

## STOP TB FOCUS GROUP ON AI-BASED IMAGING FOR TB (FG-AITB) WEBINAR 9

*Implementing CAD AI and Ultra-Portable X-Ray - Janna HealthFoundation experience from Nigeria*

To share and learn from early implementation experiences of using ultra-portable X-ray devices and computer-aided detection (CAD) AI software in high-burden countries, Stop TB Partnership is excited to invite you to this upcoming webinar: *CAD AI and X-ray in Nigeria - Janna Health Foundation*

**25th August 2023** (8am Washington DC, 1pm Nigeria/DRC, 2pm Geneva, 3pm Kenya/Uganda, 5.30 pm India, 6pm Bangladesh, 7pm Vietnam/Cambodia, 8pm the Philippines, 9 pm Korea)

Presentation	Access recording below
<a href="https://docs.google.com/presentation/d/10jqfJi3KKaFRe9K4hZTPhgtK72Kd-Nbf/edit?usp=sharing&amp;ouid=106144367183648595713&amp;rtpof=true&amp;sd=true">https://docs.google.com/presentation/d/10jqfJi3KKaFRe9K4hZTPhgtK72Kd-Nbf/edit?usp=sharing&amp;ouid=106144367183648595713&amp;rtpof=true&amp;sd=true</a>	<a href="https://drive.google.com/file/d/1u1EvBDLkQ2dHo2mcXyrmhKJSJWNpChGr/view?usp=sharing">https://drive.google.com/file/d/1u1EvBDLkQ2dHo2mcXyrmhKJSJWNpChGr/view?usp=sharing</a>

This webinar aims to share the experiences of Janna Health Foundation in implementing Portable X-Ray (MinXray) and CAD AI, as well as lessons learned during implementation. There will also be the opportunity for attendees to ask questions and discuss any similar issues and experiences they may have faced in their own implementation journeys.

Wider objectives of this webinar and the Focus Group on AI-based Imaging for TB are:

- To facilitate south-south learning on early experiences and exchange lessons learned on CAD AI and X-ray implementation.
- For Stop TB, NTP, implementing partners and manufacturers to understand challenges in planning and implementation and identify solutions.

### BACKGROUND

To meet global demand for support in rolling out AI/CAD and digital X-ray, Stop TB launched the [Focus Group on AI-based Imaging for TB \(FG-AITB\)](#), the first global platform that brings together implementers of CAD AI and X-ray.

This is the 7th webinar of a series of webinars hosted by the FG-AITB to share results, challenges faced, and lessons learned from implementers of CAD/AI and X-ray from global country projects and beyond. Implementers will present their experiences in the webinar in the following thematic areas:

- Screening Algorithm involving CAD AI and X-ray
- Digital X-ray & CAD considerations

- Patient Selection
- Results
- Threshold score setting
- Xpert Saving
- Quality control
- Challenges
- Other lessons learned

Webinar 9 will focus on the implementation experience of Janna Health Foundation in Nigeria.

[TB REACH](#) is an initiative of the Stop TB Partnership funded by the Government of Canada, the United States Agency for International Development, the UK's Foreign Commonwealth and Development Office (FCDO), the Bill & Melinda Gates Foundation, and the National Philanthropic Trust. TB REACH was created to test innovative solutions to improve TB case detection and care delivery. Since 2010, TB REACH has supported over 13 pilot projects using CAD/AI and digital x-ray which have successfully been implemented by various partners around the globe. TB REACH projects produced significant contributions to the global fight against TB, and have inspired partners, governments, TB affected communities and other TB stakeholders to adopt and develop new TB innovation.

### AGENDA (1 HOURS)

<b>Facilitators: Zhi Zhen Qin</b> (Digital Health Specialist, Stop TB Partnership)	<b>Time (CEST)</b>
<b>Welcome &amp; introduction:</b>  <b>Zhi Zhen Qin</b> Digital Health Specialist, Stop TB Partnership	<i>5 mins</i>
<b>Experience sharing of Jana Health Foundation in Nigeria</b>  <b>Dr. Stephen John MD, MPH/ICHD (KIT).</b> Founder Janna Health Foundation, Planning, Research and Statistics, Ministry of Health, Yola, Adamawa State	<i>40 mins</i>
<b>Q&amp;A</b>	<i>10 mins</i>
<b>Closing remarks</b>	<i>5 mins</i>

### INVITED PARTICIPANTS

- National TB Programmes, USAID country missions,
  - Implementers of digital X-ray with/without AI (iNTP, GF, LON etc)
  - MinXray, Delft Imaging Systems, Fujifilm and other suppliers
  - Stop TB, USAID Washington and IDDS
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## Q/A Session

**Q1. Pranati Das:** Did you offer CXR screening for asymptomatic individuals, from key-vulnerable populations? In India, we find a significant number of cases that may report to be asymptomatic but end up with a diagnosis of TB?

**A1. Answered in session by Dr. Steven**

**Q2. Tori Lebrun:** Did all people with a negative Xpert result and TB-presumptive CXR have clinical consultation for potential diagnosis of non-bacteriological TB?

**A2. Answered in session by Dr. Steven**

**Q3. Ken Castro:** Excellent work and clear improvements in active TB case finding. I'm concerned about the people with CXR abnormalities that are deemed "not TB" -- are there efforts underway to follow-up (or refer elsewhere) these persons? Also, the increase in "clinically diagnosed TB" is a double edge sword, as some of these will NOT have TB disease?

**A3. Answered in session by Dr. Steven**

**Q4. Asker Ismayilov (Stop TB):** How much did one day cost you (transportation + cost of one screening expert's day+costs motorcycle use per day + DSAs + etc. ) Was it mandatory to a radiologist present at each X-ray shoot? Did you include a radiologist presence at the screening into the day costs?

**A4. Answered in session by Dr. Steven**

**Q5. Elizabeth A. Talbot:** How do you explain the 2 week cough screen low sensitivity? Do you think that people with TB cannot accurately estimate the duration of their cough, or these are indeed short duration coughs, and disease caught early?

**A5. Answered in session**

**Q6. Sreenivas (Stop TB):** Why do we need radiologists if AI CAD is used for screening? In fact with 0.3 cutoff, you can diagnose almost all tb.

**A6. Answered in session**

**Q7. Sandile Mchunu:** What is the accuracy for the AI?

**A7. Answered in session**

**Q8. Mary ICAP Kenya:** My question is on the cut off points are they specific for this machine and how were they arrived at?

**A8. Answered in session**

**Q9. Dr. K Rajendran ICMR-NIRT:** What is the accuracy of AI? really all tb can be diagnosed?

**A9. Answered in session**

**Q10. Hilina M:** Regarding safety, is it safe to take images of the clients in an open space? And it would be nice if you add your experience regarding how you keep all materials safe while traveling?

**A10. Answered in session**

**Q11. Samuel Kalibala:** How do patients get to health facilities to take their sputum samples for bacterial diagnosis. Do you have a loss to follow up at this stage?

**A11. Answered in session**

**Q12. Jamiu Olayinka:** What is the rationale behind engaging 3 Teams, while you have only 1 system.

**A12. Answered in session**

**Q13. Ramesh Satyawali:** Are all X-rays being examined by the radiologists? If not, any details of false negative cases.

**A13. Answered in session**

**Q14. Debrah Vambe, NTCP, Eswatini:** From the algorithm it looks like even those who had symptoms of TB(Presumptive) still had CXRay done...any explanation to this??? My concern is the increased number of X-rays and cost?

**A14. Answered in session**

**Q15. Karma:** Besides AI reading, any medical doc (non radiologist) also reviewing the X-ray remotely?

**A15. Answered in session**

**Q16. Macarthur Charles (CDC):** Are you planning to look at TB treatment outcome?

**A16. Answered in session**

**Q17. Manmohi Deeptek:** I wanted to ask if you conducted a study to decide to use the threshold of 0.3? What was the specificity and sensitivity at both thresholds?

**A17. Answered in session**

**Q18. Dmitry Cherezov:** Will the data be later available?

**A18. Jacob Creswell:** There is a paper that will be published in a few days with all of the accuracy data on this if people are interested. In BMC Global and Public Health