Short Message Service (SMS) reminders improve patient on-time pill pick-up of their antiretroviral medicines in Namibia

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Outline

• Background
• Methodology
• Results
• Conclusion
• Success story
• Acknowledgements
Background

• Namibia profile
  – 210,000 people living with HIV (PLHIV)\textsuperscript{i}
  – 13.3\% prevalence rate in adults aged between 15 and 49 years old
  – 84\% (158,000) patients on ART as of Sep 2016\textsuperscript{ii}

Sources: (i) UNAIDS Global Report, 2016 (ii) Quarterly ART Feedback Report (Jul – Sep 2016), MoHSS, Namibia
Background ...

• Ministry of Health and Social Services (MoHSS) data shows:
  – lateness of pill pickup accounted for 30% (177/589) of patients interviewed while 67% (395/589) had missed their dose due to forgetfulness
  – Retention at 12 months for quarter Jul-Sep 2015 was 73.9% (adults) and 82.3% (pediatrics)

• Namibia boasts strong mobile network coverage
  – with affordable voice call and text message services
  – has recently introduced 4G in major cities

Sources: (i) Namibia ART Adherence Baseline Survey Report, 2013 (ii) Quarterly ART Feedback Report (Jul – Sep 2016), MoHSS, Namibia
Background ...

- Data from the Electronic Dispensing Tool (EDT), implemented through the USAID-funded Systems for Improved Access to Pharmaceuticals and Services (SIAPS) project, shows that
  - patients miss their pharmacy appointments and
  - patients exhibit sub-optimal adherence rates by pill count
Methodology

• SIAPS supported the MoHSS
  – to implement the EDT-based pharmacy appointment and adherence reminder service at ten sites (in six of the Namibia’s 14 regions)
  – Sites were selected using cluster randomization based on their adherence scores in terms of two HIVDR early warning indicators (EWIs) – EWI1 on-time pill pickup and EWI2 retention in care at 12 months
  – pharmacy and clinical teams including counsellors were oriented on the recruitment process
  – messages were translated into 7 local languages
Results

• By Oct 2016
  – Seven (7) ART sites had successfully implemented the appointment reminder service
  – 40% (8,147/20,377) of patients had enrolled for the service
Results …

• Between Oct – Dec 2016 more than 9,000 text messages were sent out.

• A strong correlation between patients picking up their ARVs on time and the density of SMS reminders was observed.
Results …

- By Dec 2016, on-time pill pickup had improved from 73% in the previous quarter to 89.4% for patients enrolled for the SMS reminder service
Conclusion

• The SMS pharmacy appointment reminders
  – improved on-time pill pickup for patients who had enrolled for the service.
  – is recommended for roll out to all 51 main sites in Namibia
  – and be integrated into the routine functioning of the ART program in Namibia

• MoHSS should partner with mobile network operators to optimize the scale up of the reminder service.
• Comments from some of the patients interviewed at one of the ART sites:

“Before the SMS, I would still honor my appointments because I always check in the health passport. Now it is even easier because of the SMS that comes directly to my cell phone,” … said. “It is a good back-up system.”

“I am happy to receive the SMS because it reminds me to go to the pharmacy to pick up my medicines,” she said, adding that it is quite easy to forget an appointment, especially when she is busy.”
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- **Key Terms:** Short Message Services (SMS), Adherence, HIVDR
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- **Themes:** Intervention development, implementation, and/or outcomes
- **Key Populations/Settings:** Resource limited settings, Treatment experienced
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