

# Refining differentiated care for PLHIV



**Infectious Diseases Institute**  
College of Health Sciences, Makerere University, Uganda  
Investing In The Future – Impacting Real Lives



# Need for this intervention

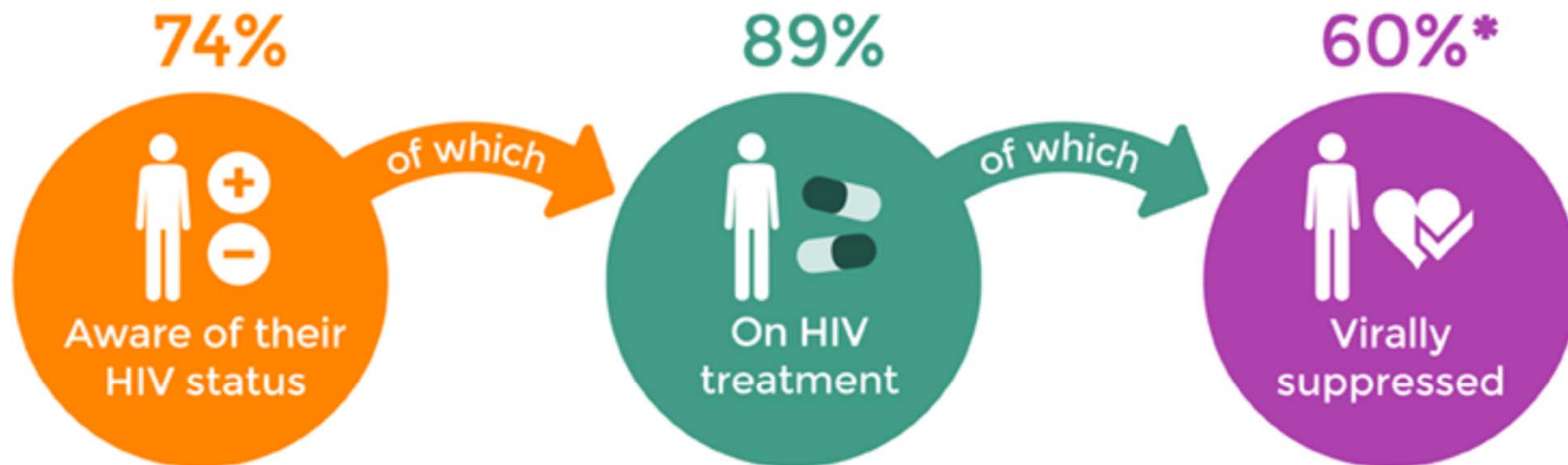
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- The burden of HIV is greatest in sub-Saharan Africa
- Treatment gap is estimated at 15 million people
- In Uganda, the HIV prevalence is around 7%
- Over 1 million on treatment; 300,000 PLHIV not on ART

# UNAIDS 90:90:90 targets

UGANDA

Progress towards 90/90/90 targets among adults aged 15-59



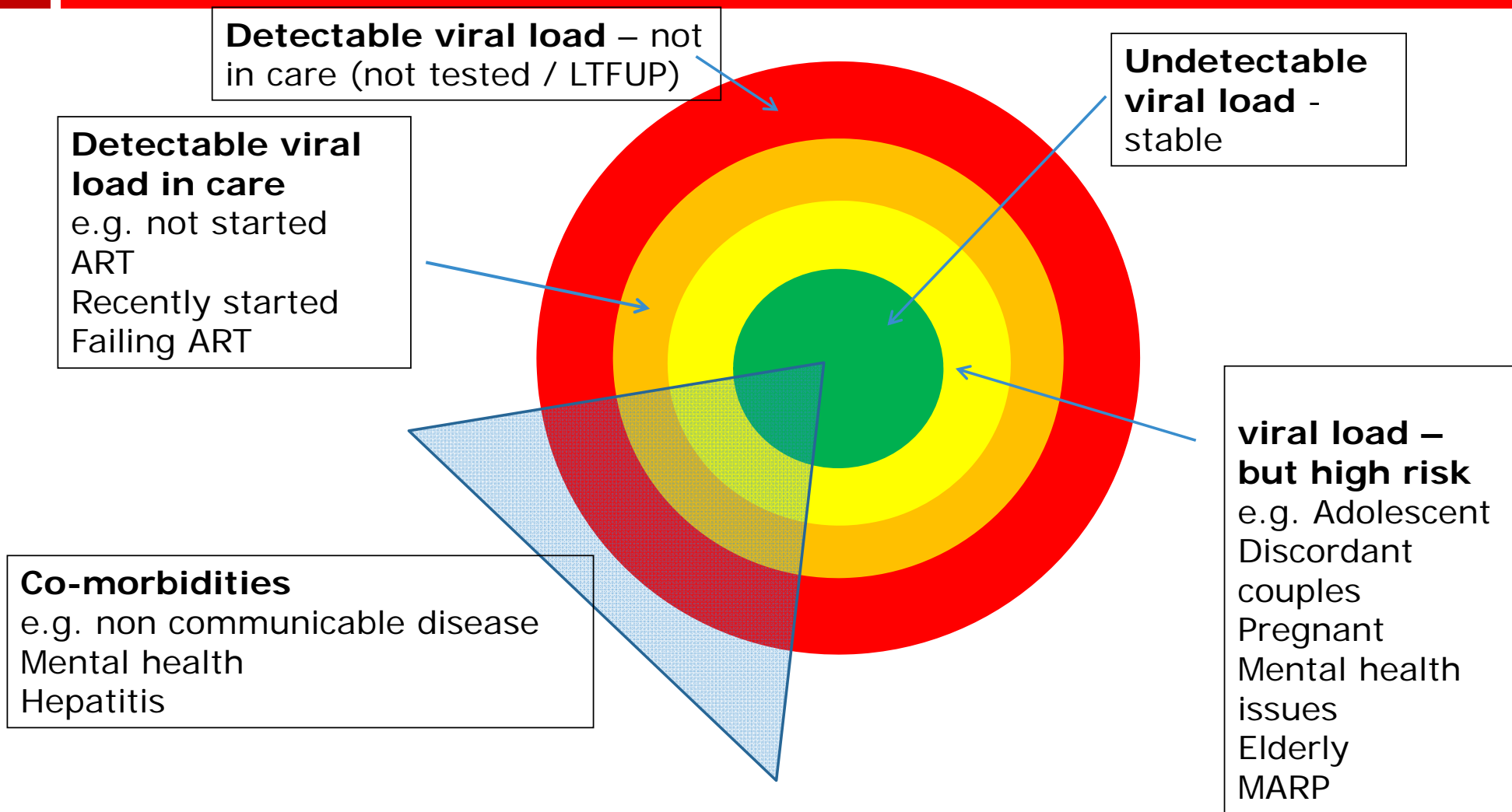
Source: UNAIDS data 2017, \*Ugandan Ministry of Health (2017)

# Differentiated care

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- Some patients requiring more intensive support
- Some patients requiring less intensive support e.g. undetectable viral load

# Targets for differentiated care



# Traditional methods of differentiation

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- Statistical analysis (longitudinal cohorts) e.g. VL, missed appointments
- Health care worker experience
- Can we apply new techniques to differentiation

# Project development

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- Meeting between COSIS teams and IDI team
- Realised we weren't ready to apply for a grant
- We needed to understand each other & our data & methods first!!

# Approached by AI team in Cambridge, UK



Prof Alan Blackwell – Computer Science, University of Cambridge

Dr Alain Vulysteke – Head of Intensive care Unit, Papworth Hospital

Previous work on AI for risk of poor outcomes in intensive care records

Funding of £15,000 from Cambridge Global Challenges Research Fund





# Next steps

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- Workshop at University of Cambridge April 2019
- Plan to do some pilot analysis following this
- Apply for further grant funding in late 2019