.,* group support, convenience, time and cost savings)

Reasons participants disagree with Model #3

- Too much responsibility placed on CARG leaders
- Concerns about safety in the absence of side effect monitoring by clinicians
- Concerns about intermittent adherence with multi-month dispensing of IPT
- Recognition that CARG leaders will need to be well trained for this model to work

"It is good in that when a person does not have the time to visit the clinic, just like what we do with ARVs, we will do the same with distributing TPT." CaL_03

"I think it is good because if you are occasionally visited by your peers at your home checking if you are taking medication, you will not leave it, you will continue taking them well. If they realize that you are not taking your medication well they will encourage you to finish your course." FGD_nTPT_03

"…the patient needs to be assessed by a trained clinician so that they can be able to carry on with their treatment without any problem and they can also be able to encourage others or even in the future who may decide to start TPT… no I think that approach I would not recommend that" CeL_23

Results: CARG Observations – 1

The 20 CARG leaders who participated in KII noted:

- Median of 2 years as CARG leader (range 1-3 years)
- 16/20 reported formal training on their role as CARG leader:
  - Most training was < 1 day
  - Those trained by ZNNP+ attended a 3-day workshop
- 7/20 reported any subsequent training
- 19/20 wanted more training

Results: CARG Observations – 2

Trained data collectors observed 8 CARG meetings:

- CARG leaders asked each participant if they were **taking their ART** as instructed in **7/8** meetings
- CARG leaders asked each participant if they had any **new health issues** in **5/8** meetings
- CARG leaders asked each participant about **TB symptoms** (cough, fever, night sweats, weight loss) in **2/8** meetings

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Conclusions & Discussion

- All respondents were open to provision of TPT in CARGs
- All preferred at least some multi-month dispensing of TPT, rather than taking people out of CARG models
- Additional training and supervision of CARG leaders would be required to implement this approach
- Shift to 3HP will facilitate expanded TPT coverage with minimal CARG disruption

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