

# Using existing data to develop high-quality abstracts

Arthur G. Fitzmaurice, Ph.D., M.T.S. CDC Uganda

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afitzmaurice@cdc.gov



# Objectives

- Suggest process for analyzing data to answer questions
  - From Questions to Data
  - From Data to Questions
- Discuss some data sources
- Conclude

### Disclaimer

• The findings and conclusions in this presentation are those of the author and do not necessarily represent the official position of CDC

# Process



# What are you asking?



### Process

# From Problems or Questions to Data



# Data to investigate hypotheses

# Are there data to support this?

- 1. <u>Question</u>: Do faith-based facilities have better outcomes than other facilities?
- 2. <u>Hypothesis</u>: Faith-based facilities find more people living with HIV than other facilities

### 3. Find Data Source(s); then Analyze and Visualize Data:

- National data system includes data element on whether facility is faith-based

#### 4. Conclusion:

- Faith-based facilities have more POS tests per total tests (higher positivity) compared to other facilities
- Cannot answer the question with this figure

### 5. Data Limitations and Follow-ups:

- Need to look at total POS tests to answer the question, but this is still meaningful
- This leads to more questions like "Are these facilities screening?" "Are these facilities creating demand?"
  "Are people with HIV more comfortable being tested at these facilities?"



# Data to evaluate interventions – Pre/Post Example

# Did it work??

- 1. <u>Question</u>: Are FCI activities having the desired effect?
- 2. <u>Hypothesis</u>: Self-tests distributed by faith leaders will lead to identifying more men living with HIV
- 3. Find, Analyze, and Visualize Data
- <u>Conclusion</u>: The number of men testing POS increased after self-test kits were distributed by faith leaders
- <u>Data Limitations and Follow-ups</u>: Did the reporting process change? Were other interventions also introduced?
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# Data to evaluate interventions – Timeline Example

# Did it work??

- 1. <u>Question</u>: Are FCI activities having the desired effect?
- 2. <u>Hypothesis</u>: Faith community posts will lead to identifying more people living with HIV
- 3. Find, Analyze, and Visualize Data
- 4. <u>Conclusion</u>: The number of people testing POS increased after faith-engaged community posts were introduced
- 5. <u>Data Limitations and Follow-ups</u>: Sometimes need to ask others

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Shah et al., IAS 2020

### Process

# From Data to Problems and Questions



# Data to identify problems – Timeline Example



- 1. <u>Question</u>: Is this indicator improving/declining during the pandemic?
- 2. <u>Hypothesis</u>: This indicator is decreasing due to lockdown
- 3. Find, Analyze, and Visualize Data:
  - The indicator declined after lockdown was instituted, suggesting lockdown had an effect
  - Improvement after taking away the variable further suggests lockdown had an effect
- 4. <u>Conclusion</u>: The indicator declined during lockdown and recovered after ease of lockdown
- 5. Data Limitations and Follow-ups:
  - We observe changes, but is this due to decline of reporting, decline of service delivery, other?

### Data to identify problems to address – PHIA National Survey



Viral Load Suppression Among PLHIV in Five Countries, Population-based HIV Impact Assessment (PHIA) https://phia-data.icap.columbia.edu/visualization#



### Questions:

- How does my country compare?
- Which country should we focus on?

### Problems:

- None of these countries had achieved 90% viral load suppression among PLHIV
- Country X is at XX% viral load suppression, which is below its goal of 90%
- Country X has the worst viral load suppression as compared to other countries in Region Y

# Data Sources

What's going on?

# Static data

(e.g., reports, reference sheets, published posters/articles)

# &

### **Dynamic data** (e.g., dashboards, public datasets)

Uganda World Health HIV Country Profile 2019 Demographic and socioeconomic dat 90-90-90 progress towards 2020 targets (2018) 509 25% imated % of pregnant wome ving with HIV who received ARVs for PMTCT (2018) PLHIV who know their PLHIV receiv PLHIV with viral los By 2020, 90 percent of people living with HIV know their status, 90 percent of people living w HIV who know their status are receiving treatment and 90 percent of people on treatment ha who know their status are receit ressed viral loads. Health sector cascade (2018) Value 1 160 000 84% People living with HIV who know their status Reported number of people living with HIV receiving ART 1 004 000 72% 885 000 64% People living with HIV with viral load suppression ed number of people newly infected with HIN stimated number of deaths due to AIDS 10000 2010 2011 2012 2018 2014 2015 2016 2017 2018 2010 2011 2012 2018 2014 2015 2016 2017 2018 WHO HIV Country Profiles

https://cfs.hivci.org/country-factsheet.html

# Data Sources

PEPFAR Panorama Spotlight https://data.pepfar.gov/

Population-based HIV Impact Assessment (PHIA) https://phia-data.icap.columbia.edu/visualization#

WHO HIV Country Profiles https://cfs.hivci.org/country-factsheet.html

UNAIDS AIDSinfo https://aidsinfo.unaids.org/

UNAIDS Key Population Atlas https://kpatlas.unaids.org/dashboard

USAID Demographic & Health Surveys https://dhsprogram.com/ https://www.statcompiler.com/en/

### Other static and dynamic data sources?

- Program data
- National statistics
  - DHIS2
  - MOH dashboards
- Population surveys
- Clinical trials
- Academic journals
- Conference posters
- Qualitative feedback
- Faith-based data sources
  - Some national data
  - Some PHIA
  - Others?

# **Final Considerations**

- Ethical considerations
- Data should be publicly available; be careful before you pay for data
- Static and dynamic data sources
- Can use data from your program or other programs, but might need to collaborate to ensure using it correctly
  - Study of faith/religion is nuanced field

### afitzmaurice@cdc.gov



# Questions? Comments?

afitzmaurice@cdc.gov

