



Data Driven Healthcare

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Wait a minute

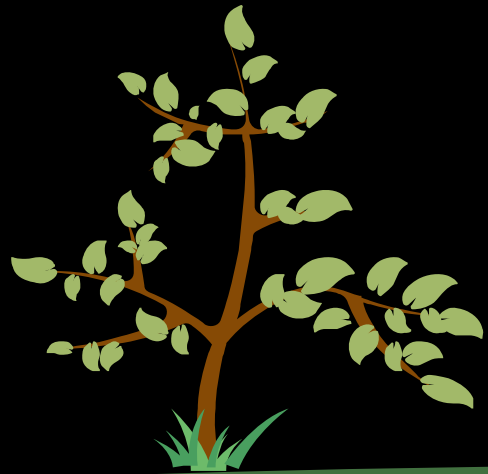
....

he's not a doctor!

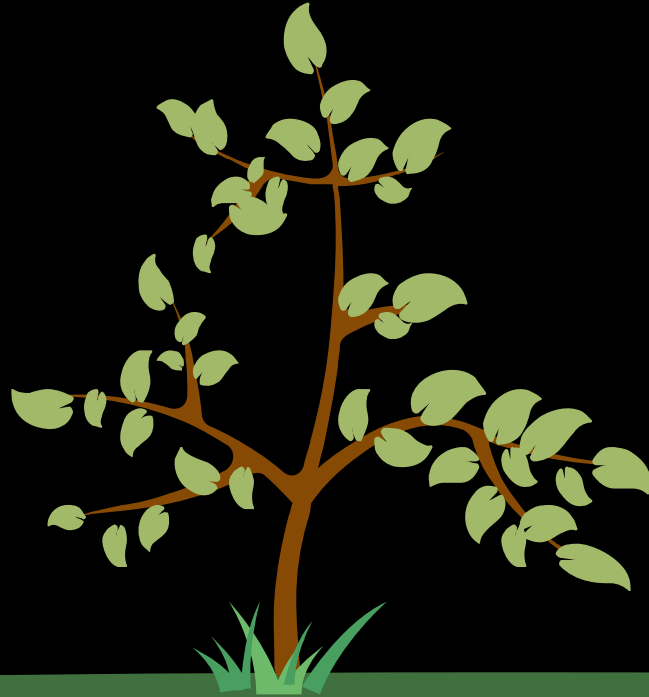


Ndaa! Dummela!
Säinubona! Kalllo!
Säinubona! Kalllo!
Säinubona! Kalllo!

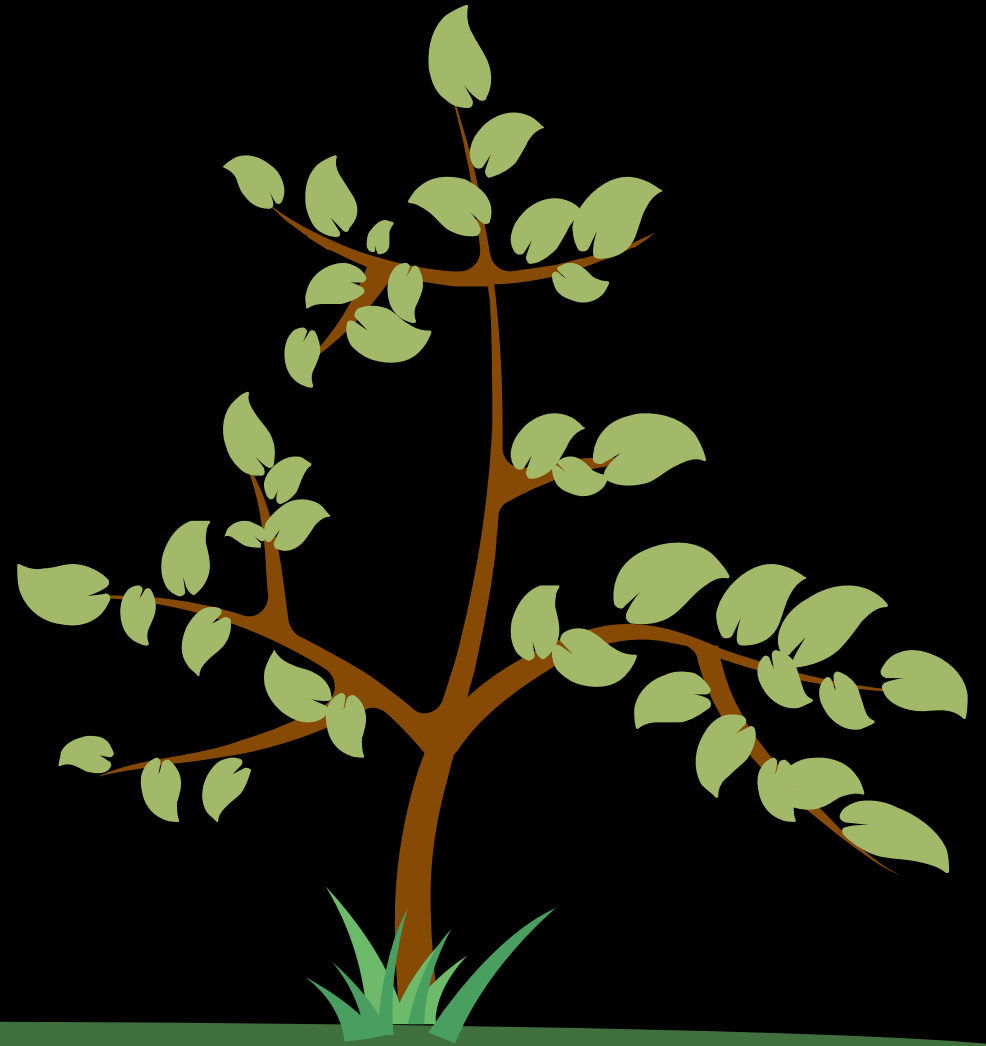
Where We're Headed Today



**State of HIV
and Data**



Change is Now



**Roadmap for
The Future**

“Complete Your Response, Please”

-Dr. Henry Sunpath
Audience Response Training
AWACC 2019

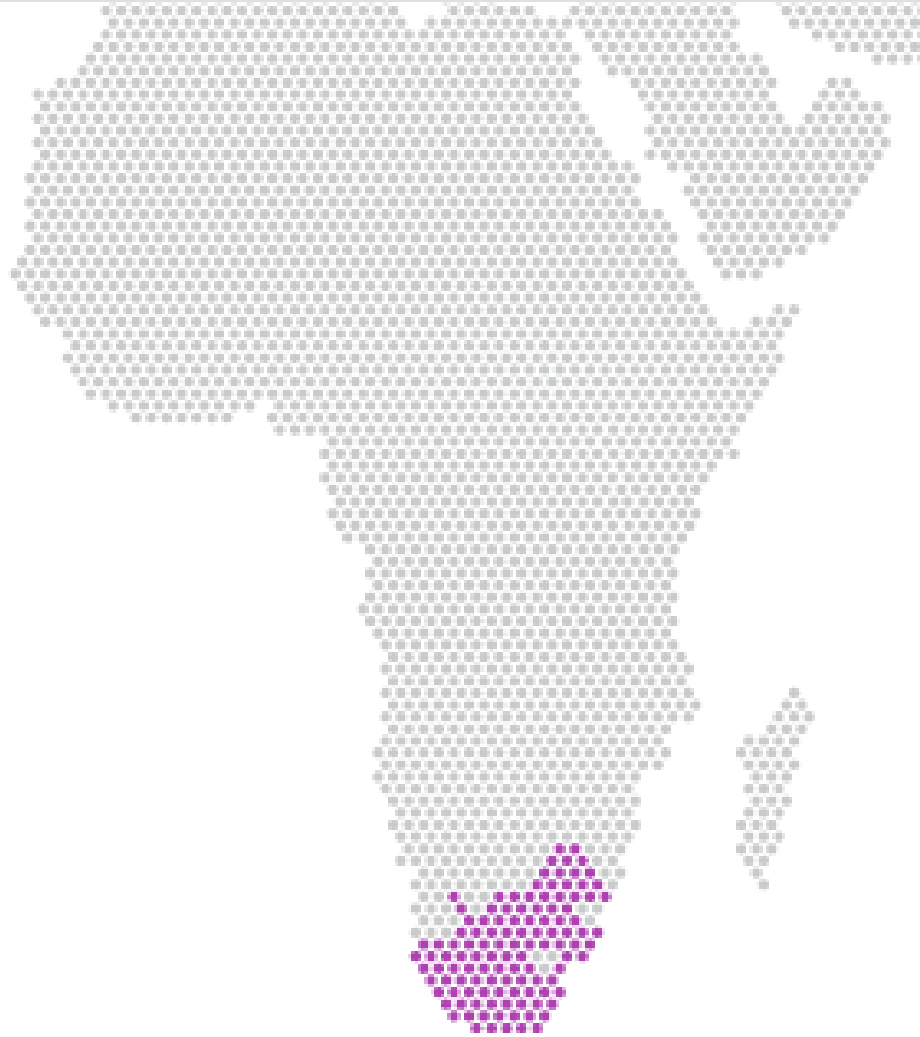
If we need a reminder to complete a simple task under new conditions with little stress and fear, why do we assume that patients can complete complex task without reminders.

Also, how can we assume that providers do not need reminders as well.

Current State

- These files cannot alert you to a missed visit.
- These files cannot be aggregated without considerable effort.
- These files decay in water, heat, humidity...Durban





South Africa (2017)

7.2m people living with HIV

18.8% adult HIV prevalence (ages 15-49)

270,000 new HIV infections

110,000 AIDS-related deaths

61% adults on antiretroviral treatment*

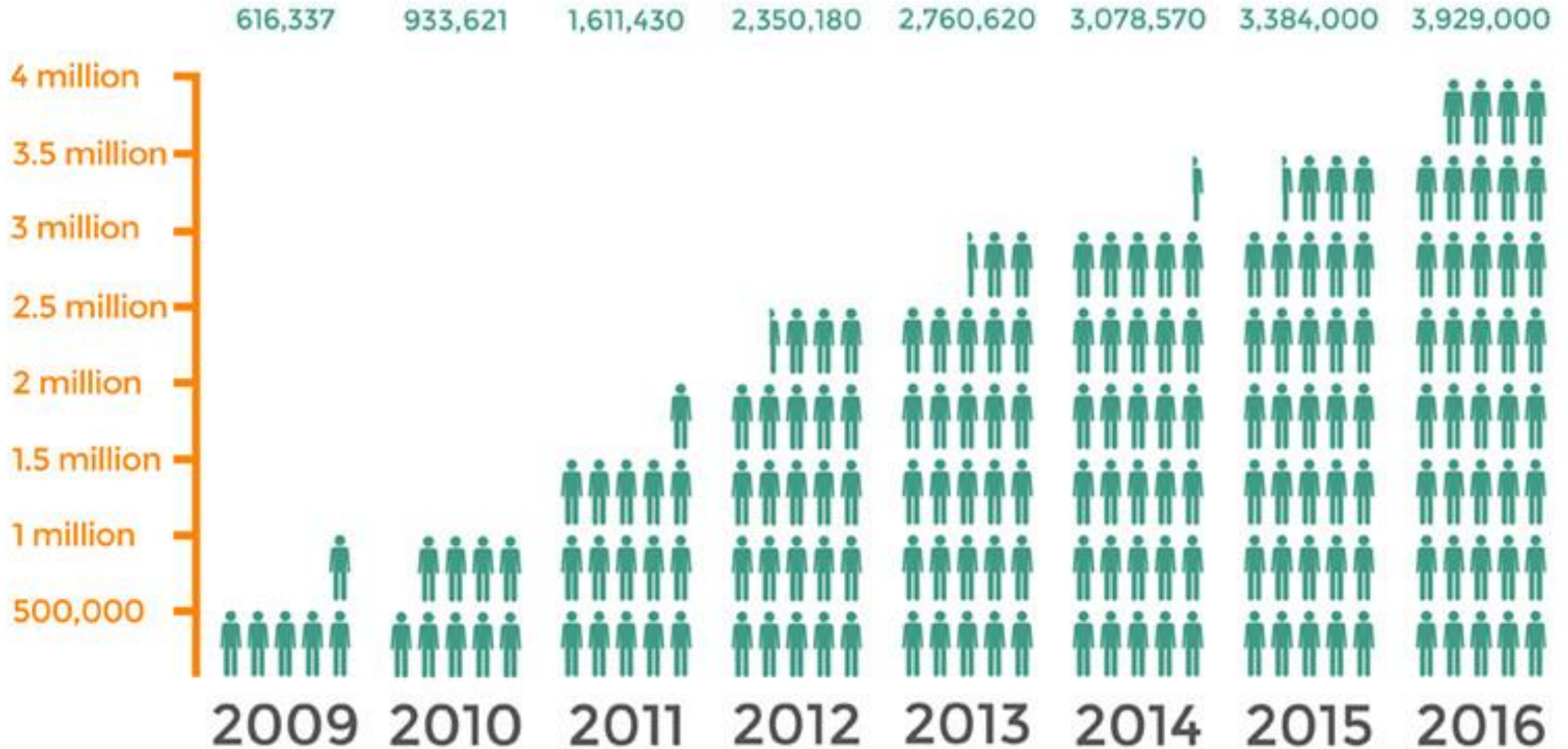
58% children on antiretroviral treatment*

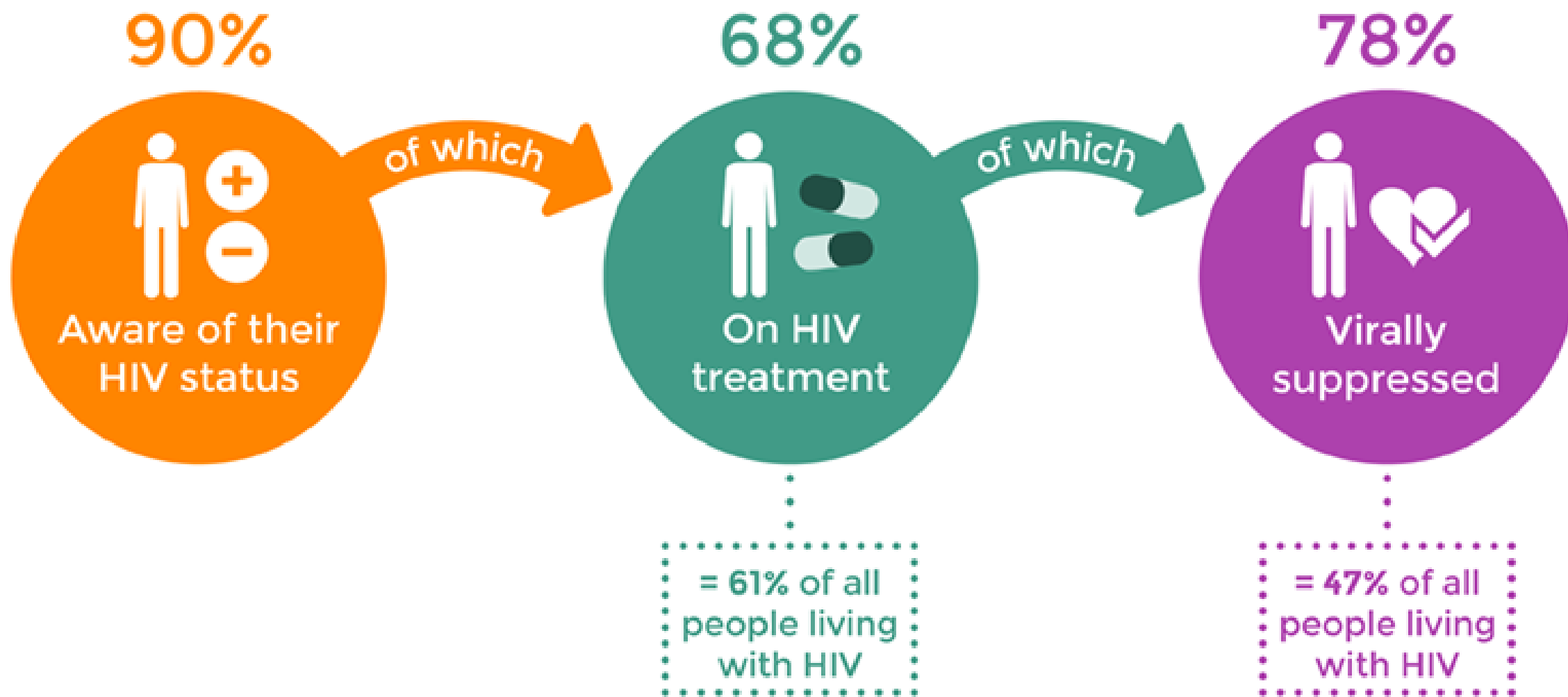
*All adults/children living with HIV

Source: UNAIDS Data 2018

SOUTH AFRICA

Number of people receiving antiretroviral treatment





Source: UNAIDS Data 2018

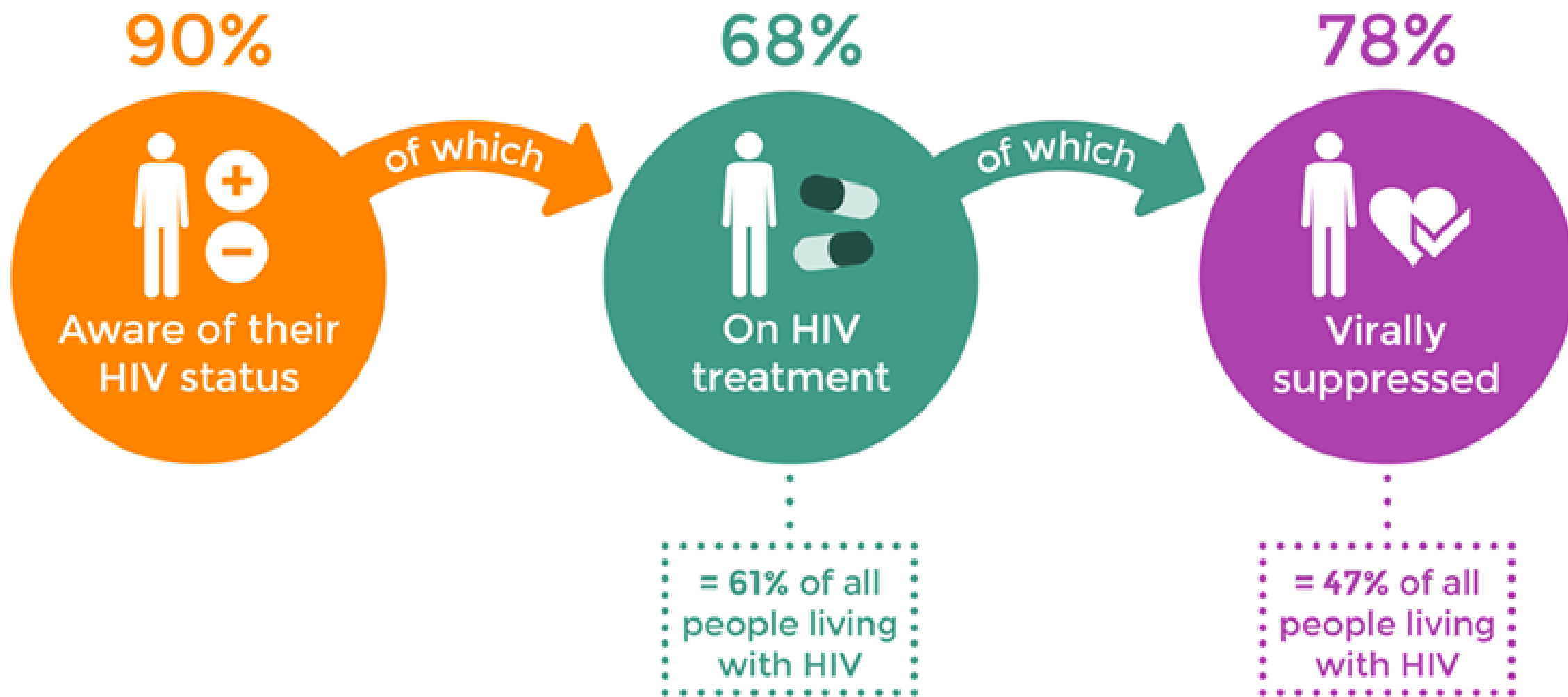
Change Is Now

- Hybridization of the system.
- Protected layer of local measures.



When you enter an exam room to see a patient, how confident are you that you have the information in their chart needed to treat your patient?

- 1) 0% - 50%
- 2) 51% - 60%
- 3) 61% - 70%
- 4) 71% - 80%
- 5) 81% - 90%
- 6) 91% - 100%



Source: UNAIDS Data 2018

Do you wash your hands
regularly at work?

1) Yes

2) No

Proper hygiene has played a major role in the prevention of many infectious diseases?

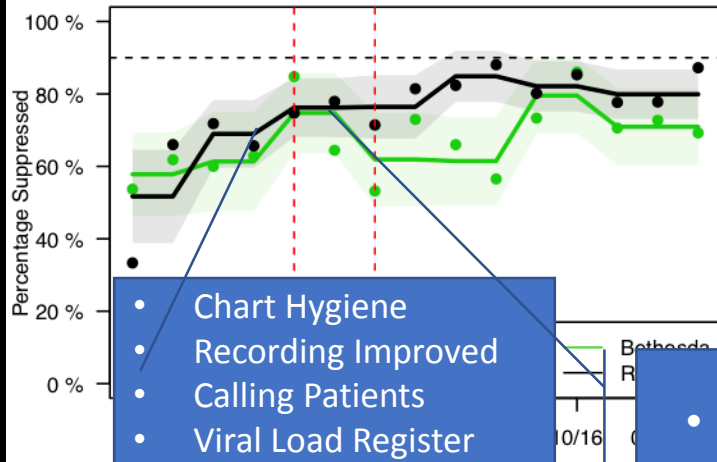
1) True

2) False

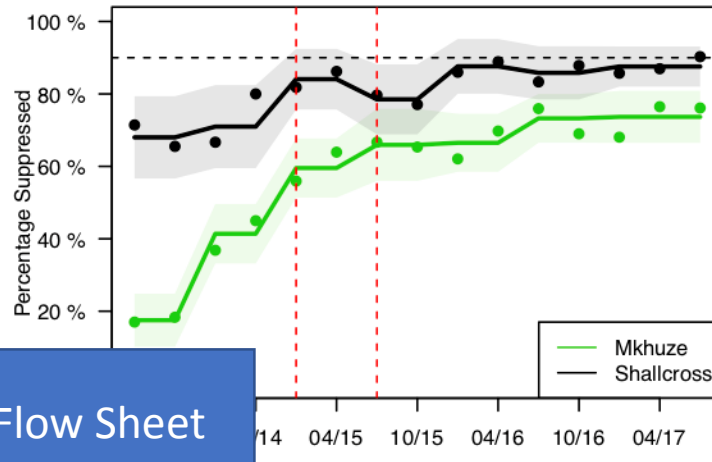
Why should chart hygiene be any different?

Clean and well maintained charts help prevent a host of issues with patient care and disease progression.

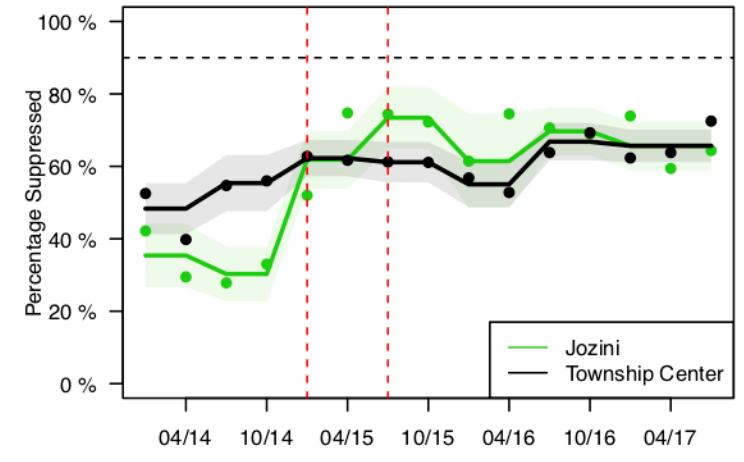
District Hospital Viral Load Suppression



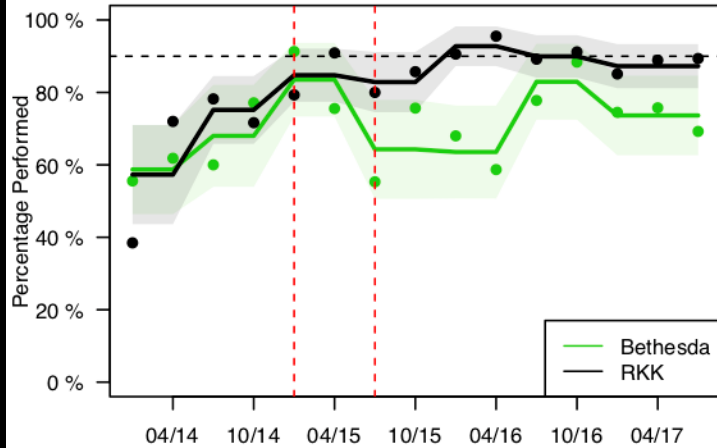
Primary Health Clinic Viral Load Suppression



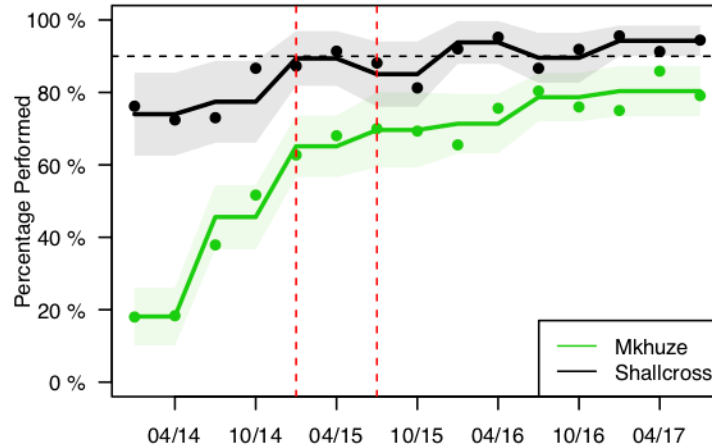
Primary Health Clinic Viral Load Suppression



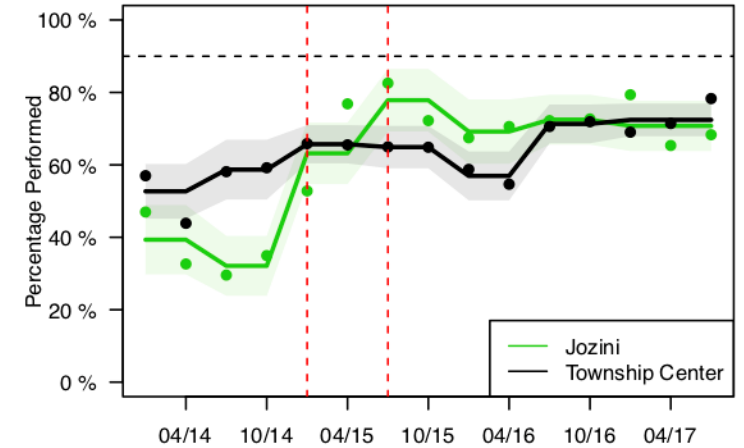
District Hospital Viral Load Completion



Primary Health Clinic Viral Load Completion



Primary Health Clinic Viral Load Completion



Characteristics	Mkuze (n=37)		Jozini (n=60)		Bethesda CDC (n=12)	
	Pre- Intervention	Post- Intervention	Pre- Intervention	Post- Intervention	Pre- Intervention	Post- Intervention
Median Age, years (SD)	34 (8.28)		36 (12.52)		44 (14.62)	
Female (%)	23 (62.16)		33 (55.00)		8 (66.66)	
Face Sheet (%)	29 (78.38)	36 (97.30) ^a	36 (60.00) ^a	30 (50.00) ^a	12 (100.00)	12 (100.00)
Flow Sheet ^d (%)	34 (91.89)	37 (100.00) ^a	36 (60.00) ^a	36 (60.00) ^a	12 (100.00)	11 (91.67)
Viral Load Test Requested (%)	12 (32.43)	28 (75.68) ^a	36 (60.00) ^a	36 (60.00) ^a	10 (83.33)	10 (83.33)
Viral Load Results Recorded (%)	11 (29.72)	20 (54.05) ^a	4 (6.66)	39 (65.00) ^c	9 (75.00)	9 (75.00)

- Does Not Change
- Regional Health Center
- Extreme Cases Always Are Referred To Consultant

^a p value < 0.05

^b p value < 0.01

^c p value < 0.0001

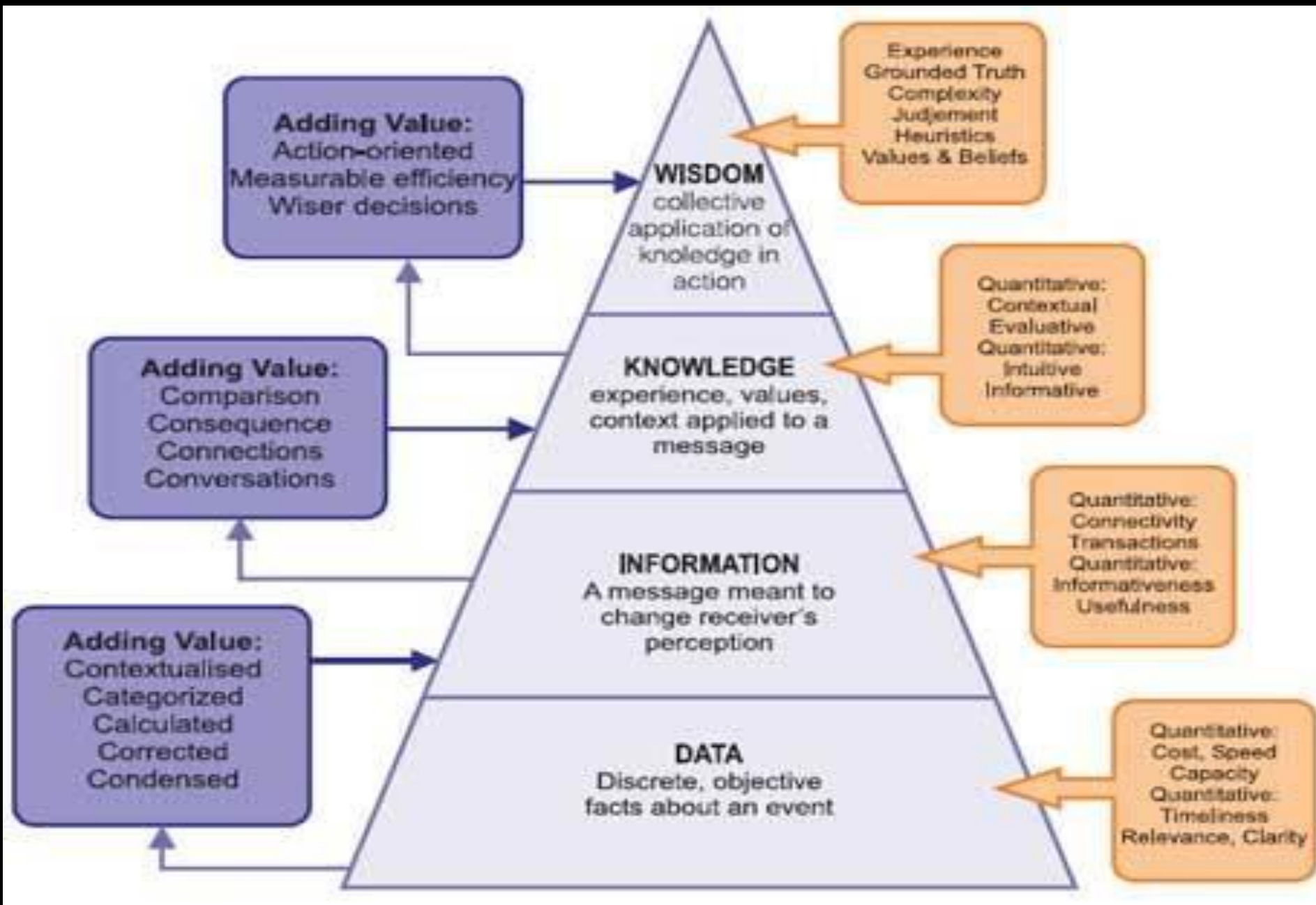
^dAll Flow Sheets reviewed during the post-chart intervention audit contained the revised Flow Sheet template.

The Big Secret:

Data is not just for research...



*Where is the wisdom we have lost in knowledge?
Where is the knowledge we have lost in information?*
TS Eliot – The Rock



What Can We Change

Modify Charting



01

Every Completion and Every Resulty
Every Time

Testing Recorded



02

Record Viral Loads Completed

Result Recording



03

Record Viral Load Results

Reminders



04

Alert to Upcoming/Missed Viral
Loads For Staff

Contact



05

Contact Patients that Need Viral
Loads



Roadmap To Ideal State



Roadmap

Evaluate Your Clinic's Chart Hygiene To Determine Organization Data Health

01

Distribution of SOPs and Standardized Workflows To Clinics.

02

Implement Tracking Spreadsheet Alongside Traditional Paper Charts

03

Look at Tracking Sheet to Follow Patients, Look for Alarms

04

Dual Charting in Paper and Tracking Sheet

05

Use the Tracking Spreadsheet to Keep Providers Informed, Patients In Care, and Improve Completion Rates

06

