Operational aspects of the TRuST study’s implementation

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TRuST: Brazilian Amazon context

Healthcare units

- 9 High-complexity units, including referral, urgency and emergency units
- 43 Low-complexity units, including Basic health units and Malaria diagnostic posts

Healthcare professionals

- 659 trained HCPs (field agents, field supervisors, policy makers, physicians, pharmacists, lab technicians)
- Different materials designed to support training and implementation
- Different levels of knowledge

Malaria patients

- 6,074 participants included – Brazilian epidemiological database (SIVEP-Malaria)
- 139 hospitalizations fully investigated for safety analysis, including AHA cases description

Diagnosis → G6PD testing → Pv radical cure
TRuST: Step by step

- TQ and G6PD test logistics
- Training matrix
- HCF’s routine adaptation
- Supervision and Pharmacovigilance
Partnership for Vivax Elimination

TQ and G6PD tests logistics

- Supply chain adapted for municipality staff
- No changes in the routine
- Total control of distribution delegated for malaria control program
Training

• Development of training matrix – customized training for professional class (different perceptions, different backlog, different activities)

• Support materials available for all professionals (in hands or by message app)

• Easy-to-read educational material to support patients counselling (in HQ format)

• In person training (~4h)

• Online platform
Multidisciplinary staff training matrix

- Blood parasites recycle training (Central laboratory)
  - Biochemists, biomedical, lab technicians, microscopists
- G6PD diagnosis
  - Biochemists, biomedical, lab technicians, microscopists, field agents
- Report of malaria cases (electronic forms – SIVEP)
  - Biochemists, biomedical, lab technicians, microscopists, field agents
- Update on malaria treatment guide
  - Physicians, nurses, pharmacists and field agents
- AHA management
  - Physicians
- Updates on supply chain/stock systems
  - Pharmacists
Training materials

G6PD testing step-by-step guideline

Guideline for correct positive case notification

Quick tables for treatment decision
Training materials

Online training course
“This online course business - not everyone does it. It’s different from the person coming here to talk to us, you know?” (Participant 31, doctor, Porto Velho, phase one).

"Look, in-person classes everyone pays attention, unlike online classes." (Participant 42, doctor, Porto Velho, phase one).

"In my point of view, the training was very fast. It should be more in-depth, longer, with more information-rich content for us to have a little more confidence."
Healthcare facilities adaptation

- Important to understand the workflow settings
- To incorporate the new tools with minimal impact in the workload
- To have depth discussions with field agents, preventing future gaps and barriers
- D1 visit – before the first use of the new tools in field
Partnership for Vivax Elimination

Healthcare facilities adaptation
Healthcare facilities workflow
Supervisions and pharmacovigilance

- Updated supervision form including G6PD tests/analyzer quality control routine and stock control
- Establish a routine to use the G6PD control set and check strip
- Routine for supervision visits (usually monthly-based)
Pharmacovigilance

Follow-up visit on D5 after malaria diagnosis – AHA detection

Inadequate treatment for G6PDd deficient patients: what to do: Interrupt treatment in the case of PQ-use? And about single dose TQ treatment?
All patients receive a malaria card with G6PD activity and signs of acute hemolytic anemia.

Male patients are not retested for G6PD activity if they return with their malaria card.

Female patients are retested for G6PD activity each time and receive a new patient card.
Data collection

Data collected (SIVEP paper form)

Surveillance units for data entry (e-SIVEP)

Automatic data transfer (SIVEP database)

P. vivax cases consenting to data sharing

TRuST database on FMT server
Data quality and review of inadequate treatment

Data inserted by the healthcare agents/typers on the electronical system SIVEP →

Database transfer and download to FMT server →

Inadequate treatment case by case review →

Inconsistency confirmation with healthcare service →

Case will be sent to municipality surveillance program to follow-up
### Data quality and review of inadequate treatment

#### Atividade de G6PD com Tratamento Incompatível

<table>
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<th>Nm Unida</th>
<th>Class G6PD R</th>
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<th>PQ 14 dias</th>
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Data quality and review of inadequate treatment
Patient counselling
Easy access support material
QualiTRuST

Qualitative study: Perceptions from malaria patients and health workers
Thank you!