

## SESSION 4- DATA DRIVEN DECISION MAKING CASE STUDY 1- IMMUNIZATION

### The Case study

The Universal Immunization Program (UIP) of India, which provides free vaccines to all eligible children and pregnant women, is also implemented in India. The state governments have undertaken various measures to expand access to vaccines and improve immunization rates. Initiatives like Mission Indradhanush and Intensified Mission Indradhanush have been particularly significant in reaching out to vulnerable and under-served populations.

Figure: Vaccination coverage in India by NFHS-5

Indicators	(2019-20)			(2015-16)
	Urban	Rural	Total	Total
Children age 12-23 months fully vaccinated based on information from either vaccination card or mother's recall (%)	75.5	76.8	76.4	62
Children age 12-23 months fully vaccinated based on information from vaccination card only (%)	83.3	84	83.8	77.9
Children age 12-23 months who have received BCG (%)	94.7	95.4	95.2	91.9
Children age 12-23 months who have received 3 doses of polio vaccine (%)	79.2	80.9	80.5	72.8
Children age 12-23 months who have received 3 doses of penta or DPT vaccine (%)	86	88.1	87.9	81.1
Children age 12-23 months who have received the first dose of measles-containing vaccine (MCV) (%)	87.1	88.1	87.9	81.1
Children age 24-35 months who have received a second dose of measles-containing vaccine (MCV) (%)	30.4	32.4	31.9	Na
Children age 12-23 months who have received 3 doses of rotavirus vaccine (%)	34.9	37	36.4	Na
Children age 12-23 months who have received 3 doses of penta or hepatitis B vaccine (%)	83	84.2	83.9	62.8
Children age 12-23 months who received most of their vaccinations in a public health facility (%)	87.7	97	94.5	90.7
Children age 12-23 months who received most of their vaccinations in a private health facility (%)	11.1	1.6	4.2	7.2

Population in one PHC = 30000

Total number of Live Births- 600

The PHC record of vaccines was gathered and included in the study. The data is of a PHC-HWC for the year 2022-23.

Vaccine	MCTS / ANMOL/ TeCHO	HMIS
Pentavalent 1	570	590
Pentavalent 2	560	588
Pentavalent 3	540	575
Oral Polio Vaccine-1	570	590
Oral Polio Vaccine-2	565	588
Oral Polio Vaccine-3	540	575
MR 1	530	580
MR 2	420	500

Vaccine utilization data gathered from eVIN

Vaccine	eVIN
Pentavalent Vaccine	1890
Oral Polio Vaccine	1900
MR Vaccine	910

### QUESTIONS

*One question per group*

- Q1. What is the reason for vaccines administered or not administered?
- Q2. What could be the reason for difference in coverage data between MCTS/ANMOL/TeCHO and HMIS?
- Q3. What is the reason for coverage more than vaccine Utilization in case of MR vaccine?
- Q4. What is the reason for Utilization of vaccines in excess of coverage and allowable wastage?
- Q5. Why the coverage of 3<sup>rd</sup> dose of Pentavalent/ OPV is less compared 1<sup>st</sup> or 2<sup>nd</sup> dose?

*Questions for deliberation after discussion of above questions*

- Q6. How can you ensure tracking of children for Full and Complete immunization?
- Q7. What will be your plan of action?

## SESSION 4- DATA DRIVEN DECISION MAKING CASE STUDY 2- NCD

Figure: Diabetes and Hypertension burden in India by NFHS-5

Indicators	(2019-20)			(2015-16)
	Urban	Rural	Total	Total
<b>Women</b>				
Blood sugar level - high (141-160 mg/dl) (%)	6.7	5.9	6.1	Na
Blood sugar level - very high (>160 mg/dl) (%)	8	5.5	6.3	Na
Blood sugar level - high or very high (>140 mg/dl) or taking medicine to control blood sugar level (%)	16.3	12.3	13.5	Na
Mildly elevated blood pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	13.6	11.9	12.4	Na
Moderately or severely elevated blood pressure (Systolic $\geq$ 160 mm of Hg and/or Diastolic $\geq$ 100 mm of Hg) (%)	5.2	5.2	5.2	Na
Elevated blood pressure (Systolic $\geq$ 140 mm of Hg and/or Diastolic $\geq$ 90 mm of Hg) or taking medicine to control blood pressure (%)	23.6	20.2	21.3	Na
<b>Men</b>				
Blood sugar level - high (141-160 mg/dl) (%)	7.8	7.0	7.3	Na
Blood sugar level - very high (>160 mg/dl) (%)	8.5	5.5	6.3	Na
Blood sugar level - high or very high (>140 mg/dl) or taking medicine to control blood sugar level (%)	17.9	14.5	15.6	Na
Mildly elevated blood pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	17.1	15	15.7	Na
Moderately or severely elevated blood pressure (Systolic $\geq$ 160 mm of Hg and/or Diastolic $\geq$ 100 mm of Hg) (%)	5.9	5.5	5.7	Na
Elevated blood pressure (Systolic $\geq$ 140 mm of Hg and/or Diastolic $\geq$ 90 mm of Hg) or taking medicine to control blood pressure (%)	23.6	20.2	21.3	Na

Population in one HWC/SC =5000

The HWC/SC record of all adults screened for diabetes and hypertension and details of the number of them who tested positive or under medication were gathered and included in the study. The data is of a HWC/SC for the year 2022-23.

Age groups	Population	CBAC Forms filled	Screened	Suspected	Diagnosed	Under treatment/ Medications
30-39 years - Female	440	264	29	17	7	5
30-39 years – Male	484	291	10	18	8	4
40-49 years- Female	438	306	160	20	12	9
40-49 years- Male	455	296	143	21	14	9
$\geq$ 50 years- Female	250	160	80	8	12	10
$\geq$ 50 years- Male	230	145	65	20	14	12

### QUESTIONS

*One question per group*

Q1. What is the reason for People screened or not screened?

Q2. What could be the reason for difference in number of CBAC forms filled and number of people screened?

Q3. What is the reason for individuals who are suspected more than individuals who are screened (30-39 years – Male)

Q4. What is the reason for individuals under treatment (Female >50 years) more than number of individuals suspected?

Q5. What is the reason for discrepancy in the number of people diagnosed and number of people received treatment?

*Questions for deliberation after discussion of above questions*

Q6. What will be your plan of action?