

AIDA

Supporting people on TB treatment between clinic visits

Early implementation insights from Mozambique, South Africa and Nigeria

Elzier Mangunyane, MD, MPH
Fundação Aurum – Mozambique

Kristian van Kalmthout – KNCV TB Plus – The Netherlands



TB TREATMENT IS CHALLENGING

01

**TB TREATMENT LASTS
6+ MONTHS**

**DAILY ROUTINES ARE
AFFECTED**

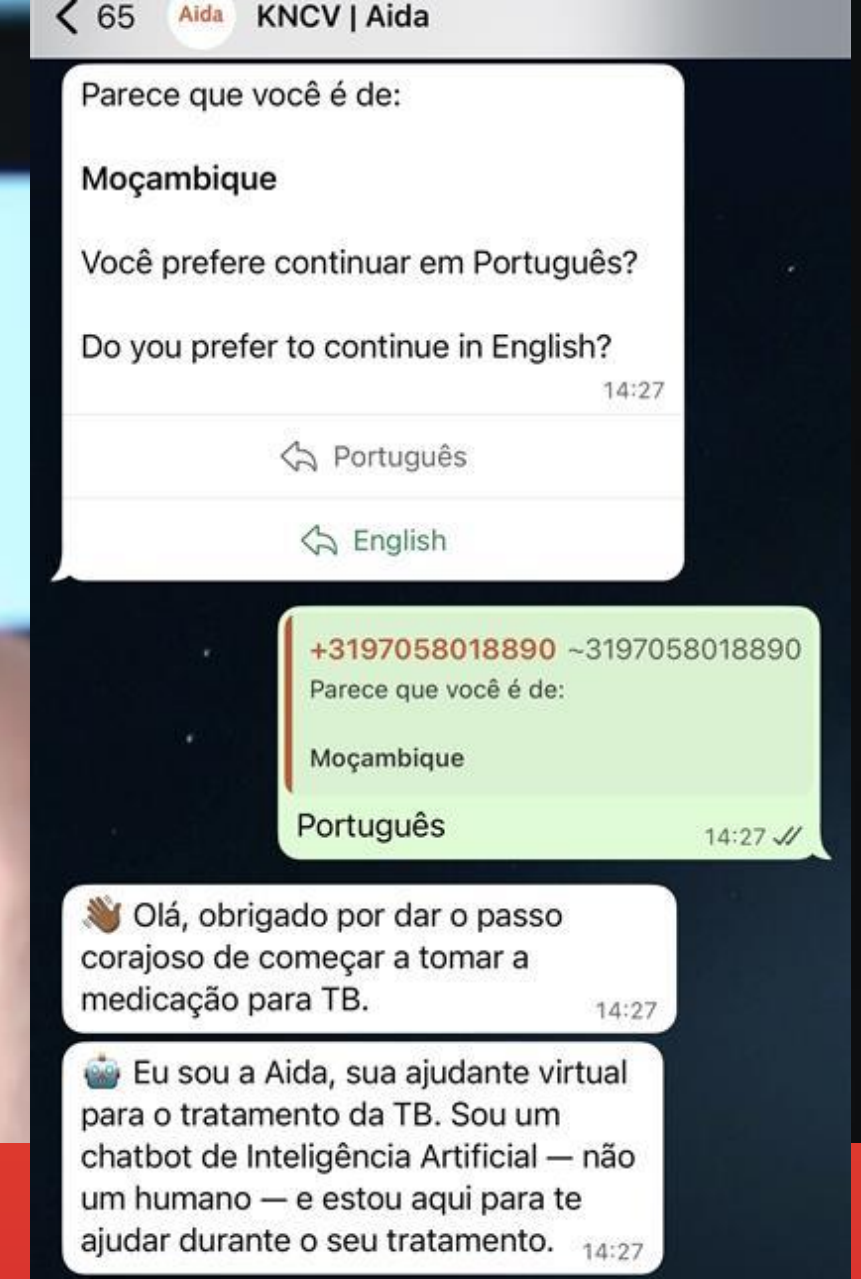
02

**SIDE EFFECTS ARE COMMON
QUESTIONS ARISE BETWEEN
VISITS**

03

**SUPPORT IS AVAILABLE,
OFTEN CENTRED AROUND
CLINIC VISITS**

Introducing Aida



People can ask questions at any time about:

- symptoms and side effects
 - medication
- daily life during treatment

Aida provides support throughout treatment

- encouragement
- information on side effects
- practical treatment guidance

Safe and supported use

- conversations are private
- concerns can be flagged
- staff follow-up when needed



Understanding real world use



Implemented within routine TB care settings



Ethics approvals obtained and informed consent from all participants



Understanding how people engage with Aida in practice



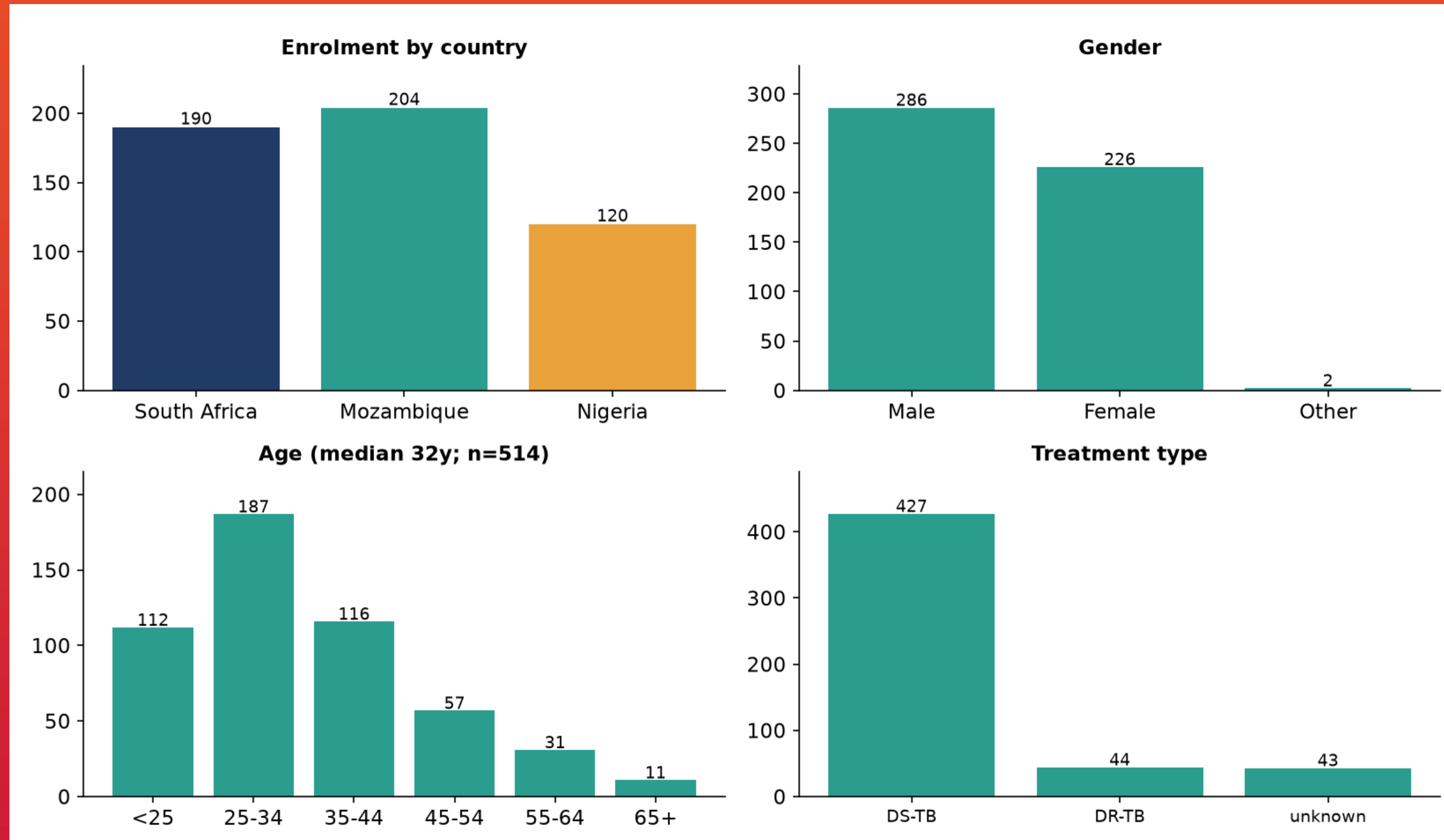
Use monitored, with feedback gathered through surveys and interviews



Human oversight: conversations reviewed and followed up when needed

Cohort and reach

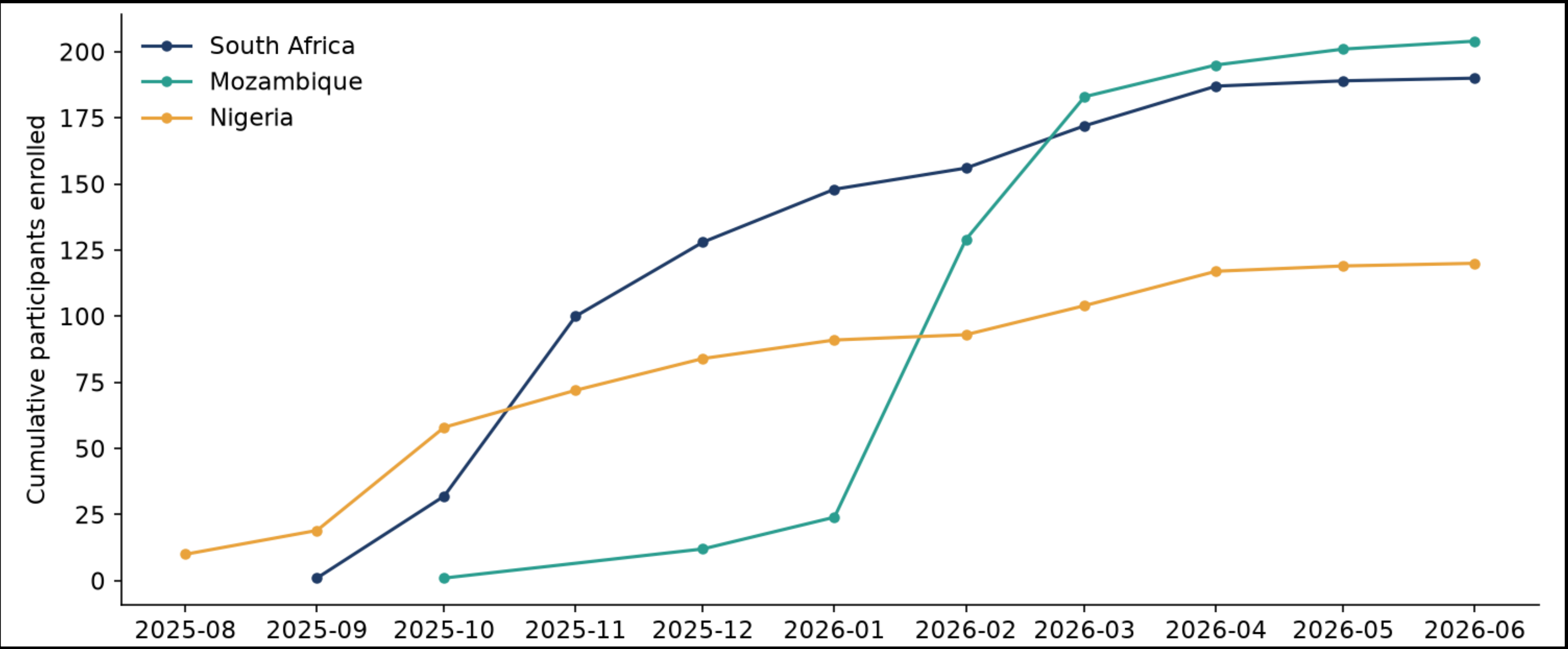
Aida reached people with TB across three countries and routine care settings



- 514 participants
- Mozambique, South Africa and Nigeria
- Enrollment across 39 health facilities, 15 in Mozambique
- Majority DS-TB, with DR-TB participants also included
- Median age: 32 years

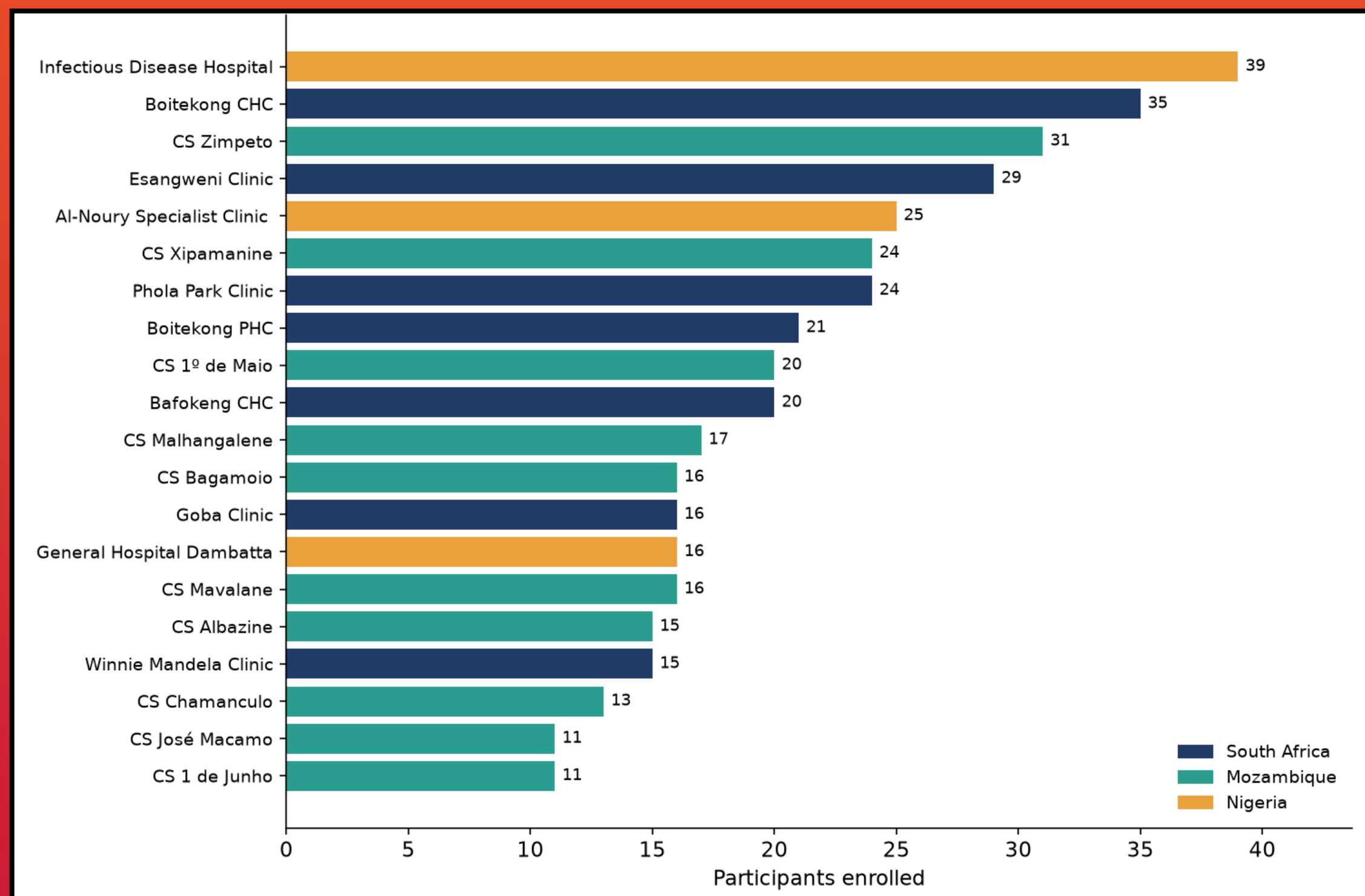
Enrollment over time

Aida reached people from September 2025 –March 2026



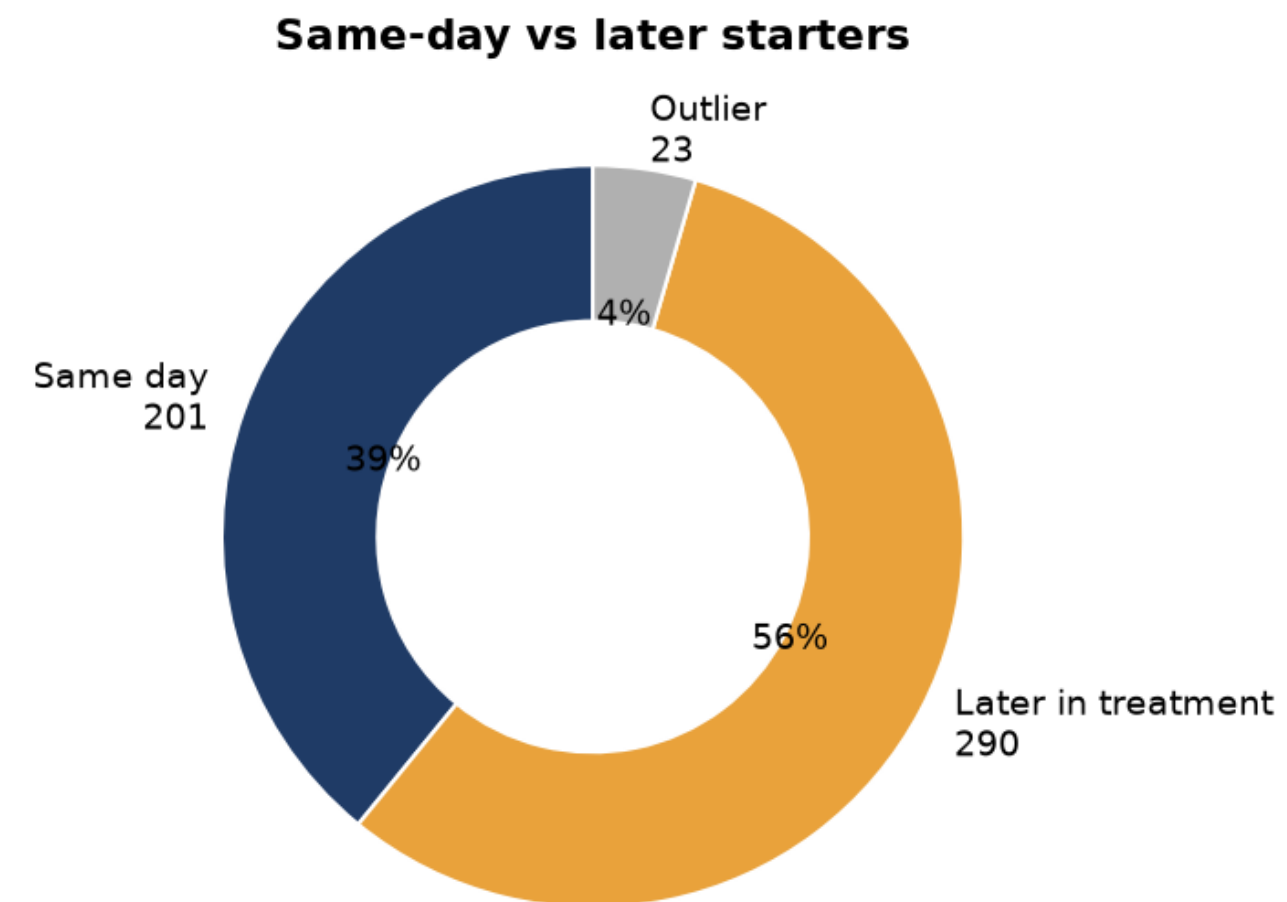
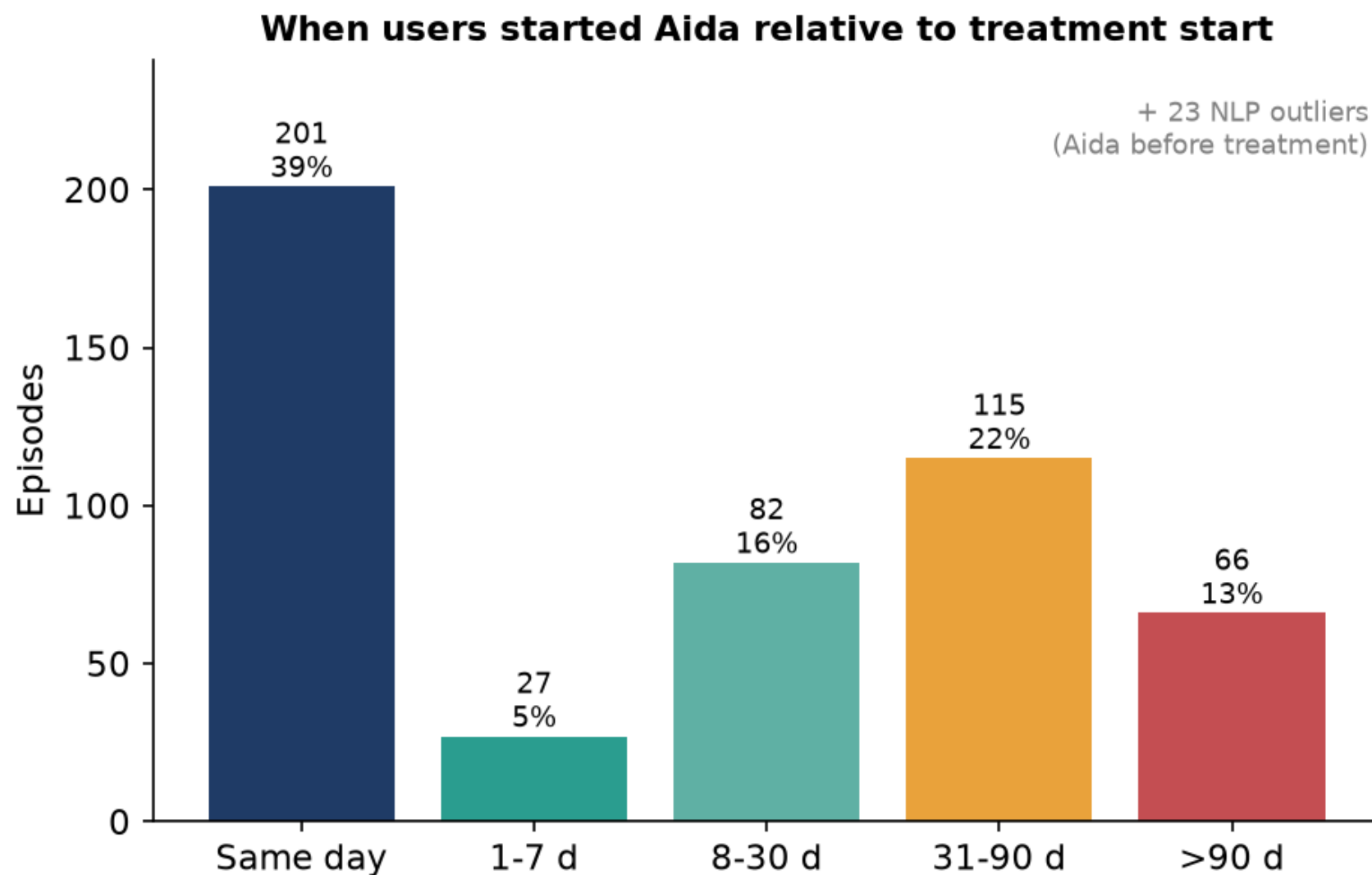
Facility footprint

Aida was implemented across a broad facility network (top 20 facilities)

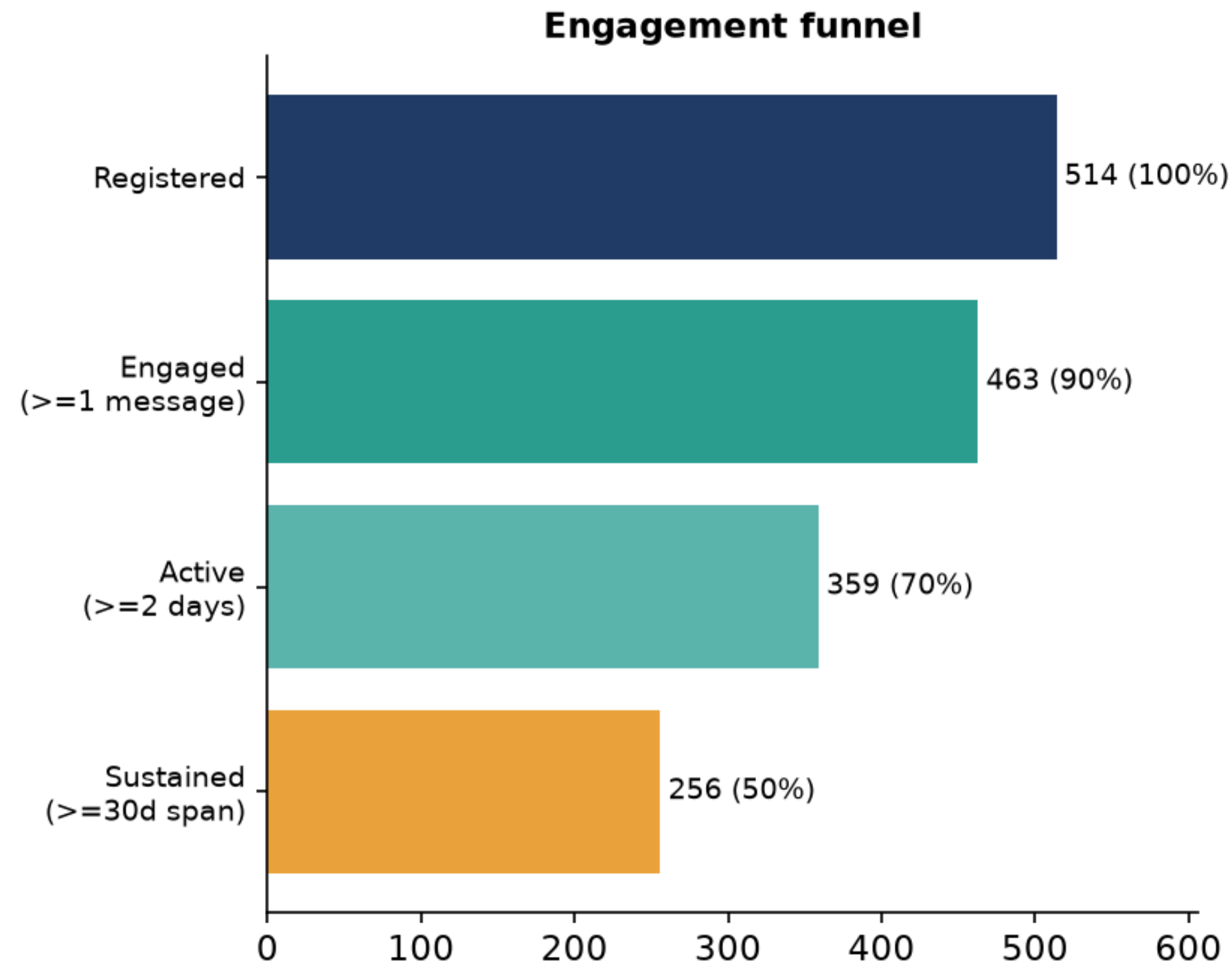


Aida is used throughout treatment

Many people started using Aida after TB treatment had already begun



People actively engage with Aida



Source: AIDA AI Threads May 2026 | Cohort: 514 non-pilot episodes (South Africa, Mozambique, Nigeria)

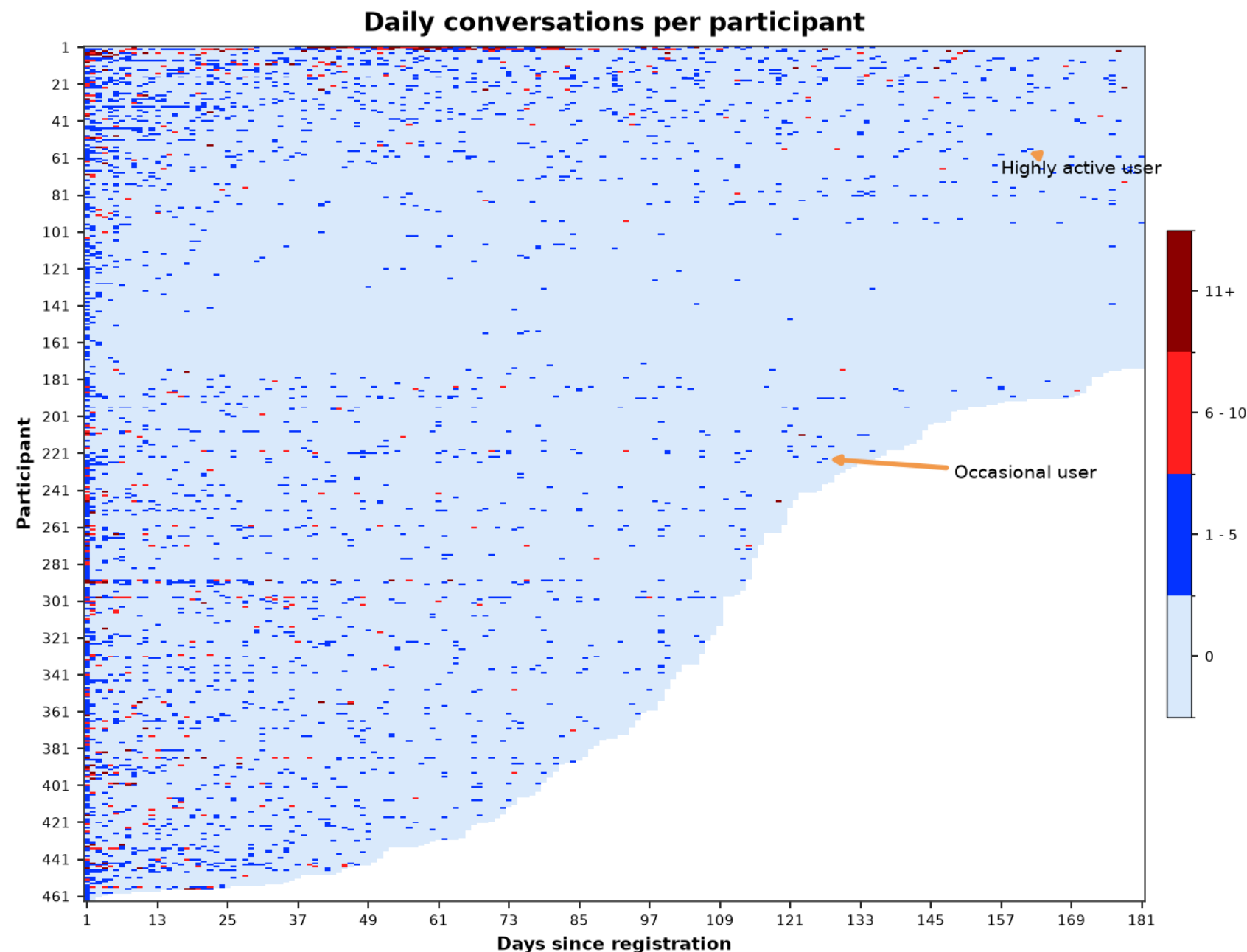
- 90% of participants had at least one conversation
- Engagement varied from brief use to regular use
- Some participants returned across many weeks or months
- Aida use appears need-driven: people return when questions arise

Many participants remain active in the weeks after joining

How people engage with Aida over time

- Many interact most within the first few days after joining
- Afterwards, use becomes more occasional and question-driven
- A smaller group interacts regularly throughout treatment

Engagement is dynamic and driven by people's needs



Each row = one Aida user

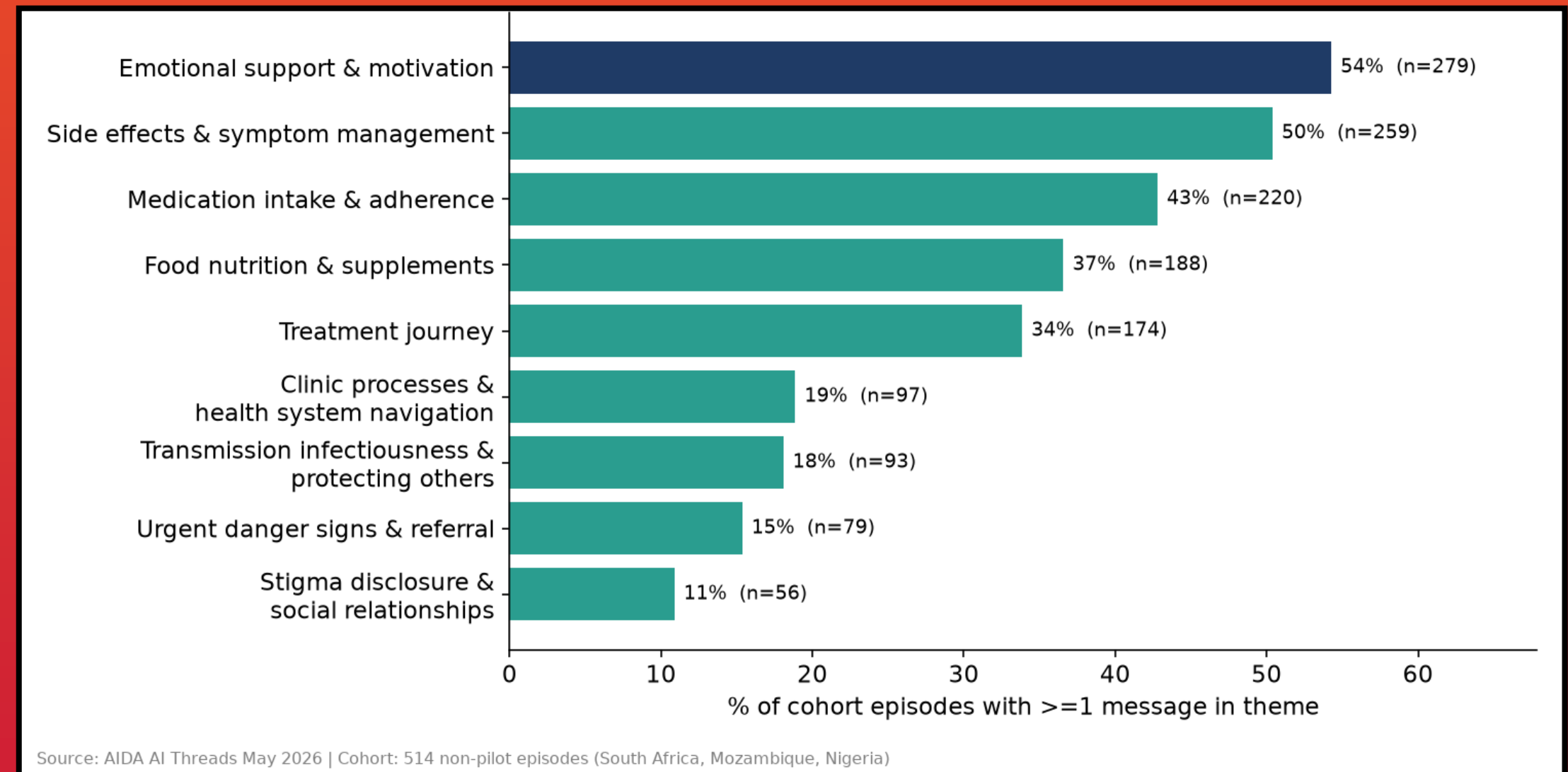
Each column = day(s) since registration

Source: AIDA AI Threads May 2026 | Cohort: 514 non-pilot episodes (South Africa, Mozambique, Nigeria)

What people ask Aida

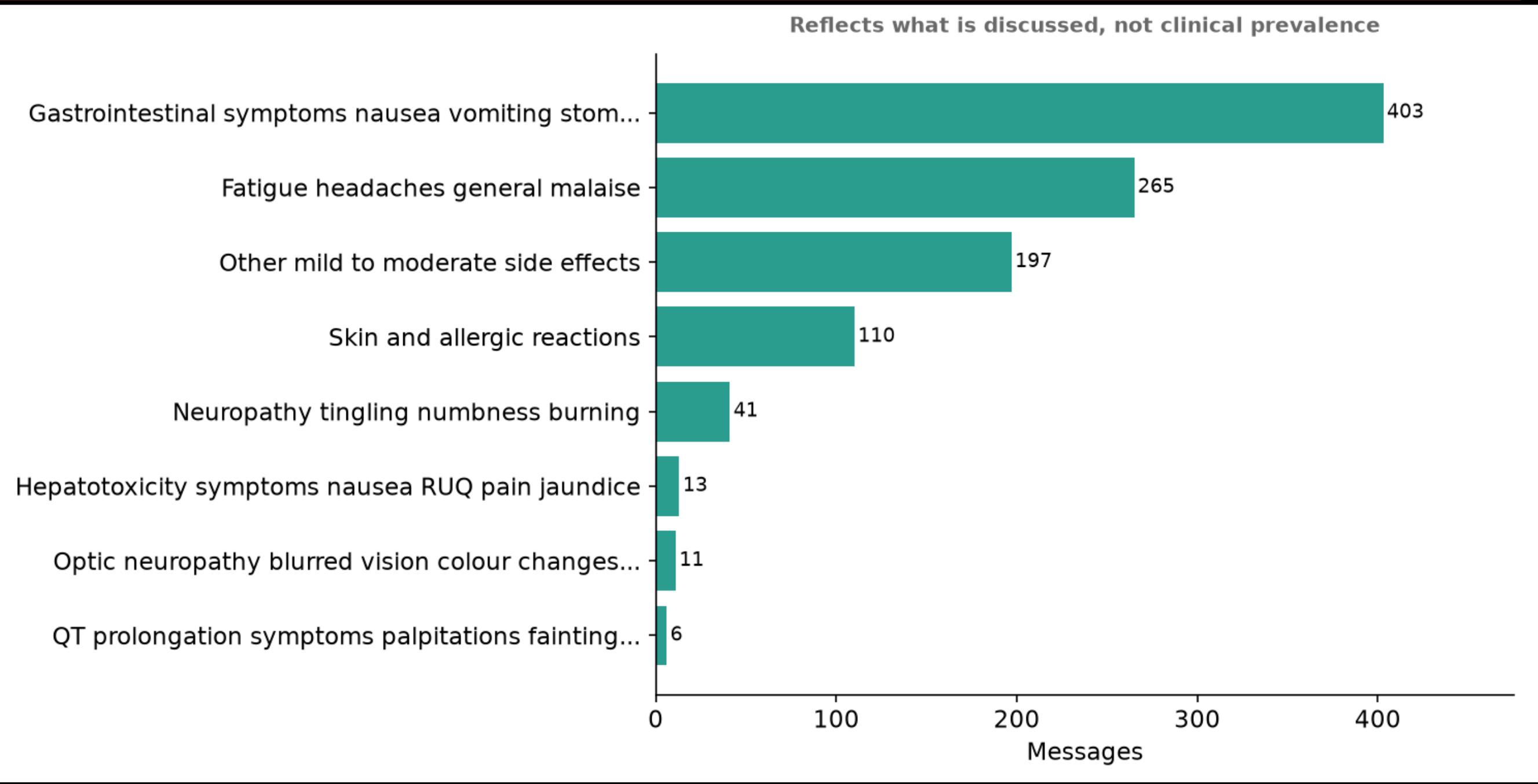
People seek support, reassurance, and practical treatment guidance

- Emotional support and motivation was the most common substantive theme
- Common practical topics included:
 - Side effects and symptoms
 - Medication and adherence
 - Food and nutrition
 - Treatment journey
- Aida helps answer questions that arise between clinic visits



Side effects are discussed in Aida conversations

Side effects and symptoms were one of the most common substantive topics



< 112

Aida

KNCV | Aida

Aida detected safety signals that need attention:

Facility: CS Malhangalene

User: \

Phone

Message

Aida, I'm having severe chest pains and no appetite, is this normal?

Aida reply

Virginia, experiencing severe chest pain and losing appetite is not normal at this stage of treatment. It's important to seek a healthcare professional as soon as possible to see what's happening. Take good care of yourself—you deserve special attention and care. I'm here to support you with whatever you need.

Triage reason

Please review the recent chats to decide whether follow-up is needed.

T B

4:19

Recent chats

Examples from Aida

Examples of real interactions with Aida during treatment

Hi 2day am not feeling well i feel dizzy

15.37 ✓✓

I'm sorry you're feeling dizzy today, Tanya. Dizziness can sometimes happen with TB treatment—try to sit or lie down if you need to, and drink some water. If it gets worse or you feel faint, please let your clinic or nurse know. Let me know how else I can support you

15.38

Thanks i appreciate i will drink some water

15.39 ✓✓

You're welcome, Tanya! Drinking water can help, and it's good to rest when you feel dizzy. If you notice any new problems or your dizziness doesn't go away, please reach out to your health-care team. You're doing well—keep taking your treatment each day.

15.39

I will do

15.40 ✓✓

That's great to hear, Tanya! 😊 Keep going—you're making good progress. If

Person asks a question – Aida responds

On day 61 of your treatment, it's important to trust in the process. Treatment takes time, and that can be frustrating, but every dose matters. You're doing something powerful by sticking with it! How are you feeling about your progress? If you have any concerns or need encouragement, I'm here for you.

60:41

Im feeling better and happy cause I'm recovering bit by bit

61 62 ✓

That's wonderful to hear, Max! 😊 Every sign of feeling better means the treatment is working—keep going, you're getting stronger each day. I'm so proud of your progress—if you ever need support or just want to talk, I'm always here for you.

61 63

Thanks

61 63 ✓

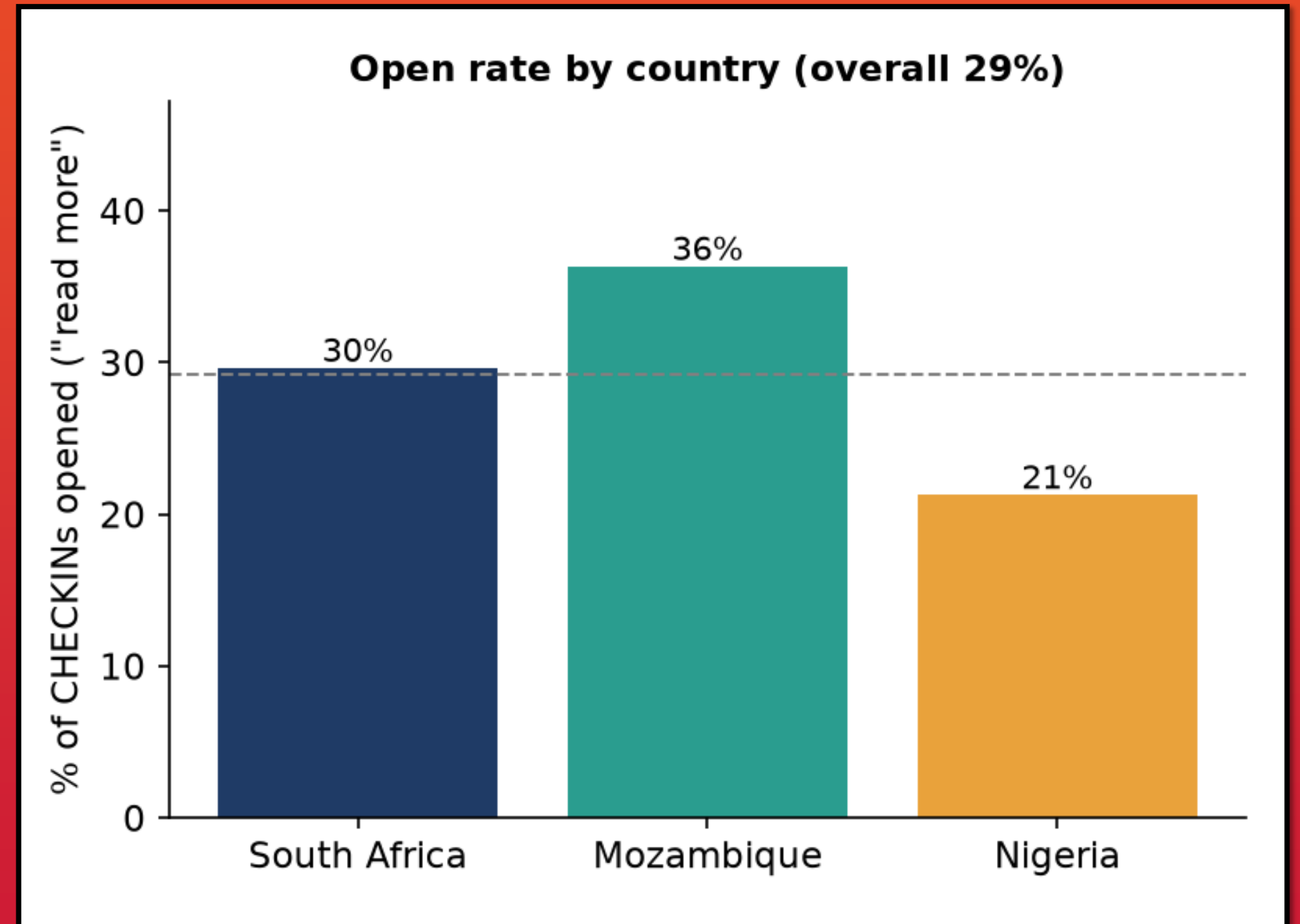
Aida check in – Person responds



Aida CHECKINs reopen contact

Proactive Aida CHECKINs messages helped bring people back into conversation

- CHECKINs were sent as short WhatsApp notifications
- Users could press “read more” to open a personalised message
- 10,070 CHECKIN notifications were sent
- 2,940 personalised messages were opened
- Overall open rate: 29%
- Half of opened CHECKINs led to a same-day reply



Safety and human oversight

Conversations are monitored to identify potential safety risks and enable appropriate follow-up

- Automated detection of potential risk signals
- Flagged messages are reviewed by support staff
- Cases are escalated for human follow-up when needed

Clinical responsibility remains with healthcare providers Aida complements, not replaces, clinical care



From signal to action: Human in the loop

Critical alerts are automatically escalated to support teams in real time

< 107 Aida KNCV | Aida

Aida detected safety signals that need attention:

Facility: CS Albazine
User:
Phone

Message
I am in the phase of strong medication, and this medication probably has side effects on the internal organs of the body, such as the liver, kidneys, among others. What can I do to alleviate these side effects in the body?

Aida reply
I understand your concern. 🧑 To protect your organs, it is important to take the medication exactly as your doctor advised, drink plenty of water, and avoid alcohol. If you experience severe pain, yellowing of the eyes or skin, dark urine, or severe malaise, seek medical help immediately. If you want, I can give you tips to deal with mild effects, like nausea —would you like to talk about that?

Triage reason

Please review the recent chats to decide whether follow-up is needed. 14:33

↩️ Recent chats

Aida - Triage Alert - 1617

M

MessageBird (Flow Builder) <no-reply@flows.messagebird.com>
To 🟢 Elzier Mangunyane

📘

If there are problems with how this message is displayed, click here to view it in a web browser.
Click here to download pictures. To help protect your privacy, Outlook prevented automatic download

⚠️ Aida Triage Alert

Aida detected safety signals that need attention.

Urgent triage signals	yes
Risk level (response)	low
Outreach recommended (misleading advice)	no
Country / Locale	Mozambique — pt-MZ
Facility	CS Malhangalene
User	Virgínia
Episode ID	1617
Phone	258844775253 Call on WhatsApp

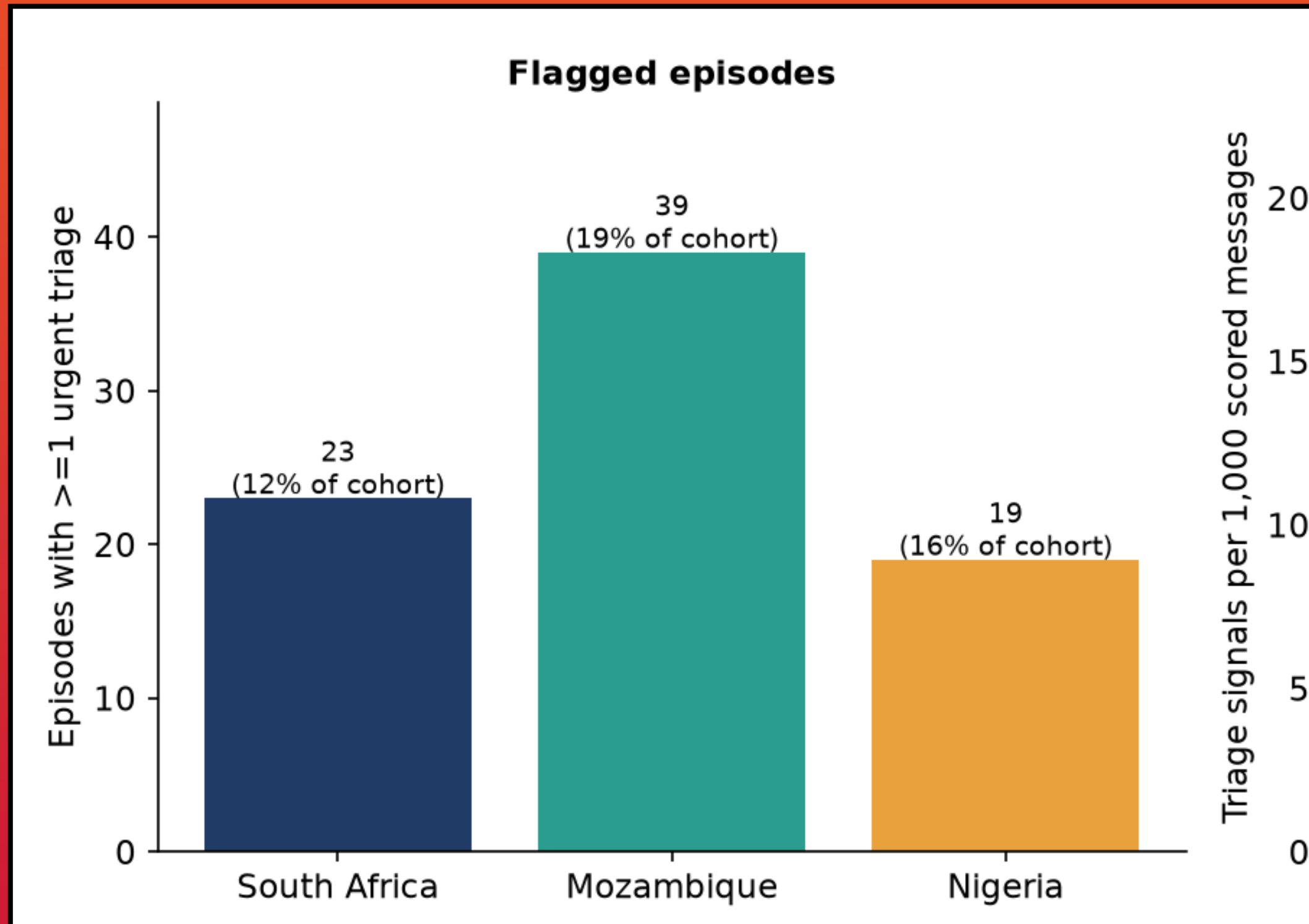
Why this was flagged

User's message (cleaned)
Aida estou com fortes dores no peito e sem apetite e normal?
EN translation:
Aida, I'm having severe chest pains and no appetite, is this normal?

Aida reply (cleaned)
Virgínia, sentir fortes dores no peito e perder o apetite não é normal nesta fase do tratamento. É importante procurares um profissional de saúde o mais rápido possível para veres o que está a acontecer. Cuida bem de ti—mereces atenção e cuidado especial. Estou aqui para te apoiar no que precisares.
EN translation:
Virginia, experiencing severe chest pain and losing appetite is not normal at this stage of treatment. It's important to seek a healthcare professional as soon as possible to see what's happening. Take good care of yourself—you deserve special attention and care. I'm here to support you with whatever you need.

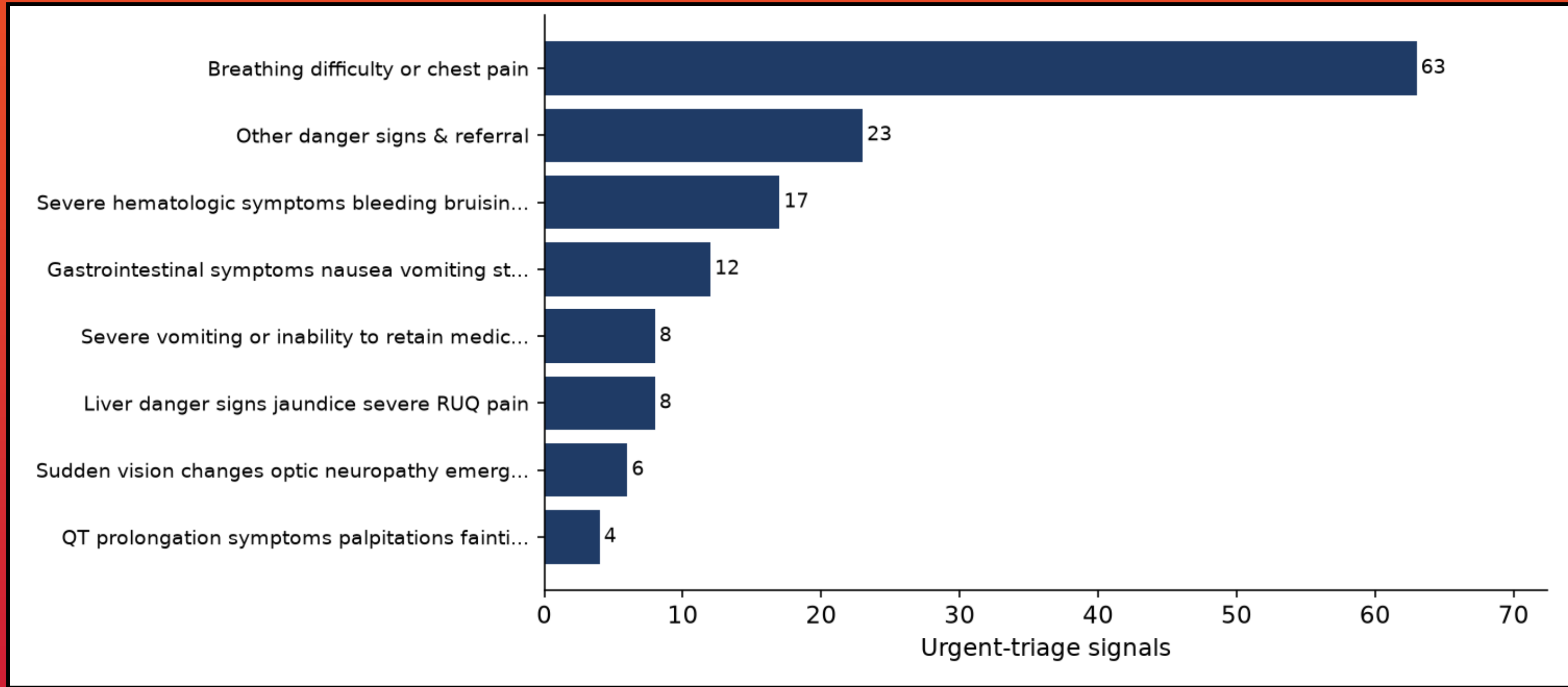


Aida flagged urgent danger signs for human follow-up



- 159 urgent triage signals were identified
- These occurred across 81 participants
- Most urgent signals related to danger signs and severe symptoms
- Alerts triggered WhatsApp/email notification to the project coordinator
- Aida complements clinical care; it does not replace healthcare providers

What triggered human follow-up?

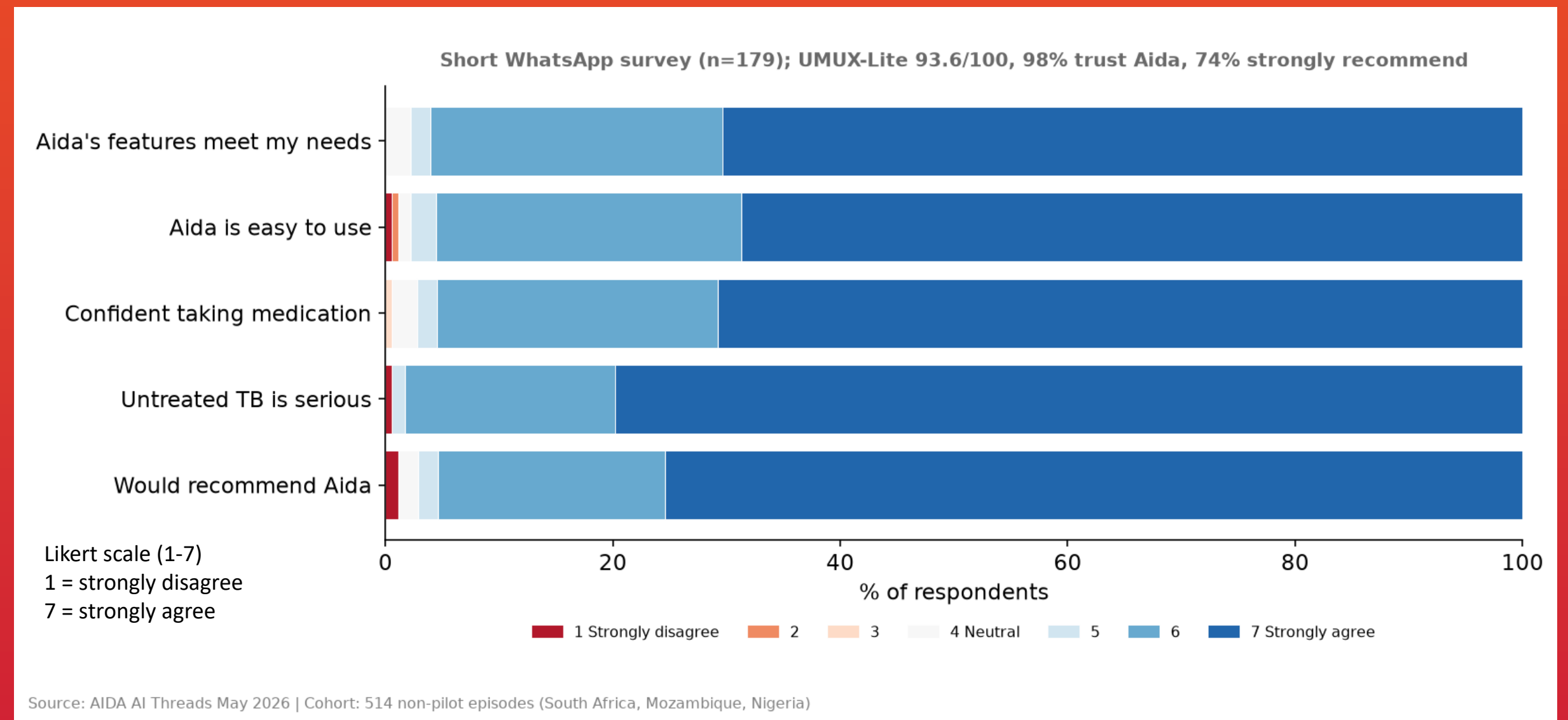


Insights from people using Aida

Understanding trust,
experience, and use in
real-world settings

Do people trust and value Aida?

Based on a short WhatsApp survey (n=179)



Most people trust
Aida and find it
easy to use

Most responses fall in the “agree” to “strongly agree” range

What people share about using Aida

We conducted 20 in-depth interviews (9 female, 11 male) with people using Aida to understand their experiences during treatment.

- emotional support
- treatment adherence
- experiences using Aida

country	episode_id	facility	First date	Last date	Days active	conversation_size_bucket	messages_per_episode
Mozambique	1614	CS Chamanculo	16/02/2026	26/03/2026	38	20+ messages	32
Mozambique	1637	CS Xipamanine	19/02/2026	29/03/2026	38	20+ messages	139
Mozambique	1629	CS Alto Maé	18/02/2026	28/03/2026	38	20+ messages	29
Mozambique	1619	CS Malhangalene	17/02/2026	27/03/2026	38	20+ messages	27
Mozambique	1643	CS Magoanine Tendas	20/02/2026	29/03/2026	37	20+ messages	38
Mozambique	1633	CS Xipamanine	18/02/2026	27/03/2026	37	11–20 messages	17
Mozambique	1616	CS Mavalane	17/02/2026	25/03/2026	36	11–20 messages	13
Mozambique	1648	CS Catembe	23/02/2026	30/03/2026	35	20+ messages	39
Mozambique	1659	CS 1º de Maio	23/02/2026	30/03/2026	35	11–20 messages	13
Mozambique	1653	CS Chamanculo	23/02/2026	30/03/2026	35	11–20 messages	11
Mozambique	1617	CS Malhangalene	17/02/2026	24/03/2026	35	20+ messages	60
Mozambique	1660	CS Bagamoio	23/02/2026	30/03/2026	35	20+ messages	23
Mozambique	1666	Unknown	24/02/2026	30/03/2026	34	20+ messages	32
Mozambique	1664	CS Malhangalene	24/02/2026	30/03/2026	34	20+ messages	24
Mozambique	1662	CS Zimpeto	24/02/2026	30/03/2026	34	20+ messages	29
Mozambique	1656	CS Malhangalene	23/02/2026	29/03/2026	34	20+ messages	106
Mozambique	1655	CS Xipamanine	23/02/2026	29/03/2026	34	20+ messages	40
Mozambique	1649	CS Albazine	23/02/2026	29/03/2026	34	11–20 messages	19
Mozambique	1650	CS Zimpeto	23/02/2026	29/03/2026	34	20+ messages	47
Mozambique	1647	CS Catembe	23/02/2026	29/03/2026	34	20+ messages	23
Mozambique	1645	CS José Macamo	23/02/2026	29/03/2026	34	11–20 messages	14
Mozambique	1644	CS 1º de Maio	21/02/2026	27/03/2026	34	20+ messages	32
Mozambique	1665	CS Bagamoio	24/02/2026	30/03/2026	34	20+ messages	23
Mozambique	1667	CS Albazine	25/02/2026	30/03/2026	33	11–20 messages	20

What people value about Aida

- Easy and convenient to use
- Provides emotional support during treatment
- Offers clear and accessible TB information
- Private and safe to use
- Builds trust while reinforcing connection to healthcare providers

"It's very easy to use - it [Aida] responds quickly, and I haven't had any difficulty using it." (ID: F_1711)

"You ask a question and it responds immediately — it doesn't take time." (ID: M_1507)

"It helped me avoid going to the hospital just to ask questions." (ID: M_1645)

"Sometimes I check the answers with my doctor, and many times they agree." (ID: F_1617)

"I ask questions about my symptoms and treatment, and it [Aida] explains what to do." (ID: M_1678)

"When I felt sad, AIDA would talk to me and tell me that everything will be okay." (ID: F_1711)

"She feels like a friend... when you need her, she's there to listen and support you." (ID: F_1617)

"When she sends messages telling me to keep going and not give up, it feels comforting." (ID: M_1588)

"Talking to AIDA is easier - I don't feel afraid of what someone might think." (ID: M_1507)

"It's easier to ask questions there than in person, where you might feel shy." (ID: M_1743)

"When I'm not feeling well, AIDA tells me to go back to the hospital to speak to the doctor." (ID: F_1711)

"It helps me confirm what the doctor says - it reassures me that I'm on the right path." (ID: F_1659)



Challenges people face when using Aida

- Requires WhatsApp and access to mobile data

"If someone doesn't have WhatsApp, they cannot easily use AIDA." (ID: M_1747)

- Shared or unreliable phone access

"My biggest concern was being exposed — that my information could be shared on social media by one of relatives since it is accessible on my phone." (ID: M_1573)

- Digital literacy challenges

"I found it difficult at the beginning, but once I managed to access it, it became easy. (ID: F_1621)

"On the first day, I couldn't access AIDA — I had to go back to the doctor so he could help me." (ID: F_1719)



Implications for TB programmes

- Support is needed beyond clinic visits
- Emotional support is a core part of TB care
- Side effects are identified early outside the clinic
- People trust and actively use digital support such as Aida
- Engagement is sustained and driven by individual needs
- Smartphone access influences reach

Aida enables TB programmes to extend support beyond the clinic—simply and at low cost



What this means in practice for TB programmes

Impact

- Earlier identification of people at risk
- Improved adherence and treatment completion
- More continuous support between clinic visits
- Increased engagement and trust

Feasibility

- No major workflow changes required
- Can be introduced via QR posters and brief explanation
- Works alongside existing care (not replacing HCWs)
- Low-cost, scalable approach

Discussion and next steps

- How can Aida complement existing (TB) treatment support strategies?
 - Where does Aida fit within existing workflows?
 - How can Aida be integrated into routine, AI-enabled selfcare and treatment support
 - What would be needed to scale responsibly?
-
- Continue learning from people's experiences and data
 - Share Aida insights with programmes and partners
 - Strengthen AI safety, prompting, clinical guardrails and infrastructure
 - Expand implementation to additional clinics and settings
 - Collaborate to embed Aida into national programme(s)

**Aida helps TB programmes
and communities support
people on TB treatment
between clinic visits**



OBRIGADA!

<http://www.askaida.org>

**Many thanks to the participating countries, facilities, healthcare workers, and patients
who made this implementation possible.**