



Explanation of discrepancy in long-acting reversible contraceptives and permanent methods (LARC/PM) use between data recorded through service statistics and household reporting

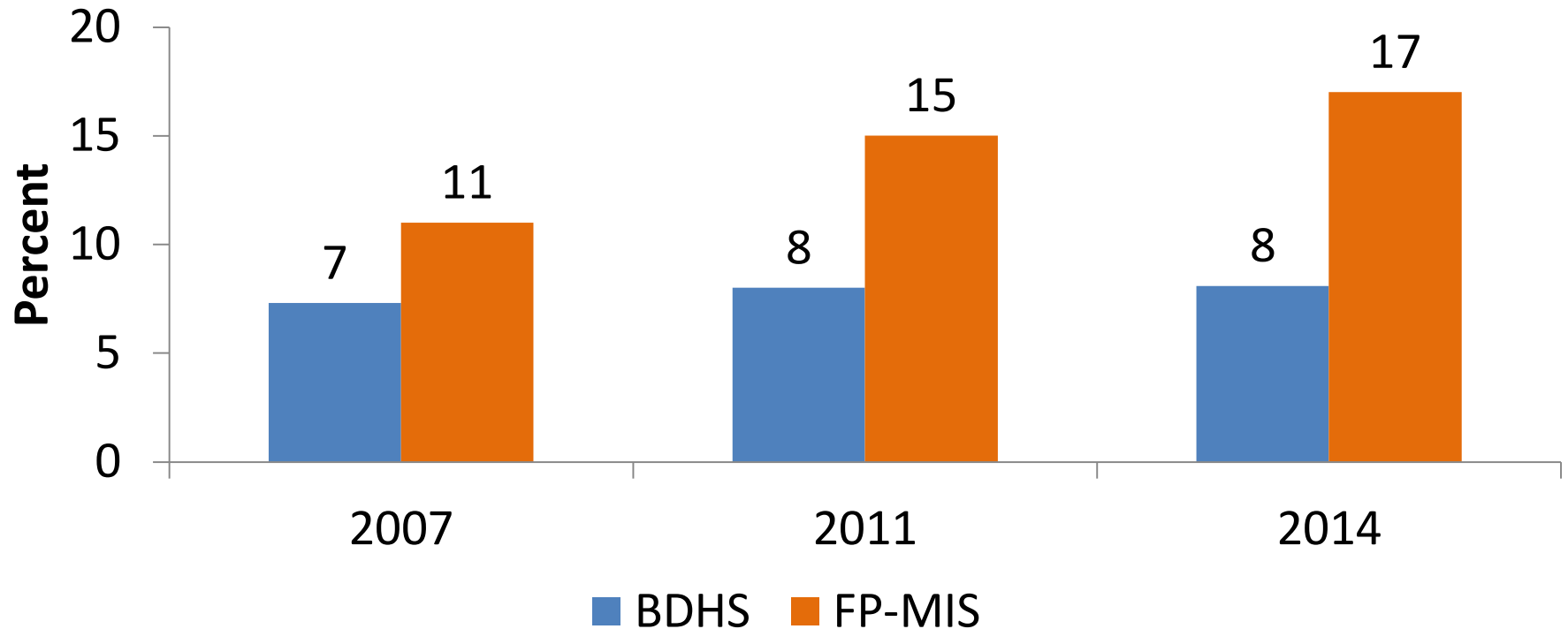
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Background

Percent of currently married women aged 15-49 using LARC/PM (*national estimates*)



LARC/PM: IUD, implant, tubectomy and NSV

Mathematical definition of use rate of LARC/PM

The diagram illustrates the mathematical definition of the LARC/PM use rate. It consists of a central equation where each component is enclosed in a blue box. On the left is the box 'LARC/PM use rate'. This is followed by an equals sign. To the right of the equals sign is a fraction: the numerator is the box '# of LARC/PM user' and the denominator is the box '# of currently married women aged 15-49 years'. To the right of the fraction is a multiplication sign, followed by the box '100'.

$$\text{LARC/PM use rate} = \frac{\text{\# of LARC/PM user}}{\text{\# of currently married women aged 15-49 years}} \times 100$$

Objectives

1. Compare LARC/PM use rate among family planning MIS (FP-MIS), surveillance record and independent survey.
2. Explore reasons for differences between FP-MIS data with surveillance data.

Methods and procedures

Study area

- **Comparison area** of Matlab health and demographic surveillance (HDSS)
- 16 villages – 13 in Daudkandi and 3 in Matlab South
- 10 FWAs (FP-MIS's field worker) cover the villages.

Study population: All currently married woman of reproductive age (15-49 years) in the area

Reference period: Household visiting cycle May-June 2017. Visiting cycles of FWAs and HDSS's field workers are same.

Outcome: LARC/PM use

Program characteristics of HDSS area

Matlab HDSS

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graph TD; A[Matlab HDSS] --> B[icddr,b service area:]; A --> C[Comparison area:];
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icddr,b service area:

- Usual govt. health and FP services are available
- icddr,b provides health and FP services parallel to govt.
 - *Selected MCH services*
 - *FP services*
- Health and demographic data collection bi-monthly

Comparison area:

- Usual govt. health and FP services are available
- Health and demographic data collection bi-monthly

Comparability of FP-MIS and HDSS: FP data collection

FWAs (primary data collectors of FP-MIS)	CHRWs (primary data collectors of HDSS)
Two months visiting cycle	Two months visiting cycle
Work for FP promotion <ul style="list-style-type: none">- Provide FP information- Provide pills and condoms	Do not work for FP promotion <ul style="list-style-type: none">- Do not provide- Do not provide
Collect contraceptive acceptance data	Collect contraceptive use data

For LARC/PM, acceptance and use are same due to nature of the methods

Study method

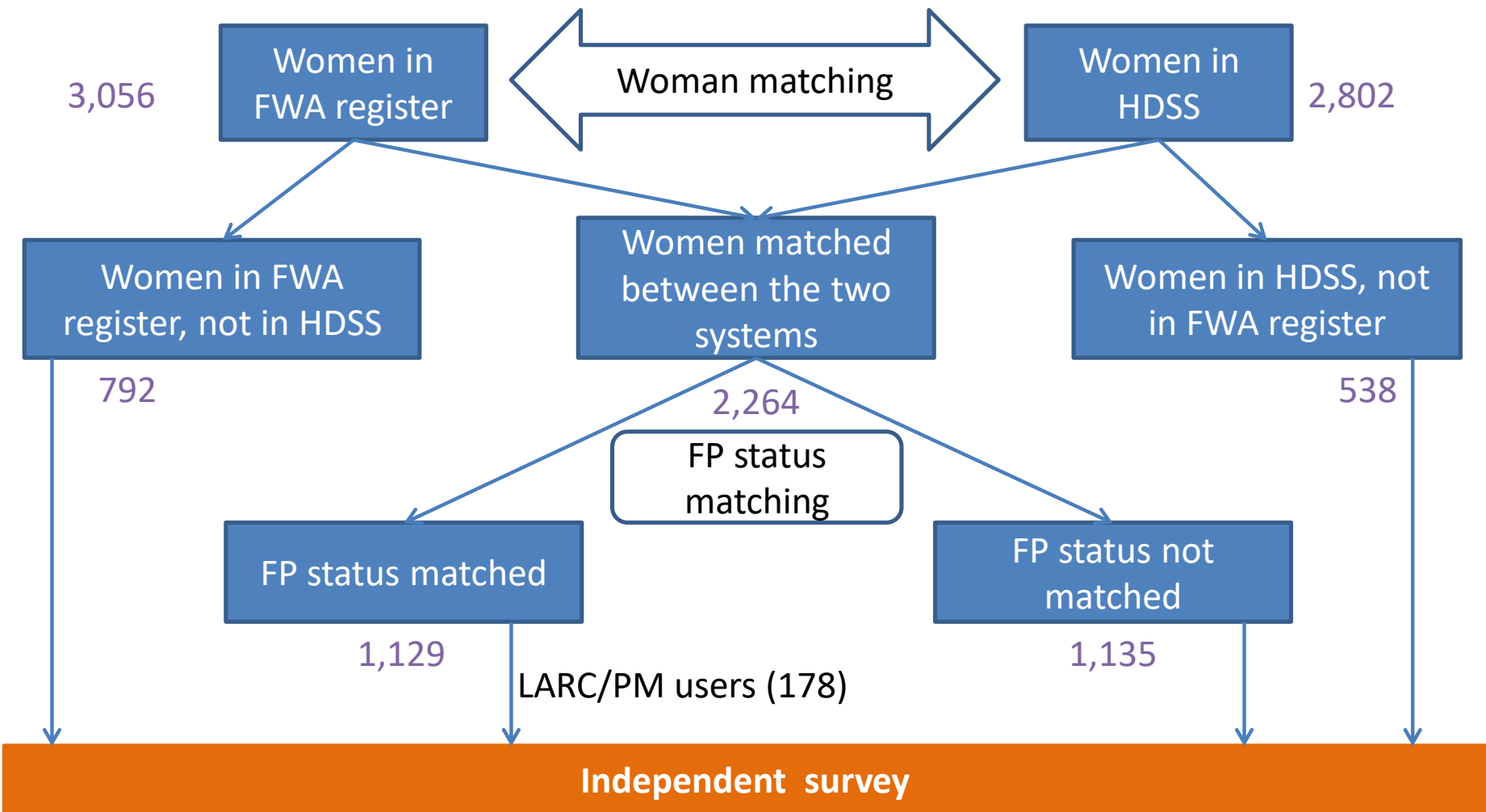
- Verify individual woman's FP record between FP-MIS and HDSS
 - Match women between the two sources by name and husband's name in a village
 - Match FP method use status
- Independent survey equivalent to DHS (only FP use) among women
- ***Strength of the independent survey:*** Data collectors did not have prior information about FP method use of the respondents

Results

FP method specific use rate based on FWA register and HDSS

FP method	% using method	
	FWA register (n=3,056)	HDSS (n=2,802)
LARC/PM (<i>Tubectomy, NSV, IUD, implant</i>)	13.2	8.2
Short acting (<i>pill, injectable, condom</i>) and <i>other</i>	47.1	25.3

Matching of women between FWA register and HDSS



Method specific use rate by groups of women

Matching between HDSS and FWA register

Groups of women by matching status

	Women and method use matched (N=1,129)	Women matched, but method unmatched (N=1,135)		Women in HDSS but not in FWA reg. (N=538)	Women in FWA reg. but not in HDSS (N=792)
		FWA reg.	HDSS		
% use LARC/PM	15.8	8.7	3.2	3.0	16.0
% use short acting method	28.8	69.1	23.9	21.1	41.8

Characteristics of the women who are in FWA register but not in HDSS

Characteristics	N=792	LARC/PM use rate (%)	
		FWA reg.	Survey
Left the village or died before May 2017	512		
49+/divorced/widowed before May 2017	139	16.4%	N/A
Unidentified	37		
Currently married women of age 15-49 living in the area	104	9.5%	6.0%

688 (23%) recorded in FWA register should not be in the register



Method specific use rate by groups of women

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Women in HDSS but not in FWA register – comparison between HDSS and independent survey

% using method	Women in HDSS only (N=538)	
	HDSS	Survey
LARC/PM	3.0	2.4
Short acting method	21.1	24.4

- Non-users were more likely to be excluded from FWA register

Method specific use rate by groups of women

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Women matched between HDSS and FP-MIS but method unmatched – comparison among FWA reg., HDSS and survey

% using method	Women matched, method unmatched (N=1,135)		
	FWA register	HDSS	Survey
LARC/PM	8.7	3.2	3.2
Short acting method	69.1	23.9	29.2

- Many of the LARC/PMs recorded in FWA register were not in the HDSS and not found in survey

Method specific use rate by groups of women

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Women and their method matched – comparison among FWA register, HDSS and Survey

Women and method matched (N=1,129)

	FWA register	HDSS	Survey
% use LARC/PM	15.8	15.8	15.0

- Survey didn't capture some of the LARC/PMs as LARC/PM

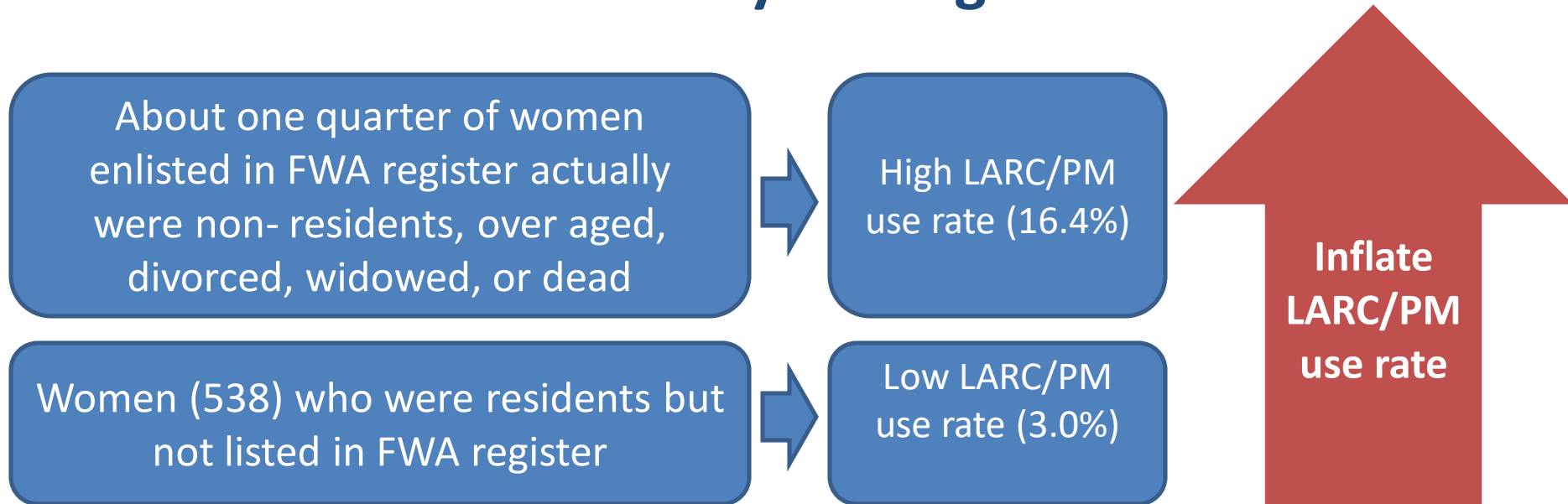
LARC/PM use rate in FP-MIS, HDSS and survey: final estimates

	FP-MIS	HDSS	Survey
Number of women	3,056	2,802	2,906
LARC/PM use rate (%)	13.2	8.2	7.7

How good was the independent survey to capture LARC/PM by method?

Number of users (FWA register and HDSS)	Number of users (Independent survey)						Total
	Tubectomy	NSV	Implant	IUD	Injec.	No method	
Tubectomy	110					4	114
NSV		10			1	2	13
Implant			8				8
IUD				1			1

Summary findings



- The independent survey slightly underreported the use of tubectomy and NSV (approximately **0.6% point**)
- About 11% women reported that they were visited by FWAs in last 6 months
- About 90% women reported that they were visited by HDSS worker in last 6 months

Thank you