SHOPS PLUS

Estimates of Progress:

Integrating Private Sector Data into EMU

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About SHOPS Plus

Sustaining Health Outcomes through the Private Sector (SHOPS) Plus is USAID's flagship initiative in private sector health. The project seeks to harness the full potential of the private sector and catalyze public-private engagement to improve health outcomes in family planning, HIV/AIDS, maternal and child health, and other health areas. SHOPS Plus supports the achievement of US government health priorities and improves the equity and quality of the total health system.

SHOPS Plus collaboration with Track20

Estimates of Progress: Integrating Private Sector Data into FP2020 Annual Estimates

Introduction

In recent years the Track20 Project has made large strides in increasing the use of routine data (e.g. Health Management Information Systems or HMIS) to inform progress in increasing mCPR.* This data is used to inform annual estimates of progress published in FP2020's annual progress report. In the 2018 Progress Report, 13 countries used services statistics to help inform their current progress. This is done through a two-step process. First, using a tool developed by Track20, Estimated Modern Use (EMU), service statistics are translated into estimated use. Next, these estimates are used in the Family Planning Estimation Tool (FPET), allowing the service statistics to influence estimates and projections of contraceptive prevalence.

Generally, countries include service delivery numbers or commodities provided via the public sector and some provided via NGO partners within the EMU tool (when this data is reported into the government HMIS system). Currently, accounting for the remaining missing private sector data is dealt with via a methodology developed by Track20 using DHS data on method source. This document explores potential alternatives to this approach by including private sector sales data into the EMU tool.

Integrating Private Sector Data into HMIS Systems

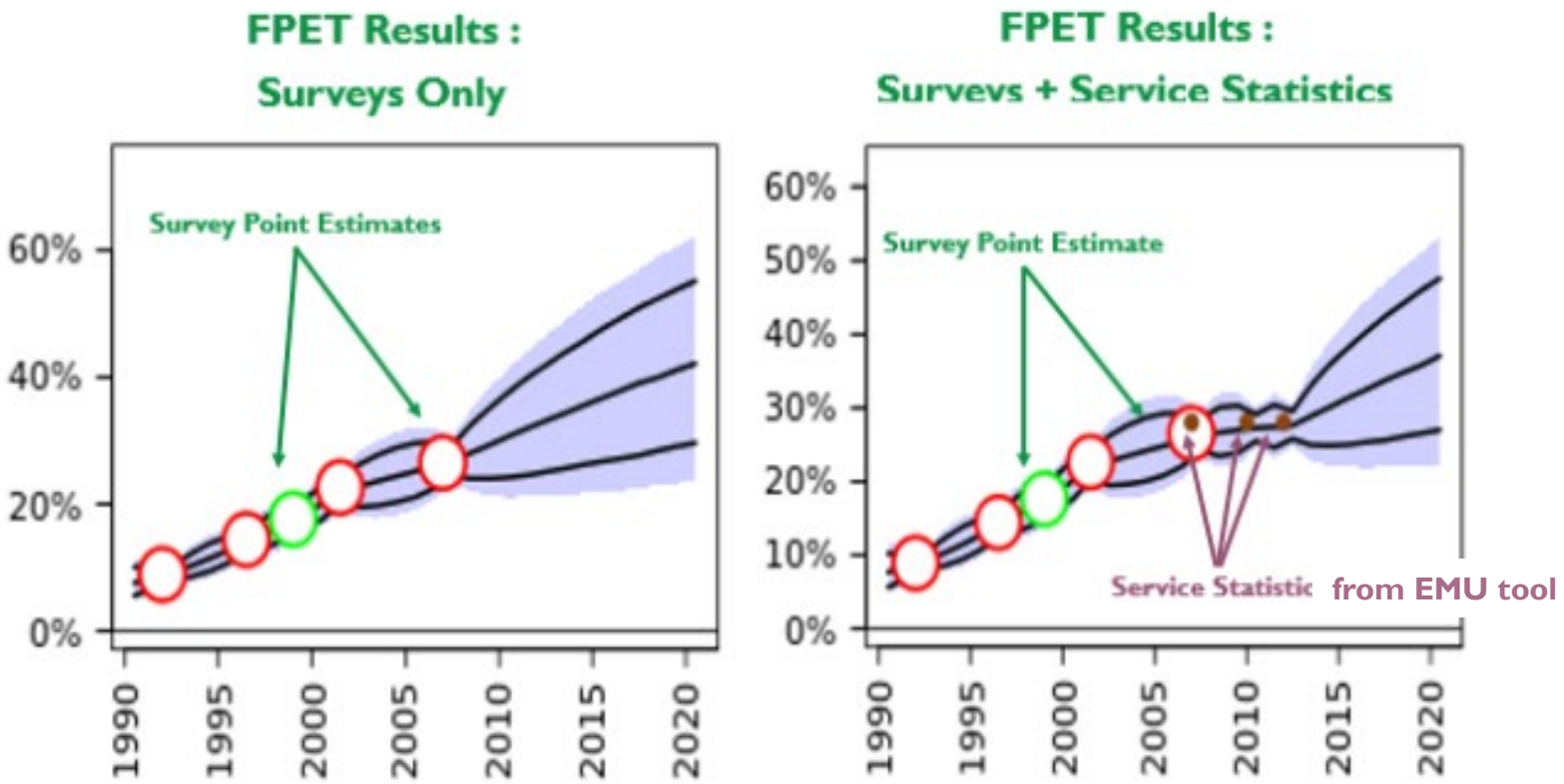
The inclusion of all sectors within HMIS is being actively explored by countries as they move toward UHC so expanding the visibility of private sector provision, especially the commercial sector, will align with priorities of many health systems. In many countries parts of the private sector are already routinely reporting into government HMIS systems, most commonly NGOs; however, products distributed through social marketing programs and the more "commercial" private sector are less often included. Track20 has been working on expanding inclusion of NGO data that is delivered through social franchising clinics and examining opportunities to include data from social marketing, typically for short term methods via pharmacies. Data from social marketing sales, such as PSI data, is now being included in DHIS2 in Zimbabwe and is being explored in a few other countries where there is substantial social marketing of methods. While data from the private commercial sector is a harder reach, this too is beginning to be mandated through legal mechanisms, already in place in Ethiopia and Rwanda. Other work by SHOPS Plus has also focused on increasing routine reporting by private sector providers into HMIS systems. This work by Track20 and SHOPS Plus can be seen as a "long-term" fix – in a country where the full private sector routinely reports into the HMIS system, no further adjustments would be needed. However, for many countries achieving full reporting may not be feasible (especially from retail outlets and pharmacies) or may have a long-time horizon.

- What is currently done
- Potential alternative process
  - What private sector data is available?
  - Exploring potential to add private sector data to EMU
- Recommendations
- Next steps

https://www.shopsplusproject.org/resource-center/estimates-progress

What is currently done

Integrating service statistics into estimates of contraceptive use (FPET)



Source: http://www.track20.org/pages/our_work/innovative_tools/SS_to_EMU_tool.php

Estimated Modern Use (EMU) Tool

Track20 has developed the Service Statistics to Estimated Modern Use (SS to EMU) tool to assist countries in converting service statistics data into estimates of modern method use that can be used as input in the Family Planning Estimation Tool (FPET).

Based on HMIS data, adjusting for LAPM continuation and services not reported in the HMIS system

$$\text{EMU} = \frac{\text{Estimated Modern Users}}{\text{Women of Reproductive Age}}$$

Source: http://www.track20.org/pages/our_work/innovative_tools/SS_to_EMU_tool.php

Getting a full picture of FP Use

- HMIS may not capture all provision of contraceptives in a country
- To have an EMU estimate that is representative of *all* contraceptive use must estimate what is missing so it can be “added in”

Current EMU approach

Step 1 of 3 : Enter/Check Source of Modern Contraceptives

Percent distribution of users of modern contraceptive methods age 15-49 by most recent source of method, according to method.

This table is pre-populated with data from the DHS. If your country has not had a DHS, these cells will be blank and should be filled in using other data sources or your best judgement. In countries with a DHS, blank cells indicate that data wasn't available for a given method. Blank cells can be left blank, in which case the tool will assume that the services reported in your data represent 100% of those delivered in the given year, or blank cells can be filled in with data from a similar method or using your best judgement.

Method		Public Sector	Private Medical Sector			Other Source	
		Government Health Facilities and Home/Community Delivery	*NGO*	*Private Hospital/ Clinic Delivery*	*Pharmacy*	*Shop/ Church/ Friend*	*Other*
Long Acting and Permanent Methods	Sterilization (F)	78%	11%	10%	0%	0%	0%
	Sterilization (M)						
	IUD	65%	5%	30%	0%	0%	0%
	Implant	78%	2%	19%	0%	0%	0%
Short-Term Methods	Injectable	63%	2%	30%	5%	0%	0%
	Pill	41%	1%	11%	45%	2%	0%
	Othe						
	Emerg						

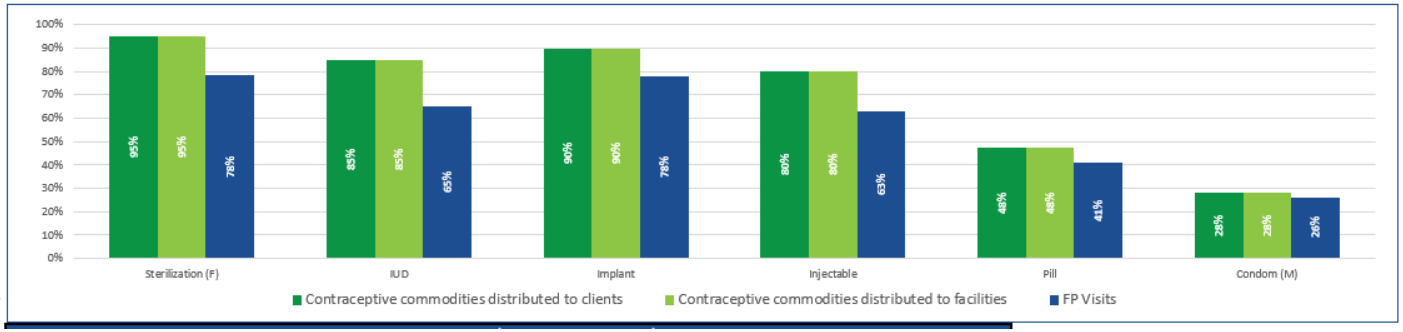
Step 2 of 3: What sectors are reporting in your data?

Based on what you entered on the previous sheet, in your summary of FP Sources, review the table below and select from the dropdown to indicate which sectors are included in the service statistics data you have on hand.

Data Type	Sectors Reporting	Public Sector	Private Medical Sector			Other Source	
		Government Health Facilities and Home/Community Delivery	*NGO*	*Private Hospital/ Clinic Delivery*	*Pharmacy*	*Shop/ Church/ Friend*	*Other*
Contraceptive commodities distributed to clients	Public and Some Private	Yes	Yes	Partially	No	No	No
Contraceptive commodities distributed to facilities	Public and Some Private	Yes	Yes	Partially	No	No	No
FP Visits	Public Only	Yes					

Step 3 of 3: Review your Adjustment Factor

In the table and graph below, for each type of data you have, the value represents what % of all provision of that method in your country the data you have from your national system represents.



All = 100%
Partially = 50%
None = 0%

See the EMU Guide for more details: http://track20.org/download/pdf/EMU_Process_Guide_2020_Eng.pdf

Simplified example of current approach

$$\frac{\textbf{10,000 injectable visits in HMIS}}{\textbf{80\% of injectables are captured in HMIS}} = \textbf{12,500 injectable visits total}$$

Estimated based on DHS source data and information about which sources report into DHSI2 (yes, no, partially)

Potential alternative process

Looking ahead to improved private sector reporting

- Some countries are working to include the private sector routinely into HMIS reporting
- This holds promise and could have important utility beyond EMU to improve visibility and governance
- But there are also challenges:
  - Long-term process, depending on governance in country
  - Some types of private providers may be difficult to include within the system– especially more informal outlets like shops – so may still not be comprehensive*

Possible to have another approach, especially in the short-term?

*Depending on country source mix; if these sources only make up a small share of use may not matter if they are excluded

HMIS + additional private sector data

What if we could collect additional data from the private sector and add it to the annual figures from HMIS before entering the data into EMU?

What private sector data exists?

↓

Might need to find new sources!

What is already in HMIS?

↓

Must remove any overlap!

Where counted in the supply chain?

↓

Might need to discount for wastage!

What is still missing?

↓

Might still need to adjust!

Requires solving lots of puzzles!

General considerations

- Is it worth doing this??
  - How large is the private sector?
  - How much is already being captured in HMIS?

If the HMIS is already capturing *most* provision in the country, it might not be worth the effort to go through this process.

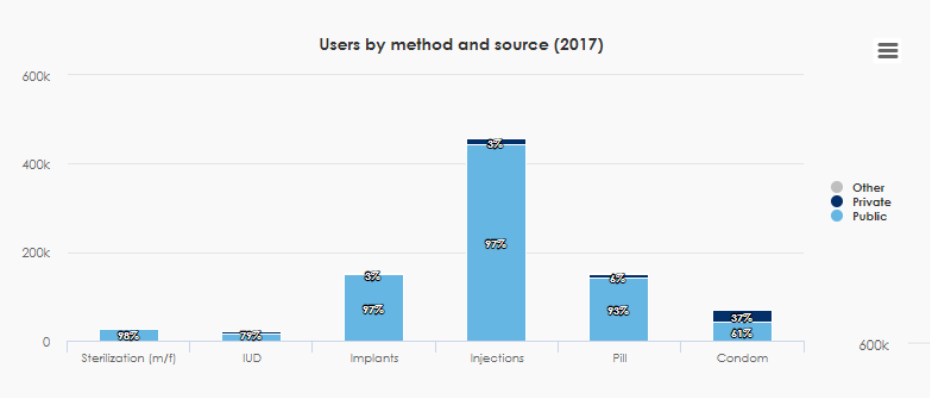
- Should we do this for *every* method or just select methods?
  - What share of the method mix is made up by the method?
  - What share of use is from the private sector?

For methods that only make up a small share of the method mix (<5%) or are primarily public (>80%) it might not be worth the effort to go through this process.

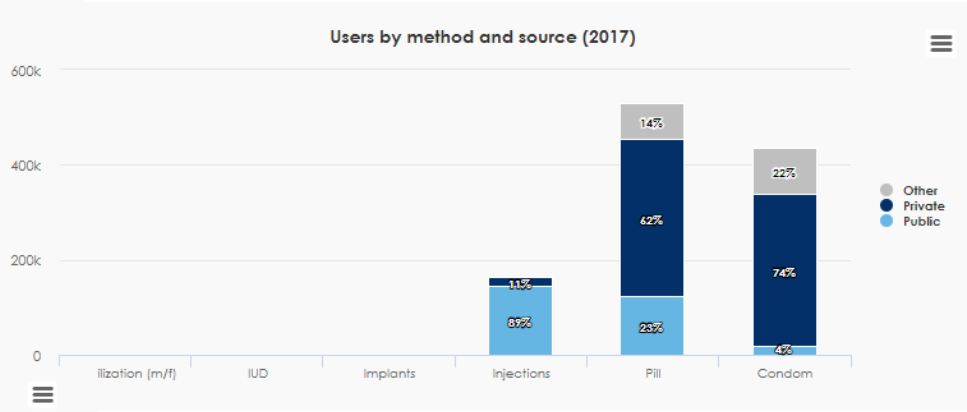
Hint: find this out easily from the **FP Market Analyzer:** http://fpmarketanalyzer.org/

What would you do in these cases?

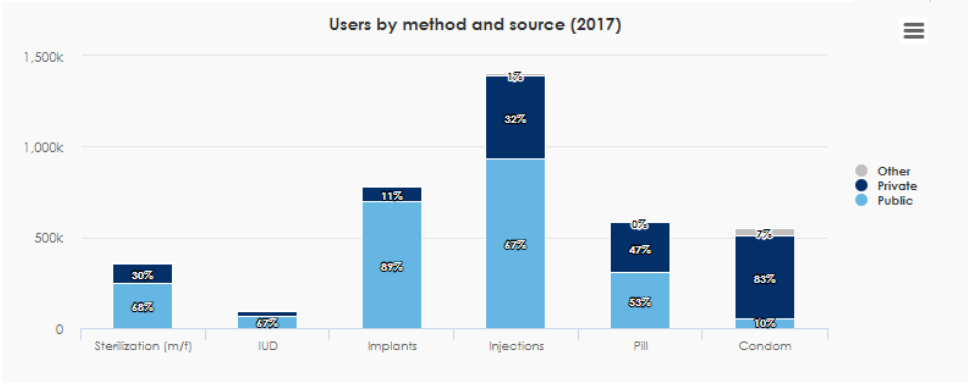
Rwanda



Cote d'Ivoire



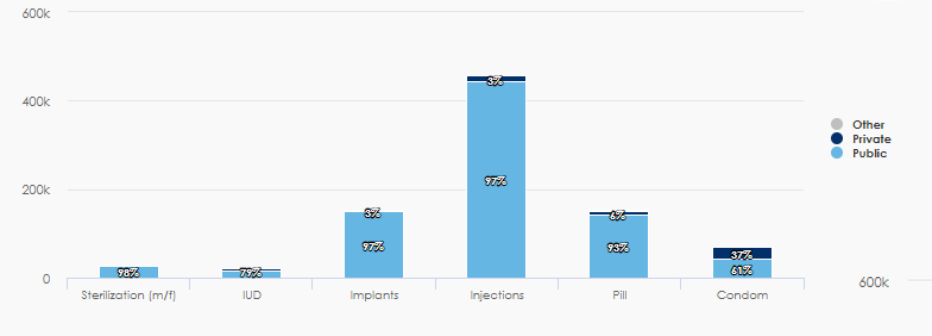
Tanzania



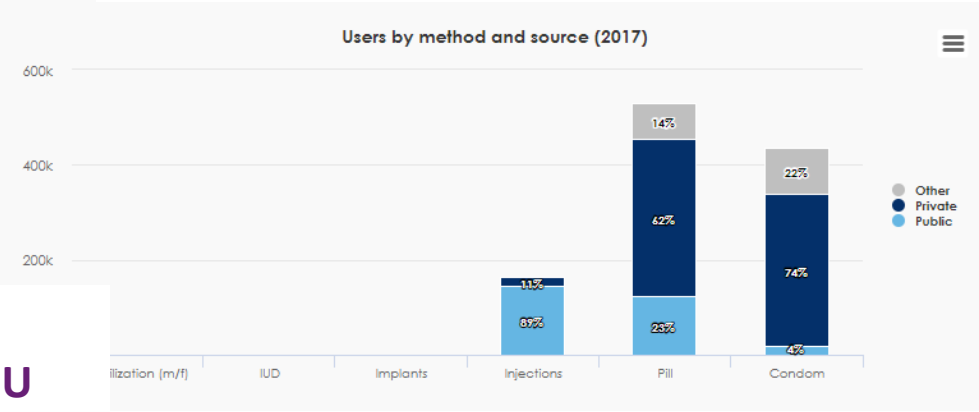
What would you do in these cases?

Rwanda

Very low private sector use; not worth trying to capture this data in EMU

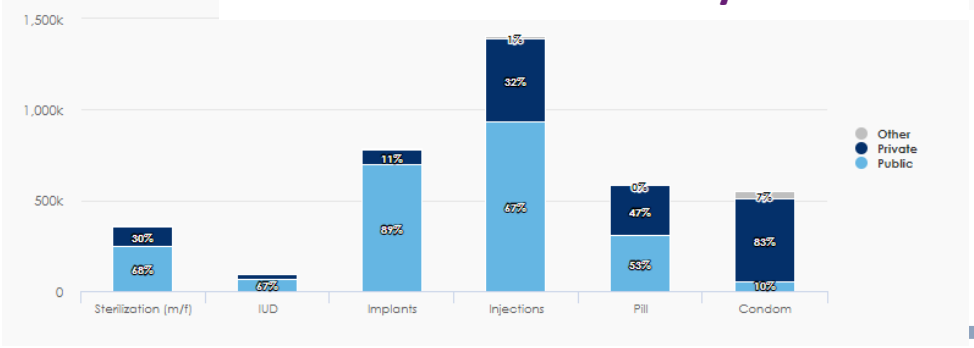


Cote d'Ivoire



Tanzania

Focus on private sector role for short-term methods only in EMU



Focus on private sector pills and condoms only in EMU

The complexities of the private sector

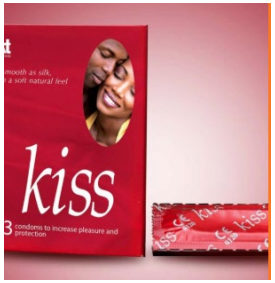
DHS generally gives us a breakdown by *source* as follows:

- Private Medical Sector
  - NGO
  - Hospital/Clinic
  - Pharmacy
- Other Source
  - Shop/Church/Friend
  - Other

But this does not tell us the full picture:

Was the clinic NGO run or part of an NGO-supported social franchise network?

At the pharmacy did they buy a commercial brand or a donor-funded socially marketed brand?



What range of FP can be purchased from shops? What is the mix of socially marketed and commercial products being bought?

In the DHS dataset more detailed sources are sometimes available including country specific options (e.g. BLM in Malawi)

Puzzle 1: What data exists?

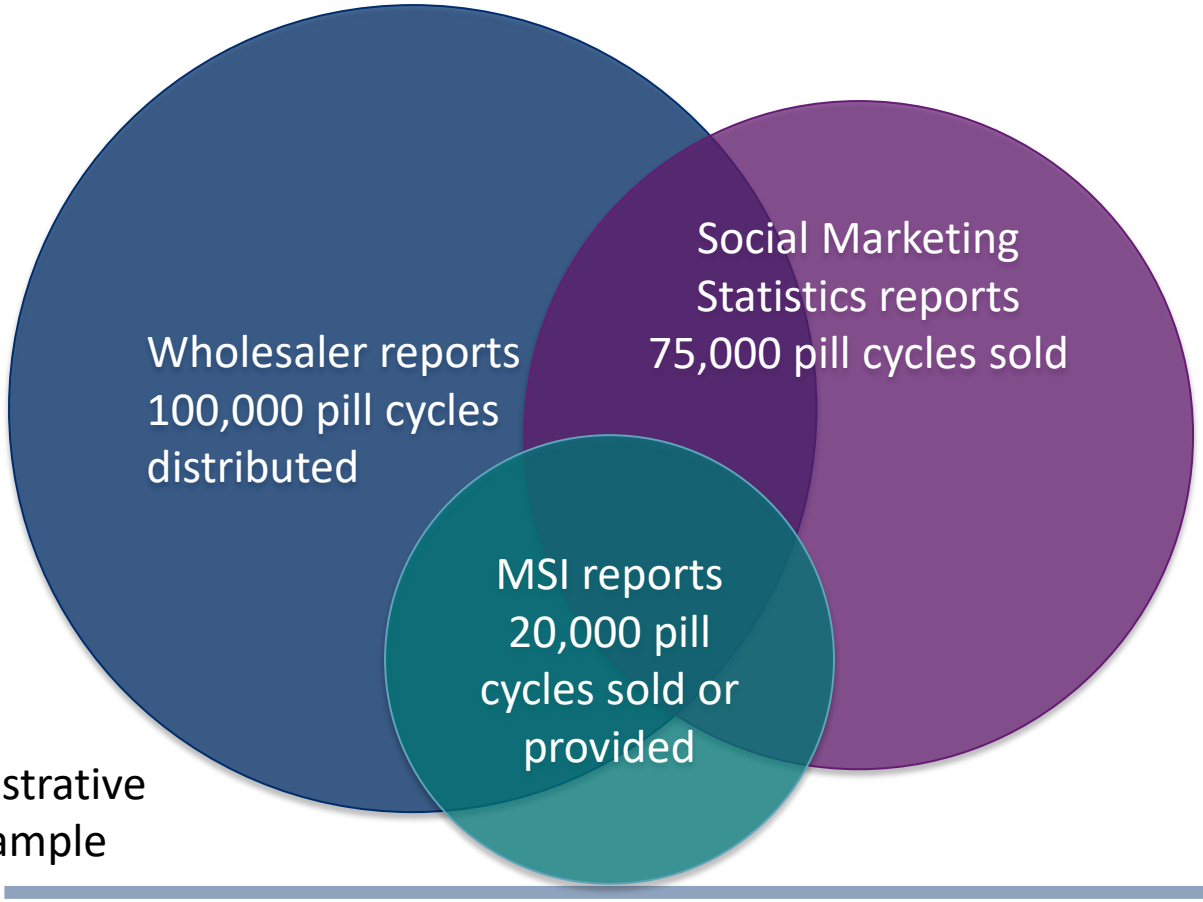
Source	Notes	Access to Data
Social Marketing Statistics	Sales volume by method. Includes reporting by DKT, PSI, MSI as well as other SMOs. *For PSI includes all channels, for MSI only includes social marketing channel.*	Publicly available (Excel): https://www.dktinternational.org/contraceptive-social-marketing-statistics/
PSI	Sales volumes and service provision	Publicly available (PDF): https://www.psi.org/publication/2018-year-end-global-impact-report/
DKT	Sales volumes (includes public sector and NGO sales in some countries)	Publicly available (Excel): https://www.dktinternational.org/resources/results/
Other NGOs and Implementing Partners	Type of data available may vary sales volumes, services provided, visits, etc.	Must request from partners in country (SHOPS Plus country offices may be able to help!)
IQVIA	Commercial data providers, track wholesale distribution (may include NGO/SMO volumes)	Data must be purchased
Nielson		

Other potential sources to explore

- Import/Export Data
- Country Quantification Reports
- FDA Registrations– will show what products are registered for sale in the country to help identify what you might be missing
- SHOPS Plus Private Sector Assessments (recent ones include: DRC, Cote D'Ivoire, Madagascar, Philippines)
- FP Watch (India, Myanmar, DRC, Nigeria) or other facility audits
- Wholesalers/distributers – in some countries SHOPS Plus has had success in approaching these groups directly and getting data on volumes

Beware of double counting!

When using data from multiple sources the same product might appear in multiple databases so you may not be able to simply add up across data sources!



Illustrative Example

Total
≠
100k + 75k+20k

because must account for overlap!

Puzzle 2: What is already in HMIS?

For NGOs and SMOs need to map their provision by delivery channel as it might be the case that only *some* of what they do is captured in the HMIS.

✓ = data being captured in HMIS **n/a** = does not use channel ■ = missing

	Mobile Outreach	Hospitals/ Clinics	Social Franchises	Socially marketed products	Other (specify)
DKT	n/a	✓	✓		✓ (sales to public)
PSI	✓	✓	✓		n/a
MSI	✓	✓			✓ (public sector support)
IPPF	n/a	✓	n/a	n/a	n/a
Local SMO	n/a	n/a	n/a	✓	n/a
Private Hospitals	n/a	✓ (partially)	n/a	n/a	n/a
Private Clinics	n/a		n/a		n/a
Pharmacies	n/a	n/a	n/a		(commercial sales)

Illustrative example– fill out for your country based on discussions with partners

Puzzle 3: Where in the supply chain?

Shipped to the country
(note: some products also locally manufactured)

Held in warehouse
(may be central or regional)

Distributed from warehouse
(to clinic vs to regional warehouse)

Dispensed from clinic

Client receives method

HMIS

LMIS

Private Sector Data Sources

Import/export data

Product sales to wholesalers

Product sales to clinics

Services provided to clients

Applying Wastage Discounts

- "Wastage" refers to loss of product across different levels of the supply chain:
  - Expired product
  - Product being used for other uses
  - Product being lost or destroyed
  - ***This does NOT include client wastage (e.g. women receives 3 pill cycles but does not take them all)– this wastage is accounted for later in the EMU tool***
- The further back in the supply chain data is counted the more opportunity for wastage
- Limited evidence on wastage; 10% wastage discount used by PSI for "distribution" data (e.g. product leaving warehouse).
- Consider higher discount if higher up in the supply chain

Reference: https://europepmc.org/article/pmc/pmc3684543

Puzzle 4: What is still missing?

- Once you aggregate together your data (adjusting for overlap between sources and removing what is already being reported into HMIS, discounting based on where in the supply chain its counted) – there is still an outstanding issue:
  - **What are we still missing?**
    - Can we find this data?
    - Can we estimate how much is missing?
    - If what is missing is *very small* then maybe its okay to just leave it out . . .

Lessons learned and next steps

Alternative approach trialed in 9 countries

- Data on the commercial private sector is limited
- In cases where NGOs and/or socially marketed products make up a large portion of the private sector market, there is often close alignment between the current EMU private sector adjustment and private sector user estimates.
- Where private sector condoms are a large share of the method mix, using private sector data instead of the adjustment factor may produce a more viable trend.
- Despite data limitations, in most countries examined using the available private sector data, as opposed to the private sector adjustment, produces similar or better results for inclusion in EMU

Preliminary recommendations by country

Country	Preliminary Recommendations & Key Findings
Afghanistan	DHIS2 now includes ASMO and some private pharmacies and providers so no additional work is needed
Benin	Add partial data from PSI (pill and condom sales)—consider adding further discount for supply chain wastage
Burkina Faso	Integrate MSI data from social marketing sales (mostly pills, condoms)
Cameroon	Don't use social marketing data due to inconsistencies; very high condom use creates issues with reliability
Cote d'Ivoire	Add AIMAS data on social marketing sales
Kenya	Add NGO and social marketing data; but need to confirm in country not double counting (as there is work underway to include private sector providers in HMIS)
Madagascar	Add social marketing data for condoms; other methods appear to be already be included in EMU
Nepal	Add NGO and social marketing data; additional data may be available locally. (Note: since publication DHIS2 has been updated to directly capture NGO and social marking reporting).
Tanzania	Add social marketing data; NGO provision already captured in DHSI2

Recommendations for EMU (pt 1)

- Adding additional private sector data (that is not already captured in the HMIS) to EMU instead of the private sector adjustment factor is generally recommended.
- Given the variability of the size of the private sector, as well as the level of integration of private sector clinic data into national service statistics, in some countries it may be most appropriate to limit the inclusion of private sector data (especially social marketing) to specific methods, such as pills.
- Condom volumes are particularly problematic for modeling, as condoms may be used for dual or HIV protection only purposes, as well as handed out freely. Condoms need to be considered carefully, and potentially include a discount factor or even exclude altogether in contexts where they are a small share of the method mix (as is already common practice with EMU).

Recommendations for EMU (pt 2)

- For countries with very small private markets, it may not be worth the effort of going through this process as it will have little impact on overall estimates.
- Emergency contraception has only recently begun appearing in survey method mixes. In the short term, it may be best to exclude it from this analysis. There are often large volumes captured in social marketing sales data that are not able to be reconciled with survey data.
- Further exploration is needed to get a fuller picture what data is being captured by companies like IQVIA and Nielson to better understand how these estimates can be leveraged, especially to give visibility into the commercial private sector.

Next Steps

- Explore opportunities to integrate private sector data into EMU in select countries
  - Leverage data from SMOs & NGOs that is not already captured in the HMIS system
  - Explore potential to access commercial data (e.g. IQVIA, Nielson) – sustainability must be considered

- Explore opportunities for private sector to report *directly* into Government HMIS systems for longer-term sustainability