India Primary HealthCare Support Initiative

Supporting systems for CPHC: Using data for decision-making and digitization

District CPHC Strengthening Workshop

JOHNS HOPKINS BLOOMBERG SCHOOL of PUBLIC HEALTH

IIPH INDIAN INSTITUTE of PUBLIC HEALTH GANDHINAGAR
ESTABLISHED BY GOVT. OF GUJARAT AND PHFI

IIPH INDIAN INSTITUTE of PUBLIC HEALTH SHILLONG
ESTABLISHED BY GOVT. OF MEGHALAYA AND PHFI

ALL INDIA INSTITUTE OF MEDICAL SCIENCES BHUBANESWAR

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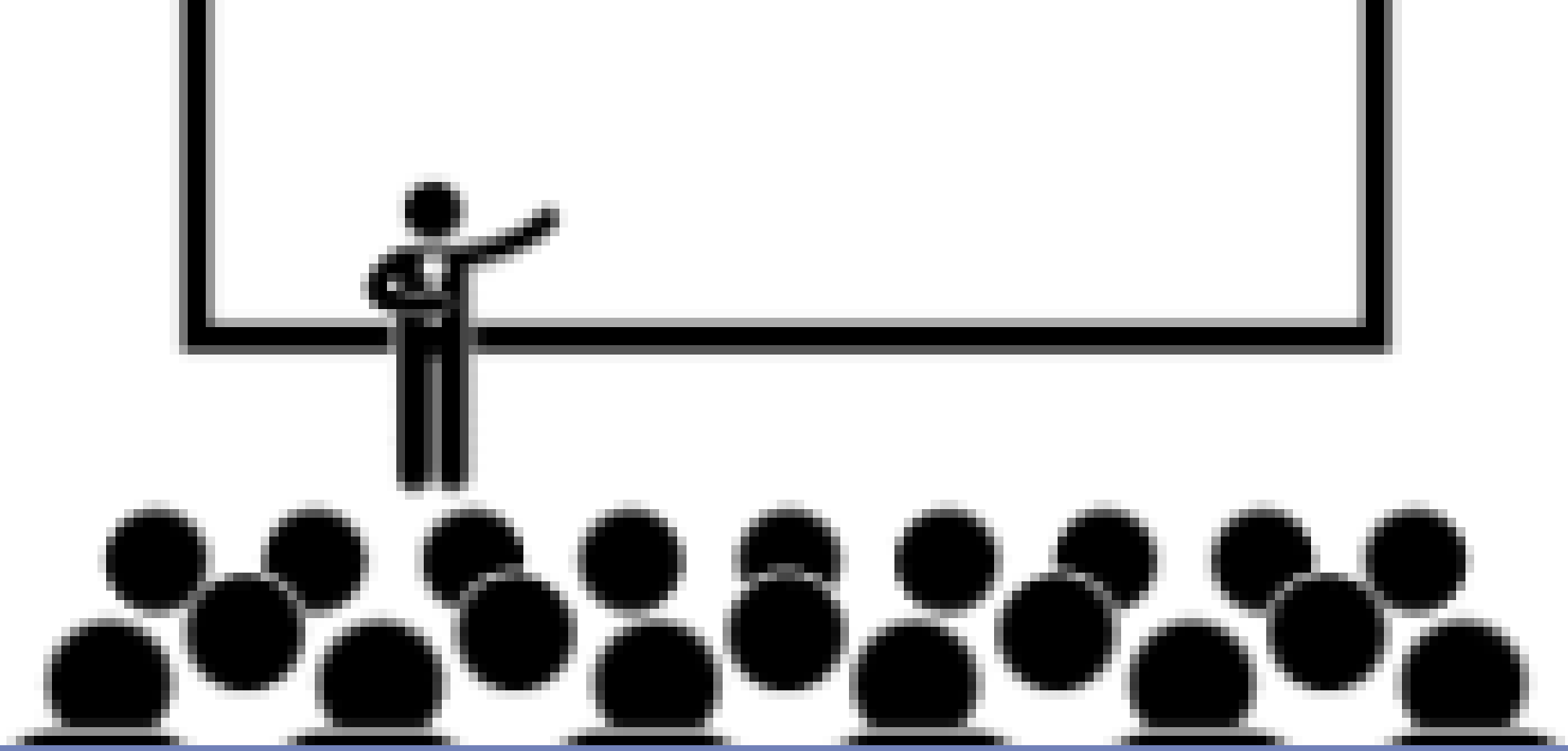
शरीरमाद्यं खलु धर्मसाधनम्

Learning Objectives

- Understanding the concept of Data and Data driven decision making.
- Gaining Knowledge on different sources of data commonly available.
- Able to effectively use data and various digital platforms for informed decision-making



LECTURE

Data

Data is a fact or an information

Data plays a crucial role in decision-making by providing (1)

- Valuable information
- Insights
- Evidence to support the decision-making process.

Sources of Data

Civil Registration System- Population census	CPHC IT System	Technology Enabled Community Health Operations (TeCHO+)	Health Management Information System (HMIS)	District Report
ICDS-MIS	Niskshay	NACO Report	NFHS report	Kayakalp Portal
Integrated Health Information Platform (IHIP)	State Report	Health & Wellness Center Portal	Home Based New born Care district report	

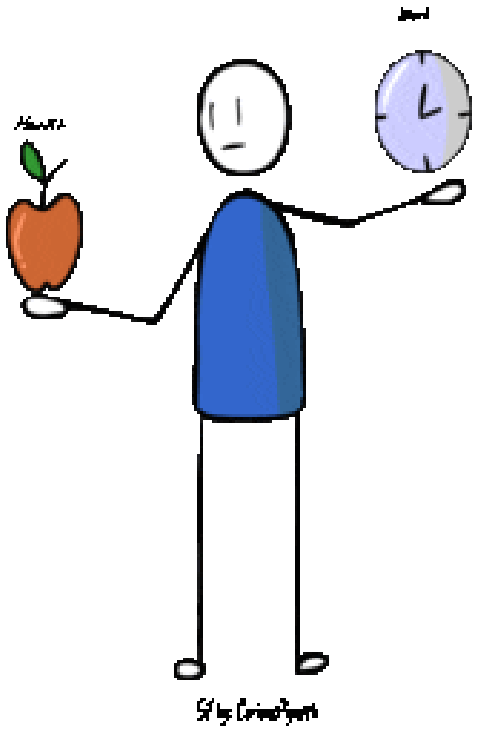
Data commonly available at HWC

- Population-based household list- Registration of all individuals and families in the catchment area.
- Record of all service delivery at HWC and PHC.
- Service delivery coverage at the HWC
- Health outcomes of the community.
- HMIS data

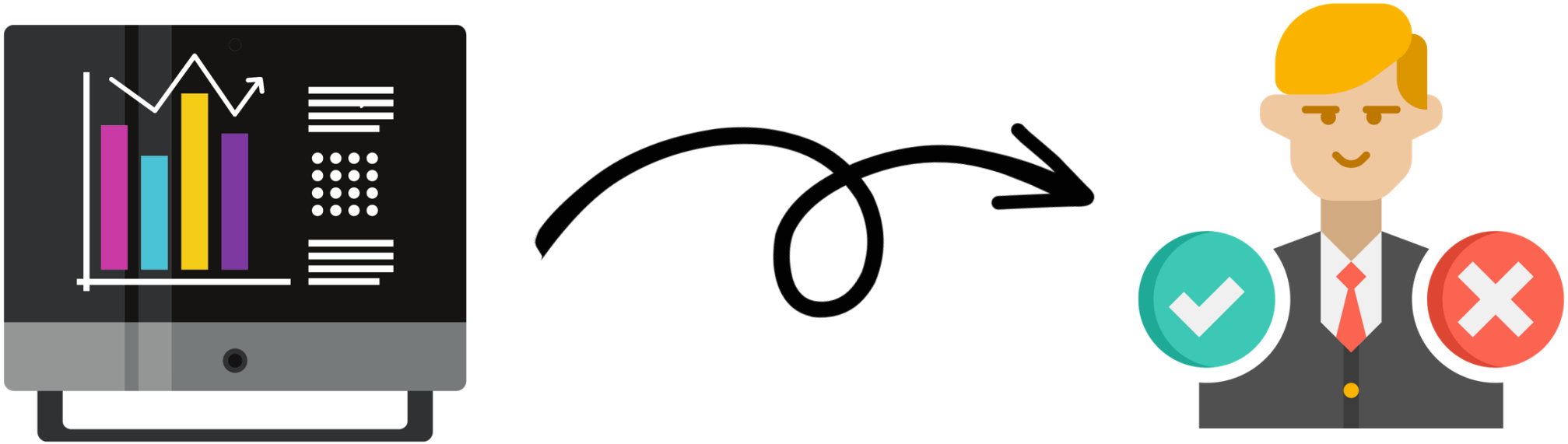
Decision making

- Decision-making is the cognitive process of selecting a course of action or choosing between different alternatives. (2)

- It involves-
  - assessing and evaluating various options
  - weighing their potential outcomes
  - making a choice that is deemed most favourable or appropriate

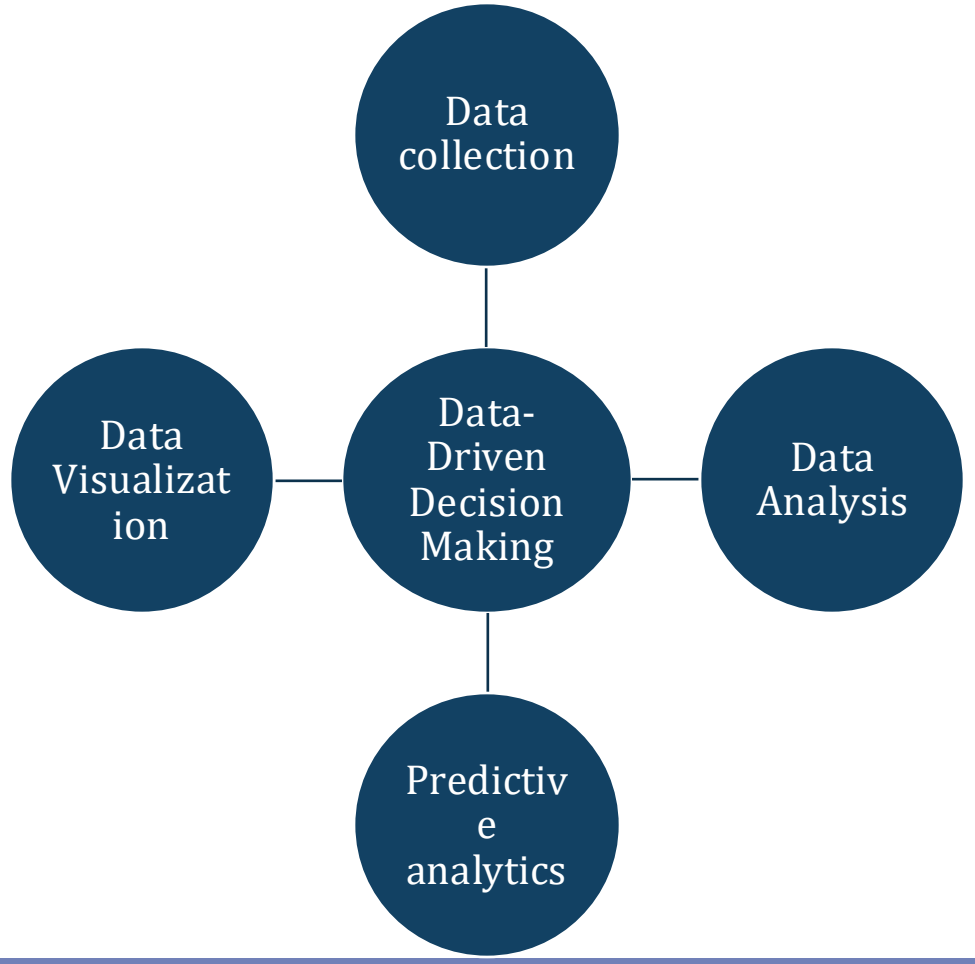


Data-Driven Decision Making



An approach to making informed decisions based on analysing and interpreting relevant data. (3)

Data in Decision Making



Importance: Data-Driven decision Making

Improved Patient Outcomes

Evidence-Based Healthcare Planning

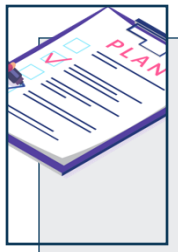
Efficient Resource Allocation

Disease Surveillance and Early Detection

Monitoring and Evaluation

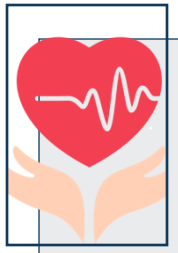
Data Sharing and Collaboration

Outcomes: Data-Driven Decision Making



Improved Healthcare Planning

Targeted Interventions



Enhanced Health status

Efficient Resource Allocation

Informed Policy Decisions

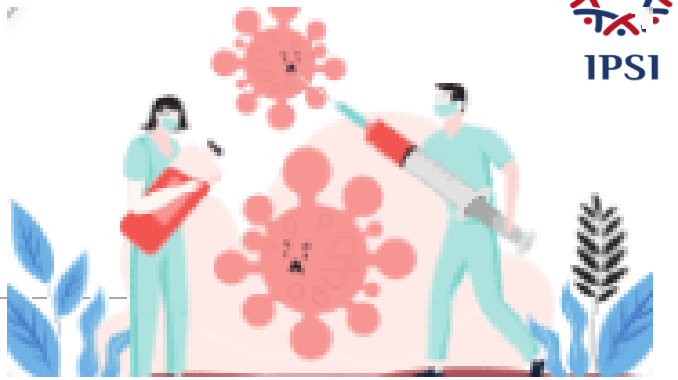
Steps: Data-driven decision Making

Common data-driven decisions taken at a PHC/ HWC

- Declaration of hot spots based on the number of covid cases during the covid-19 pandemic.
- Fumigation and vector control based no malaria or dengue cases.
- Pre-monsoon surveillance based on previous year data.
- Declaration and reporting of outbreak based on number of cases.
- Observations at AWC and pre schools based on ICDS data.
- Use of Population registry (family health survey) for Screening of NCD, family planning services, immunization services and Maternal health.

CASE STUDY

Case Study-1



- The Universal Immunization Program (UIP) of India, which provides free vaccines to all eligible children and pregnant women, is implemented in all states of India.
- The immunisation coverage for children aged 12-23 months fully vaccinated is 83.8 %, and those who have received three doses of Pentavalent vaccine is 87.9%. (NFHS-5)

The data is of a PHC-HWC for the year 2022-23.		
Vaccine	MCTS/ TeCHO/ ANMOL	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

Population: 30000
Total No of Live Births- 600

Discussion 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?

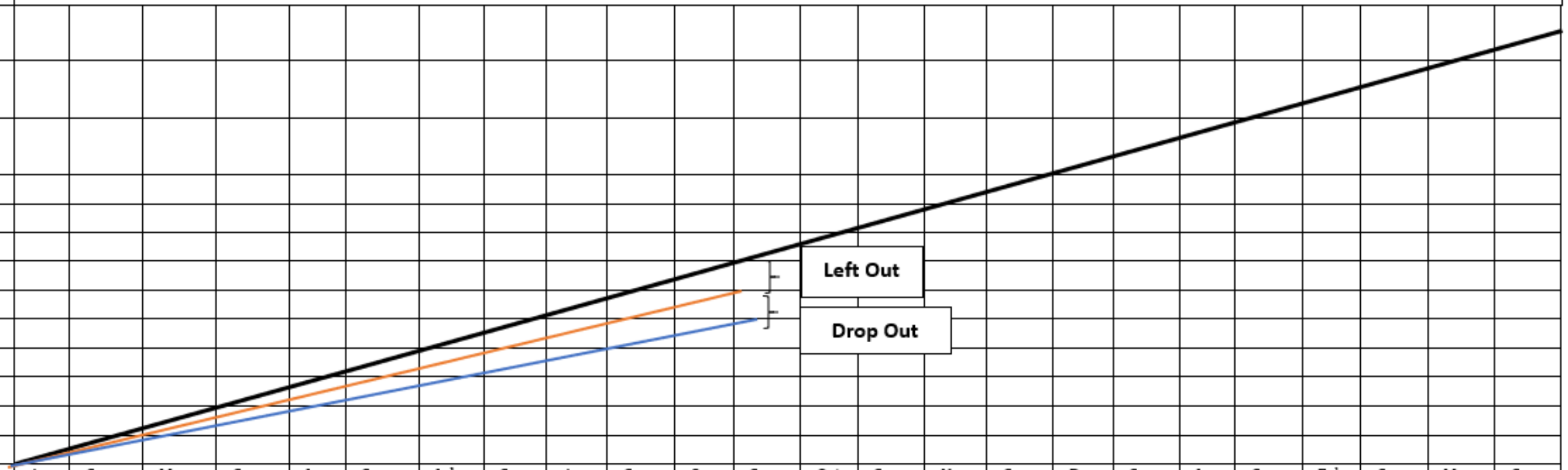
Q5. Why the coverage of 3rd dose of Pentavalent/ OPV is less compared 1st or 2nd dose?

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?

Vaccine coverage chart of Penta 1 and Penta 3



Cumulative monthly target																								
30*12=360																								
30*11=330																								
30*10=300																								
30*9=270																								
30*8=240																								
30*7=210																								
30*6=180																								
30*5=150																								
30*4=120																								
30*3=90																								
30*2=60																								
30*1=30																								
30*0=0																								
Monthly	Apr	Cum Tot	May	Cum tot	Jun	Cum tot	Jul	Cum tot	Aug	Cum tot	Sep	Cum tot	Oct	Cum tot	Nov	Cum tot	Dec	Cum tot	Jan	Cum tot	Feb	Cum tot	Mar	Cum tot
Total immunized Penta-1	25	25	26	51	25	76	28	104	21	125	25	150	23	173	24	197								
Total immunized Penta-3	20	20	21	41	24	65	23	88	24	112	24	136	24	160	21	181								
Drop out																								
Drop out %																								

Case Study - 2

- The National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases, and Stroke (NPCDCS) is an initiative undertaken by the Government of India to address the growing burden of non-communicable diseases (NCDs) in the country.

- 6.3% men and women have a very high blood sugar level of more than 160mg/dl and 21.3% Men and women have Elevated blood pressure (Systolic ≥140 mm of Hg and/or Diastolic ≥90 mm of Hg) or taking medicine to control blood pressure

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
≥ 50 years- Female	250	160	80	8	12	10
≥ 50 years- Male	230	145	65	20	14	12

Population: 5000

Discussion 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 individuals screened and number of CBAC forms filled?

Q3. What is the reason for individuals under treatment (40-49 years Male) more than number of individuals screened?

Q4. What is the reason for individuals under treatment (>50 Female) Less than number of individuals screened?

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?

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Thank You!!