

Managing a MMSC:

What data is used, where is the data found and what does it mean?

By the end of this session, you will be able to:

- Identify data types used in MMSC
- Locate where each type of data is stored (Zipline, DHIS2, LMIS)
- Understand how to interpret these data points
- Recognize data misalignments and their consequences
- Explore opportunities to synchronize

Refer to page 28 in your Team Member Workbook

A

Pre-Read: Using Data



Your Task:

- Watch the video [How to Use Data to be a Better Manager](#)
- Read the [the Pre-Read Document - Managing a Multimodal Supply Chain \(MMSC\) What Data is Used, Where is the Data Found and What Does it Mean](#)
- Be ready to bring your real-world experience with data disarray and the causes
- Be open to redesigning how we connect our systems for better outcomes



Refer to page 22-23 in your Team Member Workbook

When Data Is Aligned

When Data is Fragmented

01

Impact is measurable

Difficulty in measuring project impact

02

Adequate Stock levels for Distribution to HFs

Stockouts, missed opportunities, and increased disease prevalence

03

Clear Accountability

Confusion over delivery records or usage

04

Prompt intervention for systemic challenges

Persistent Systemic Challenges leading to poor productivity

B Theory: Where Does Data Live?

SYSTEM	WHO USES IT?	DATA IT HOLDS
Fulfillment System	Zipline	Stock Levels, Delivery Data, Product Details, Ordering Data.
Mode, Databricks, Baraza, Jira	Zipline	Delivery Data, Customer/HF Complaints, and Quality Assurance Documents.
Qualtrics	Zipline	Vaccination information from ZD teams.
Health Facility Registers	Health Facilities	Manual vaccination records of individuals.
Monthly Summary Forms MSFs	LIOs, LCCOs, LM&Es	Summary of vaccination information for a health facility
DHIS 2	National and State PHCDA/Partners	Vaccine Coverage Data, Stockouts, Consumption
Open LMIS	NPHCDA/CRSPHCDA/Partners	Vaccine Consumption, Stockouts, and coverage

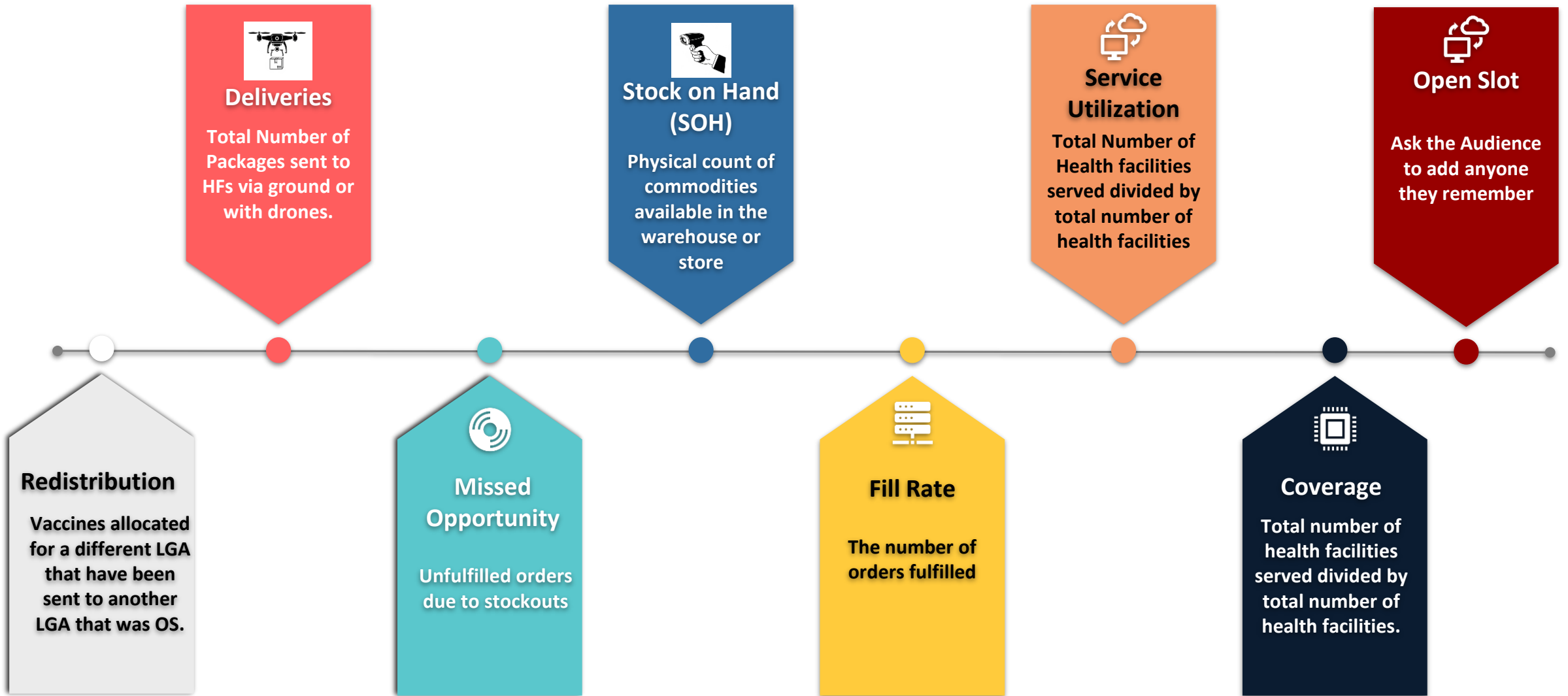
B

Theory: Types of Data Used in MMSC (Ref: CR-1)

Data Type	Purpose	Owners
Stock on Hand (SOH)	Guides national/state resupply decisions for medical commodities	Zipline, CCOs
Delivery Data	Informs rate of demand from health facilities	Zipline App, Feedback Forms
Consumption Data	Measures usage over time	DHIS2, MSFs
Vaccine Coverage	Tracks public health impact	DHIS2, Immunization Summary Tool

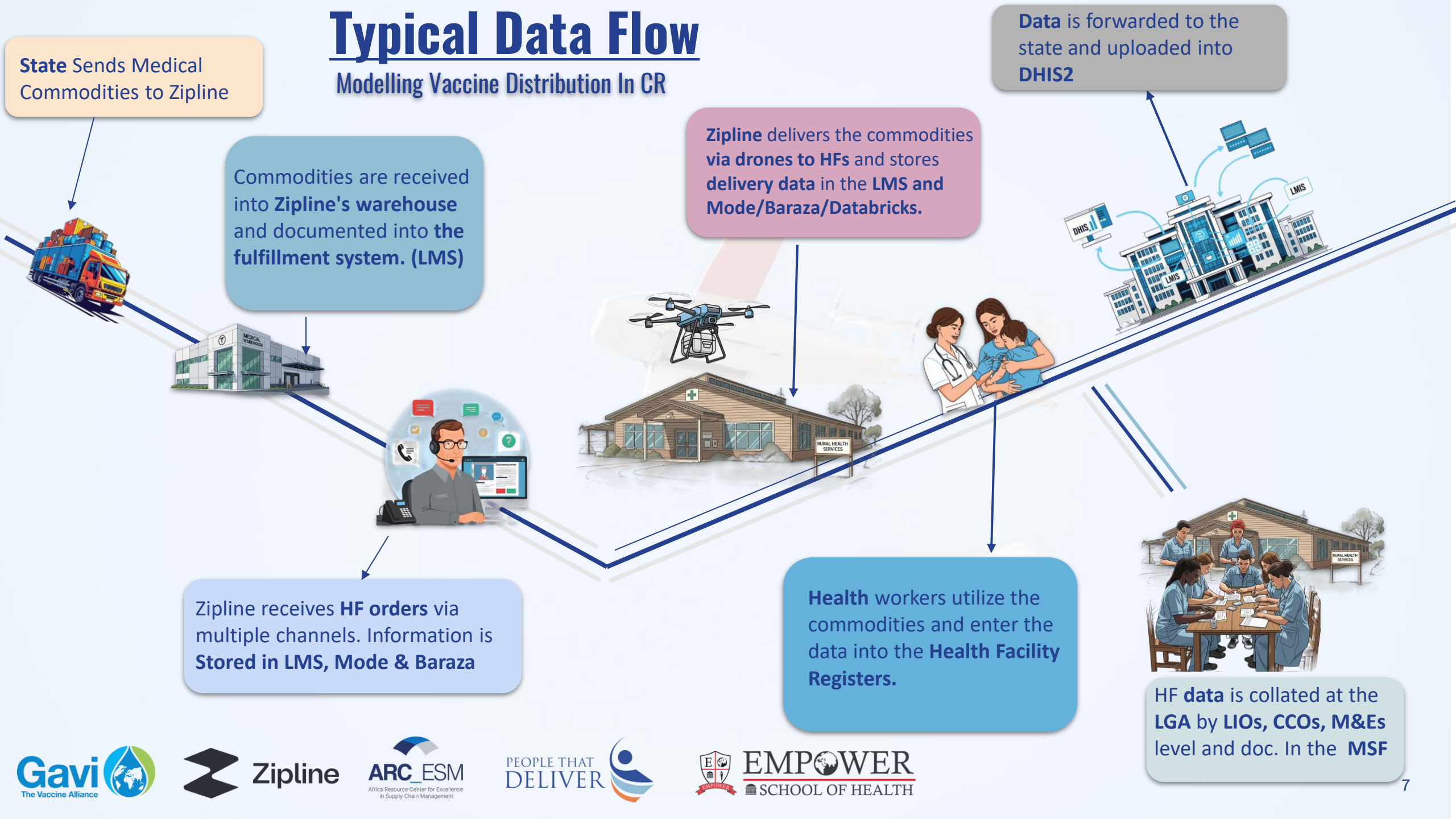
B

Theory: Interpretation of Data Points



Typical Data Flow

Modelling Vaccine Distribution In CR



B

Theory: What Data Misalignment Looks Like



Zipline Delivered Vaccines to health facilities, and the HFs utilize them without entering the data into registers



The health facility staff fails to document utilized vaccines in the vaccine registers



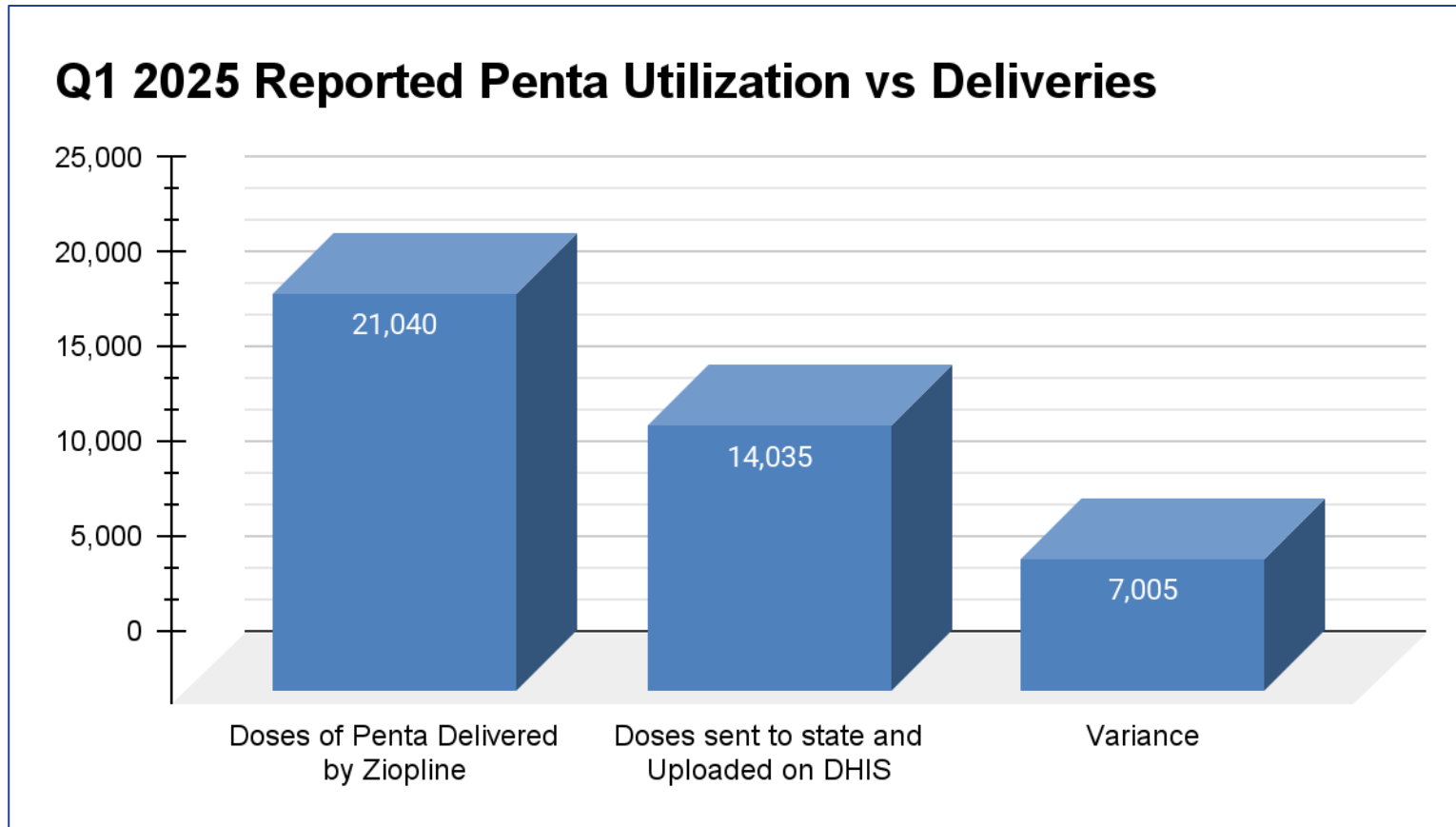
Zipline fails to share daily/weekly SOH data with LCCOs or CCOs fail to check data to enable them update Open LMIS



M&E, LIO and LCCOs reporting different figures from the same LGA on the different platforms they own.

B

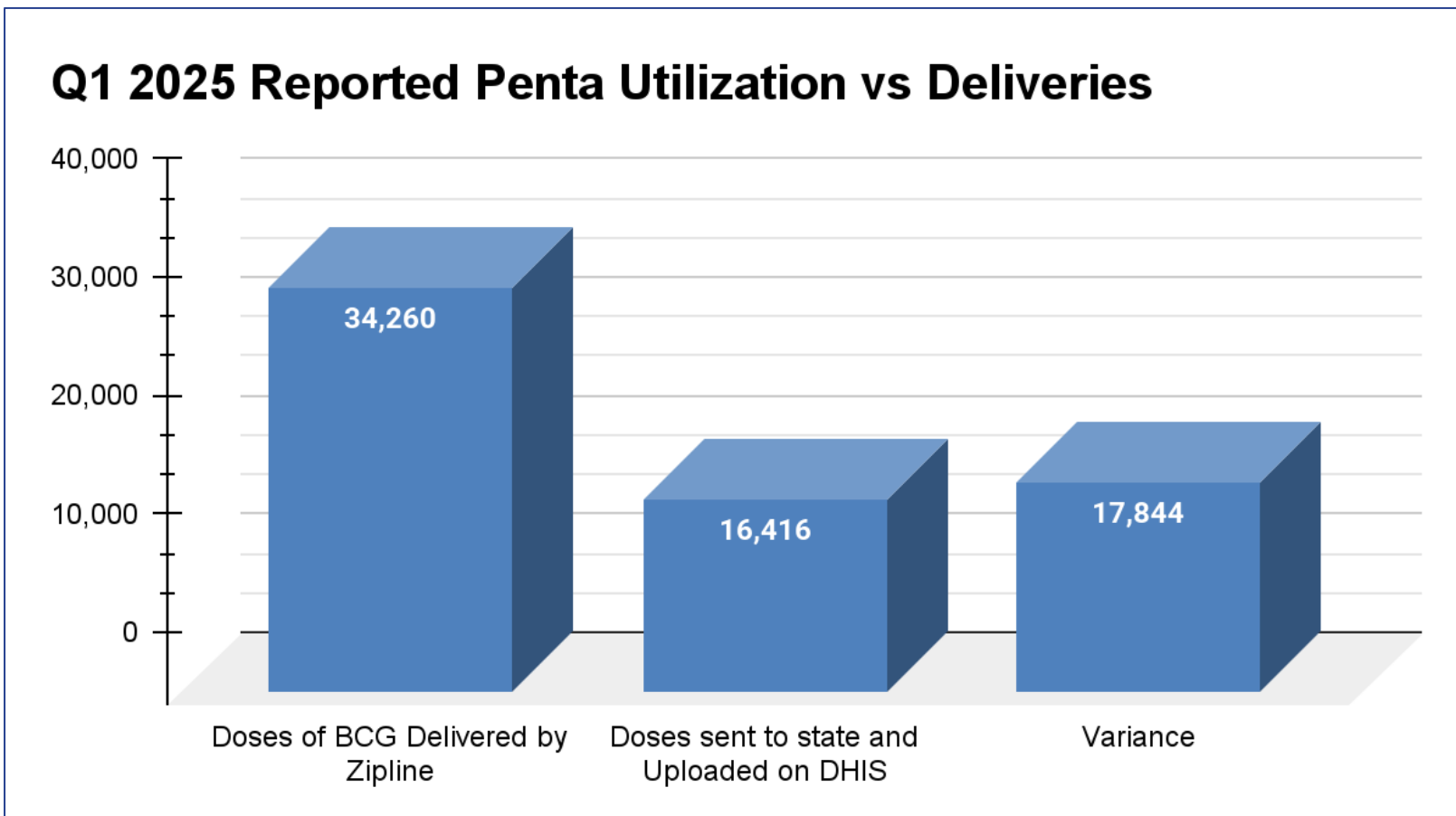
Theory: Example of a Real-Life Challenge - Q1 Penta Vaccine Data Disalignment in CR



33%
of vaccines doses were not accounted for.

B

Theory: Example of a Real-Life Challenge - Q1 BCG Vaccine Data Disalignment in CR



52%
of BCG vaccine doses
were not accounted
for.

B

Theory: Opportunities for Alignment of Data (1)

In a multimodal supply chain like ours, where data flows across drones, warehouses, health facilities, and government platforms, alignment is a necessity. Below are highlights of practical ways Zipline and the Cross River State health system can improve how we collect, share, and act on data.



Joint Audit

Joint data audit (Zipline + LGA)



Shared Dashboard

Shared delivery and resupply dashboard



M&E Validation

Use of M&E focal persons as Zipline feedback validators



Data Integration

Integration of Zipline delivery logs from Qualtrics into DHIS2-compatible formats

B

Theory: Opportunities for Alignment of Data (2)



Joint Audit

What it means:

- Introduce a structured monthly or quarterly exercise where Zipline and LGA M&Es, LIOs, and CCO compare data from both systems.
- Zipline delivery logs vs. HF registers and MSFs, to spot inconsistencies and reconcile them before uploading on DHIS and forwarding to the state.

B

Theory: Opportunities for Alignment of Data (3)



Shared Dashboard

What it means:

Create a simple, co-managed dashboard (Excel, Google Sheets, or BI tool) that shows live Zipline deliveries, pending orders, and coverage.

B

Theory: Opportunities for Alignment of Data (4)



M&E /LIO
Validation

What it means:

Assign or empower M&Es/LIOs to validate data first at the LGA level before it is uploaded on DHIS or sent to the state. Then the State SIO/M&E can serve as validators of the state data, ensuring that Zipline's delivery figures and HF reports align. And the state is synced on commodity supply and coverage data.

B

Theory: Opportunities for Alignment of Data (5)



Data Integration

What it means:

Considering that the ZD teams upload vaccination data from the field, we can explore the option of integrating these vaccination data into DHIS2 directly to reduce issues of manual entering and data loss from non-documentation into HF registers.

C Application: Data Mapping

This session is designed to give us a clear, honest picture of how data flows across our multimodal supply chain. From Zipline to health facilities and from health facilities to government systems like DHIS2 and OpenLMIS.

Group Exercise

Group Activity: As a group, discuss the following questions, then complete a 1-pager that contains the current data flow in the state. Identify gaps and improvement areas.

- What data do you currently use in your work (e.g. stock on hand, order requests, deliveries, consumption)
- Where does the data come from? (e.g. HF registers, Zipline, MSF, or other state tools)
- How does the data inform your decisions?
- Where does that data disappear or break down?

Plenary Discussion: Nominate a group member to summarize and share out the outcome of your discussions, specifically answer the following:

- Where are the gaps in our data synchronization?
- How can Zipline and state teams work toward a common data structure?
- What actions can we commit to immediately?

Refer to page 29 in your Team Member Workbook