A Global and local perspective

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What are FP service statistics?

- Data routinely recorded in connection with family planning (FP) service delivery
- Reported from facility → district → national
- Collect information such as:

(Example forms from Kenya MOH)
From service statistics to surveys

- Service statistics were primary source of data for tracking FP program performance prior to 1970 or so.

- Due to limitations (upcoming slides) shift to reliance on survey data to track key FP indicators:
  - World Fertility Surveys (WFS) in the early 1970s,
  - Contraceptive Prevalence Surveys (CPS) in the early 1980s,
  - Demographic and Health Surveys (DHS) and the Multiple Indicator Cluster Surveys (MICS) later
  - PMA2020

- Because of this survey reliance, FP service statistics systems receive relatively little attention and tend not to be relied on or invested in
Weighing out the use of service statistics

**Strengths:**
- Collected at service delivery level, no additional cost
- Collected from each individual
- High geographic detail
- Available often—usually monthly

**Weaknesses:**
- Prone to errors (mistakes, under-reporting, duplicate reporting, ‘padding’ numbers)
- Can’t measure some things—e.g. current use (mCPR)
- Often include vague concepts (‘new acceptors’)
- Don’t always capture private sector
Back to service statistics?

- Track20 seeking to address weaknesses and find new ways to improve and use service statistics

Why we think this is worthwhile:

1. Service statistics are the most cost-effective means of providing tracking data on an **annual basis**
2. Even if the data are flawed, they may still be useful if the flaws/biases are understood and can be compensated for through **modelling**
3. Advances in **information technology** provides an opportunity to minimize measurement error
Revitalizing the use of FP service statistics

- Rapid Assessments in country
- Analysis is public sector data
- Innovative modelling to develop improved annual estimates (mCPR)
Rapid Assessments

- Conducted in: Cote d’Ivoire, Ethiopia, India, Indonesia, Kenya, Malawi, Rwanda, Senegal – more in the works.

- In-depth reports (around 50 pages) on the current systems for FP data collection, including recommendations for action steps

“Reporting rates are high for public and private clinics (95% or so), but only 80-90% among private midwives and around 70% for private physicians registered with the National Population and Family Planning Board (BKKBN) to receive government contraceptive commodities.”

–Findings, Indonesia Rapid Assessment
Analysis of public sector data

- Track20 conducting analysis of public sector data collected from focus countries— including FP visits, and FP commodities provided

  Looking at: smoothness of trends, overall levels, and method mix

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**Burkina Faso: converting service stats to prevalence**

- Condom
- Injectable
- Implant
- Pills
- IUD

**Zambia: converting service stats to prevalence**

- Condom
- Injectable
- Implant
- Pills
- IUD
- Male sterilization
- Female sterilization
Analysis of public sector data

Uganda: converting service stats to prevalence

Nepal: converting service stats to prevalence
Using service statistics in modelling

- Cannot convert directly from service statistics to mCPR:
  - Under or over-reporting at facility level
  - Coverage of reporting (e.g. not all facilities report)
  - Does not capture discontinuation and non-use of methods provided
  - Does not capture continuation (for IUDs and Implants)

- But, if **understand bias**, and if bias is more or less **constant** over time, can **adjust** for this bias to inform estimates of mCPR
Bangladesh example—good fit
Ethiopia example– less good fit

![Graph showing Modern CPR trends from 1990 to 2010 with lines for Surveys, SS, and Adjusted data.](image-url)
Adding service statistics to FPET

- The Family Planning Estimation Tool is a Bayesian, hierarchical statistical model that fits logistic growth curves to historical data.
- Adapted from UNPD projection model, now allows inclusion of service statistics to inform trends since the last survey.

**FPET modelled mCPR (married) for Côte d'Ivoire, with and without service statistics**

- 2015 mCPR = 15.2%
- 2015 mCPR = 16%

*Data incl. before 1990*
Deciding if service statistics can be used

- Consistent levels of reporting over time (so changes in volume of service statistics do not represent more facilities reporting, rather than an increase in service delivered)

- At least 3 years of consistent data, with at least one year overlapping with a survey, so that the model can celebrate the two trends

- At least one year of service statistics reported after the most recent survey— if a survey is the most recent data point, the survey will be used to inform the mCPR trend
Emerging successes

- Promising findings that service statistics can be useful for monitoring at a global and country level
- New technologies = potential improvements to data quality (DHIS2)
- New modelling techniques = improvements to data usability
- Pulling from public and private sector data sources gives a comprehensive picture of family planning in a country

But, many challenges still exist in terms of data quality and usability
Questions??