Data use for supply chain management: From zero to hero

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16th TechNet Conference
Shaping a resilient and adaptive immunization program

Data Triangulation for Improved Decision-Making in Immunization Programmes

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U.S. Centers for Disease Control & Prevention

October 21, 2020

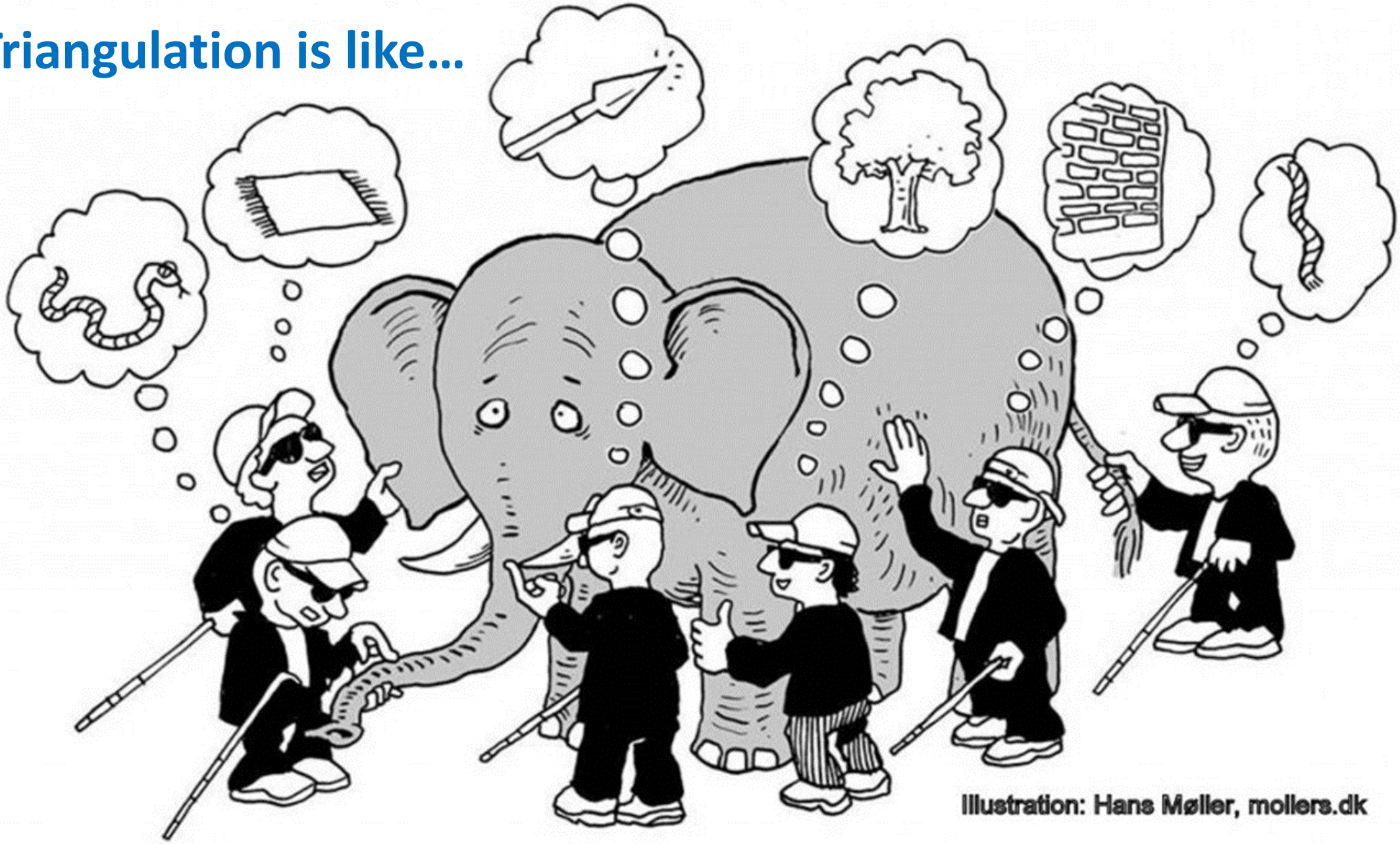
What is Data Triangulation?

Definition: **Synthesis of existing data from two or more sources to address relevant questions for program planning and decision-making**

Identifies and aims to address limitations of any one data source and/or data collection methodology

Encourages deeper insight through making sense of different information and broader context

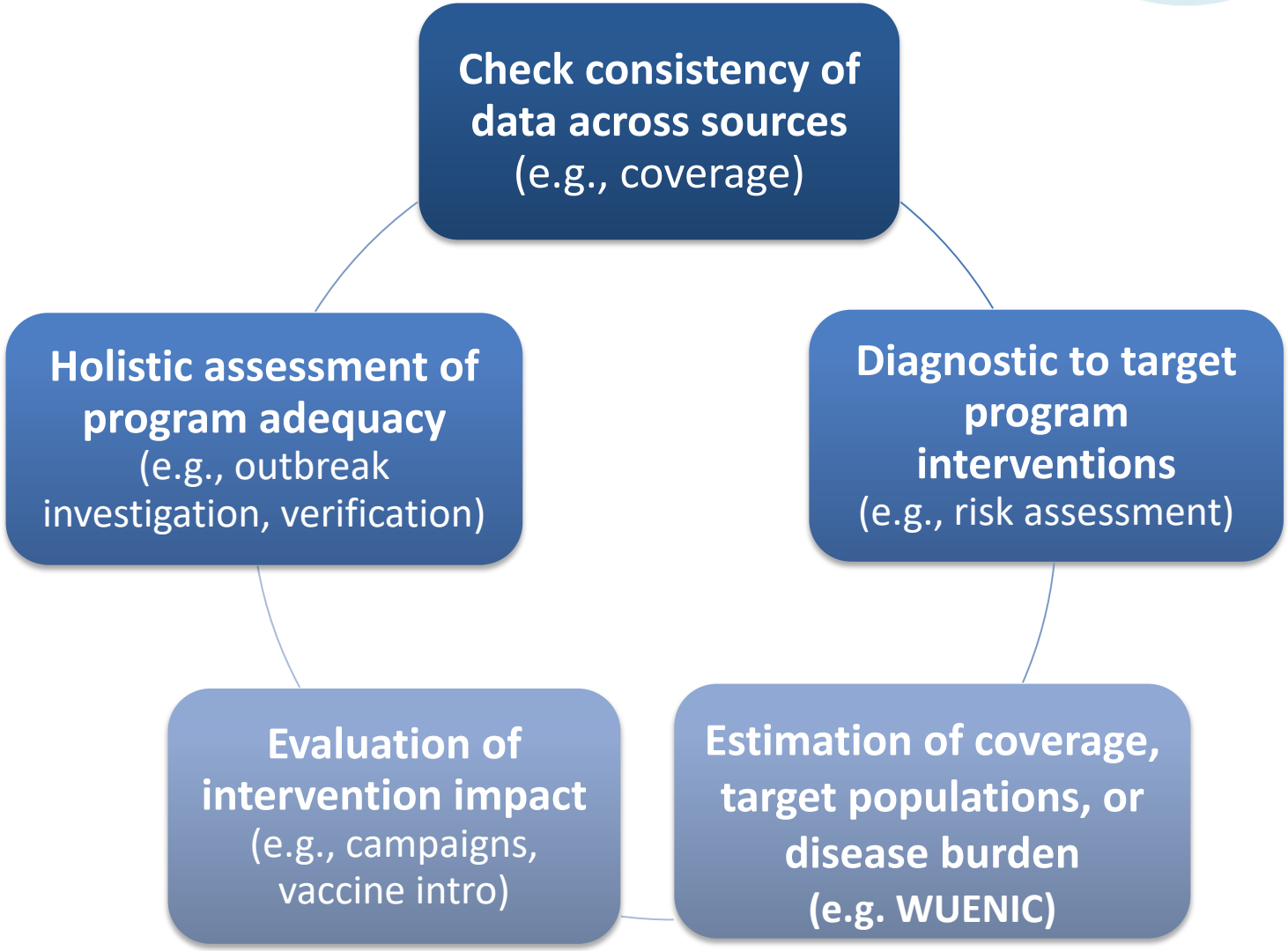
Triangulation is like…



Triangulation Use by EPI

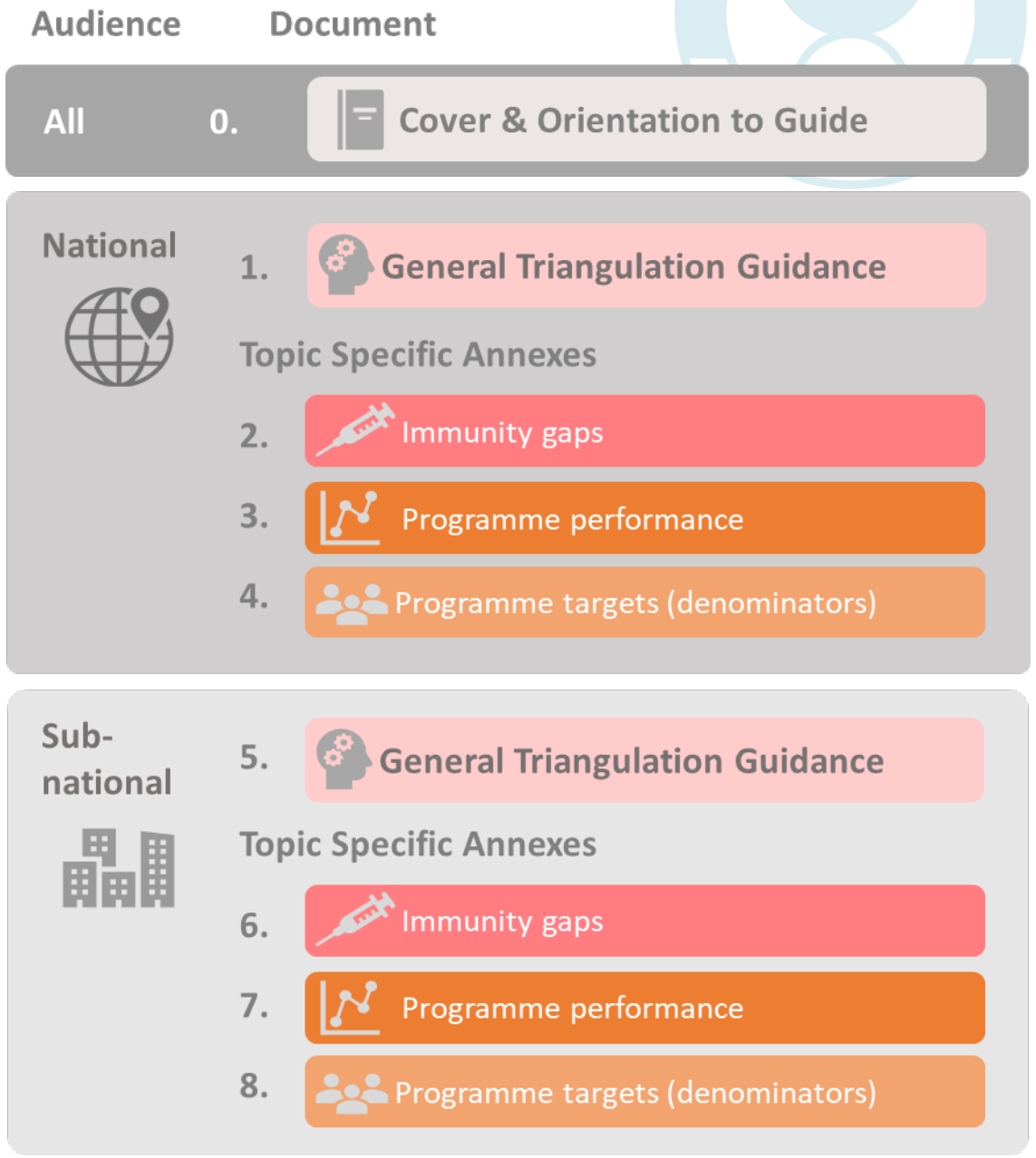
Landscape analysis:
5 types of triangulation
used by EPI

Not just data validation!



Triangulation for Improved Decision-making in Immunization Programs: Draft Guidance (July 2020)

Available at:
https://www.technet-21.org/en/topics/triangulation



WHO, UNICEF, CDC collaboration (Gavi support)

Minimal Criteria for Triangulation

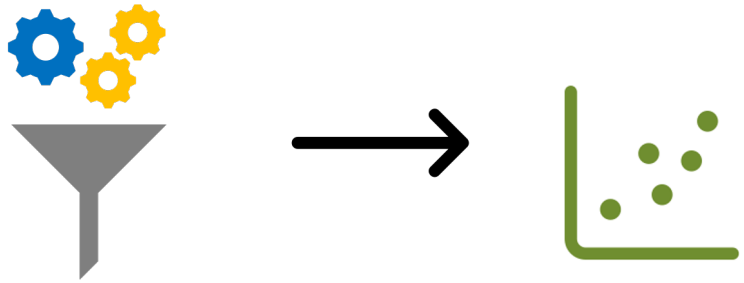
1) Access to two or more data sources, and
2) Data management/analysis capacity, and
3) Willingness to take action on results

Format will vary based on
- level (national vs. subnational)
- frequency (routine vs. ad-hoc)

Triangulation Principles

- Driven by important program objectives
- Use existing data, no new data are collected
- Include diverse data sets (e.g. coverage, stock, surveillance)
- Engage a multidisciplinary team, if possible
- Basic analysis that includes local knowledge in interpretation
- Results communicated for use in improved decision-making

Two Ways to Triangulation Data

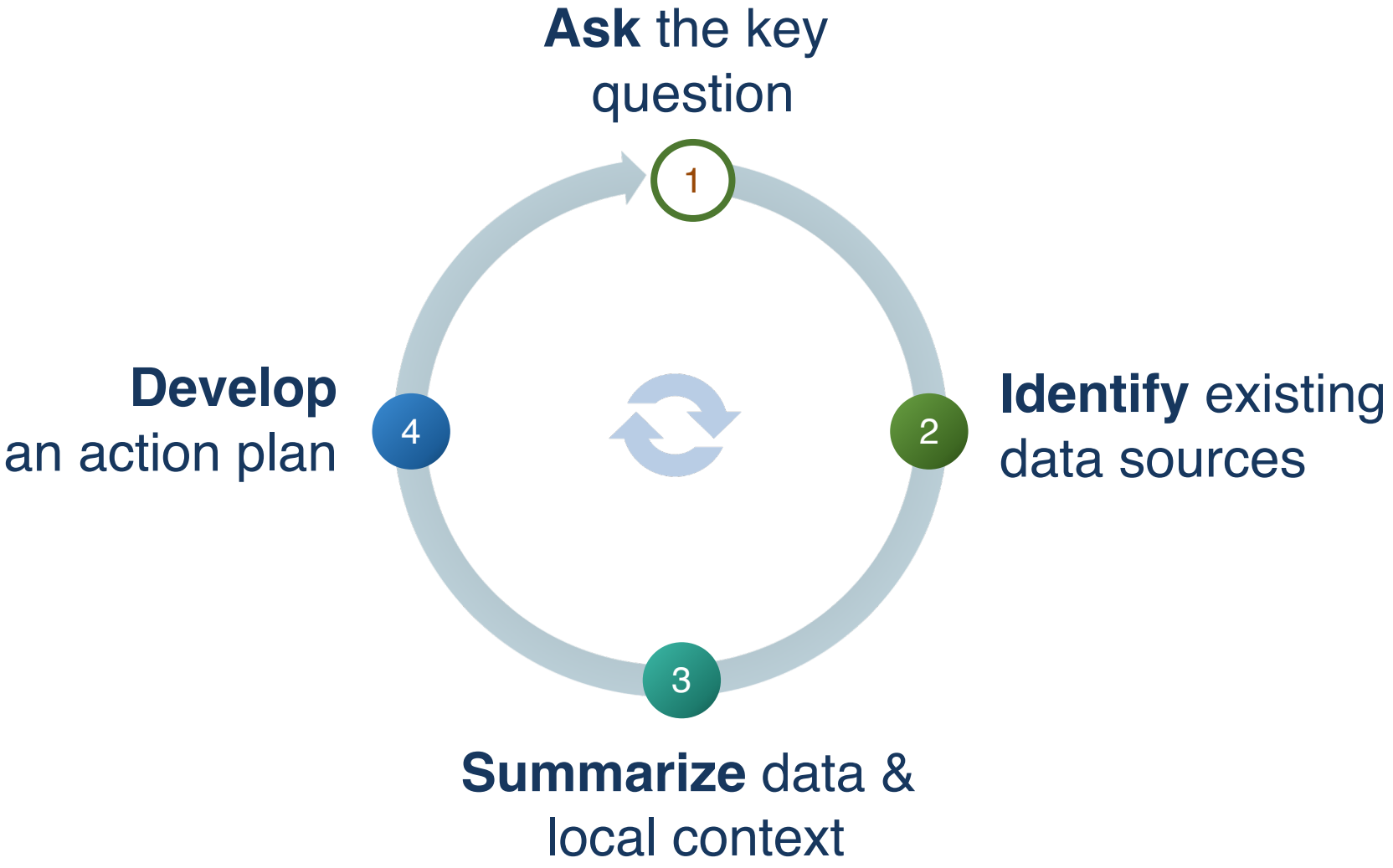


1) Combine data in one analysis (e.g., graph) from start

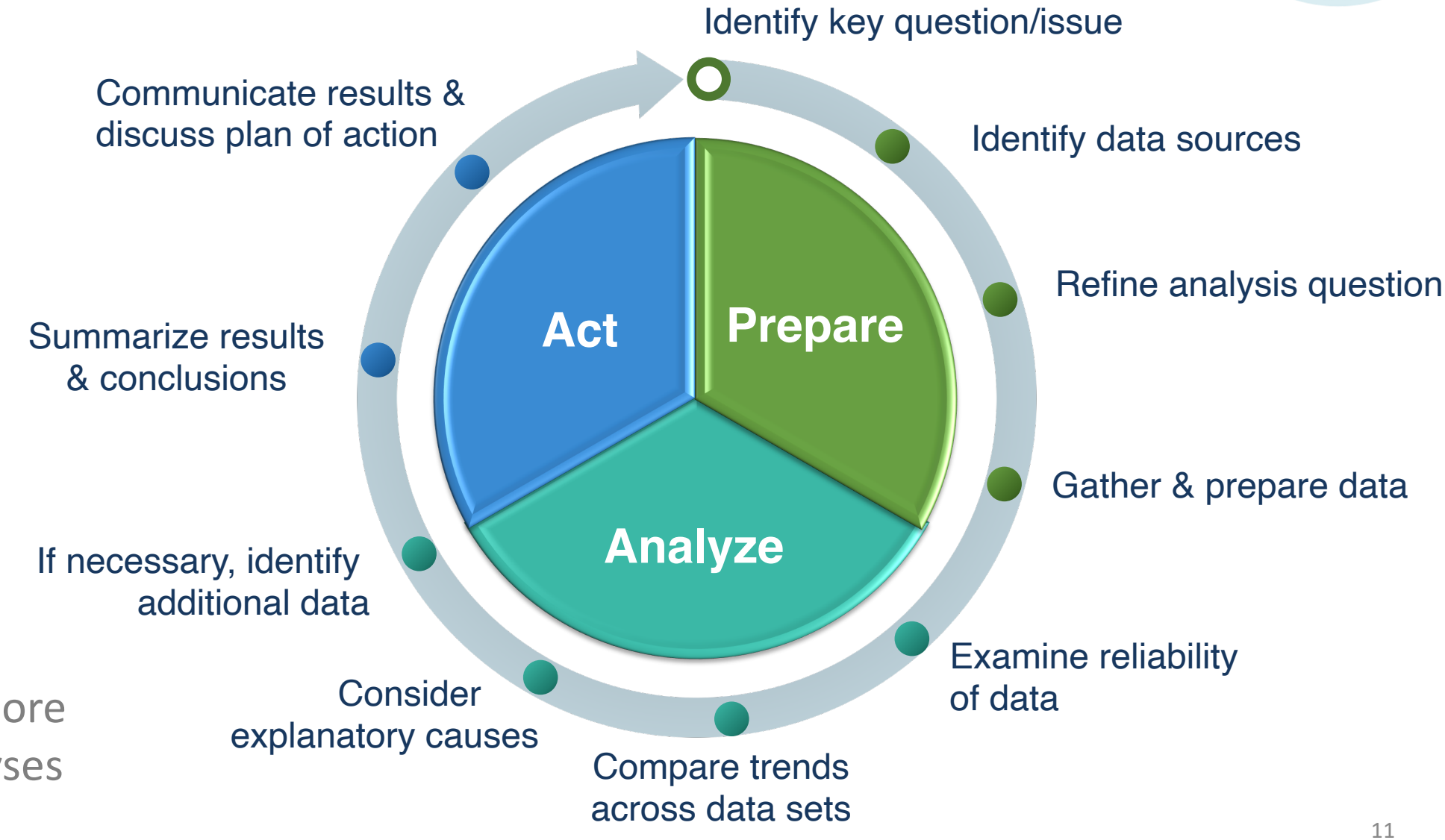
2) Separate analyses & combine through interpretation at end

Either way: Critical thinking required to turn data into information for action

Triangulation Process: 4 steps



Triangulation Process & Phases: 10 steps



10-steps for more in-depth analyses

1. ASK the key question

Start by identifying key program problem & related questions

– How do hope to use data for action at end?

Question must be answerable & actionable

Action may inform local program planning, or where a policy change from higher level needed

Engage variety of relevant staff from beginning

– Review examples, brainstorm, facilitate group discussion

2. IDENTIFY existing data sources

Identify all relevant data sources, including those not in routine use

- Talk with staff /partners within & outside program

Access & effort required to compile data in usable format

Invaluable – creating list of all data sources & well-organized archive

- Aid more regular use in the future

Consider strengths & limitations of each source

3. SUMMARIZE data & local context

- Assess data quality: completeness, internal consistency*
- Evaluate trends across data sources (place/time)
- Incorporate contextual information & local knowledge
- Brainstorm multiple hypotheses to explain findings
- Be honest about data limitations, e.g., missing data, errors

*Handbook on Use, Collection and Improvement of Immunization Data
https://www.dropbox.com/s/8ivdiu0g5xvnlbc/handbook.pdf?dl=1

Examples: Interpreting comparisons of different data

Comparison	Expected	Considerations
Administrative coverage & survey coverage		• Quality of reported data • Population movement • Role of private sector • Robustness of survey methods
Vaccination coverage & cases of disease		• Program history (vaccine intro., supplementary immunization) • Disease epidemiology (age of cases, herd immunity threshold) • Surveillance performance
Doses administered & vials used/shipped		• Vaccine presentation • Wasted/sacrificed doses • Buffer stock practices • Informal exchange networks

4. DEVELOP an action plan

- Simple key messages tailored to your target audience
- Tell a story with your data!
  - Visual information processed faster than words
  - Logical flow, supported with explanatory details
  - Case studies, if relevant
- Recommend actions based on triangulation results

Examples:

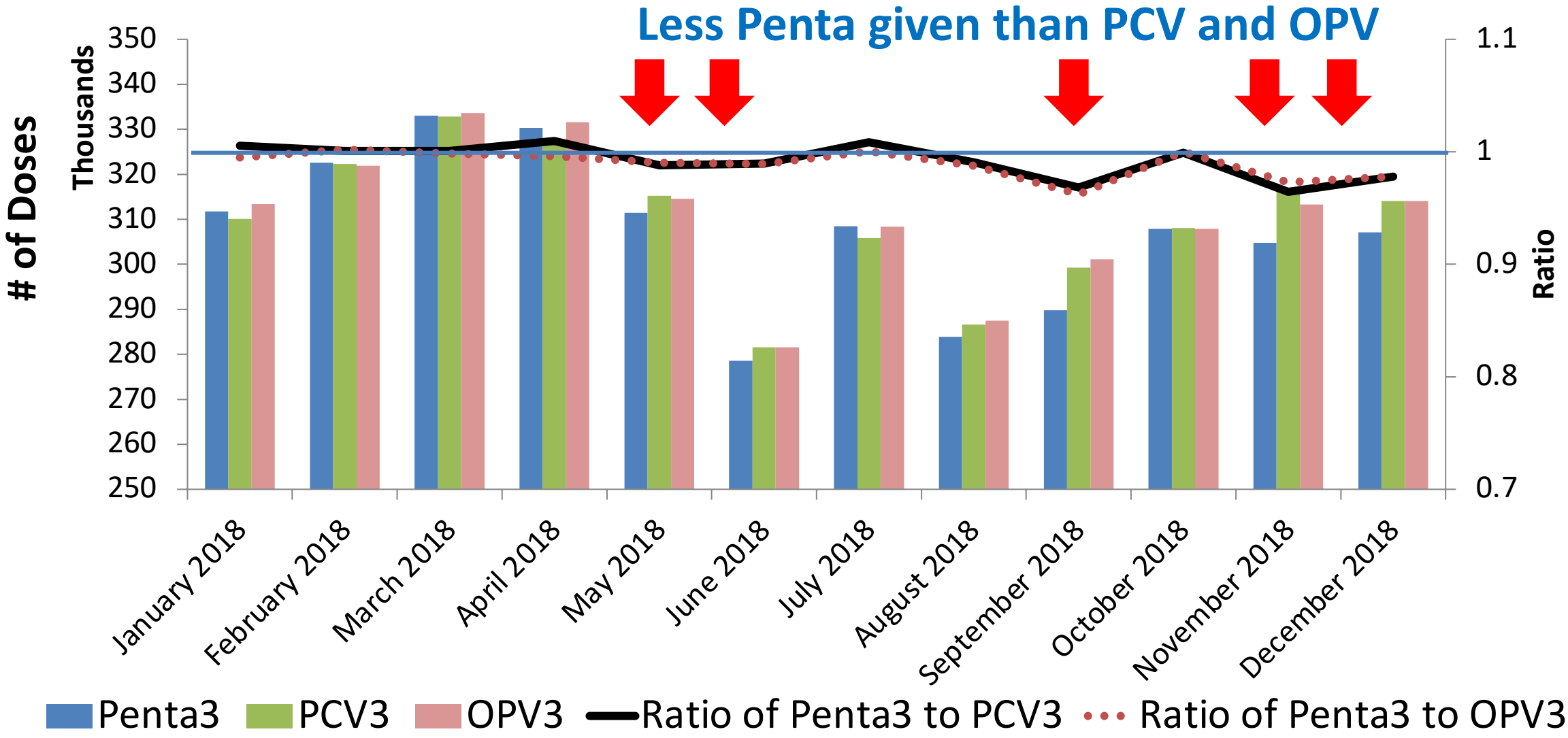
- Supportive supervision on improving data quality
- Revise microplan guidance to use local growth rates
- Catch-up vaccination in areas with coverage gaps

EXAMPLE KEY QUESTIONS

Program Level	Key Question for Data Triangulation Analysis
National-Level	Which districts with low performance and/or inconsistencies in data quality requiring follow-up?
Sub-National Level	Which health units under my supervision should be prioritized for visits or follow-up?

Next: Examples of how to investigate these questions using stock data

Ratio of Penta3 to PCV3 and OPV3 doses given — National level, 2018



Penta doses given vs. vial used & wastage

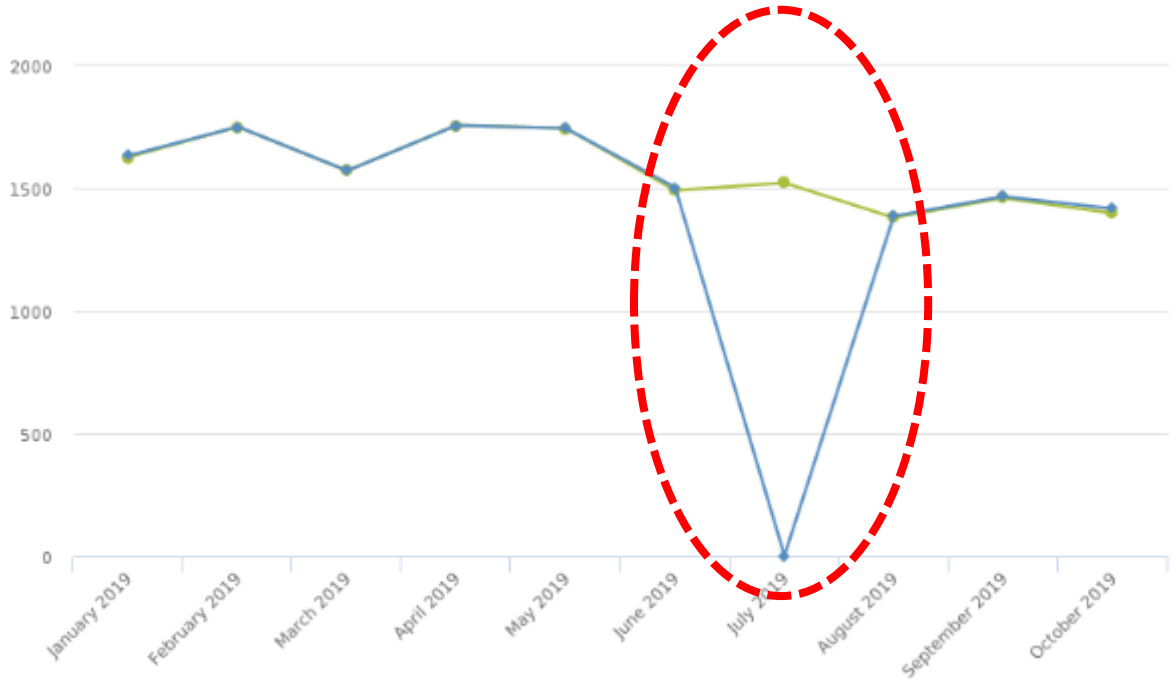
Doses	2018	2019
Penta wastage	0.14%	0.06%
Number of Sub-districts (612)		
Wastage <0%	94	98
Wastage >10%	12	6

Pentavalent – single dose vial

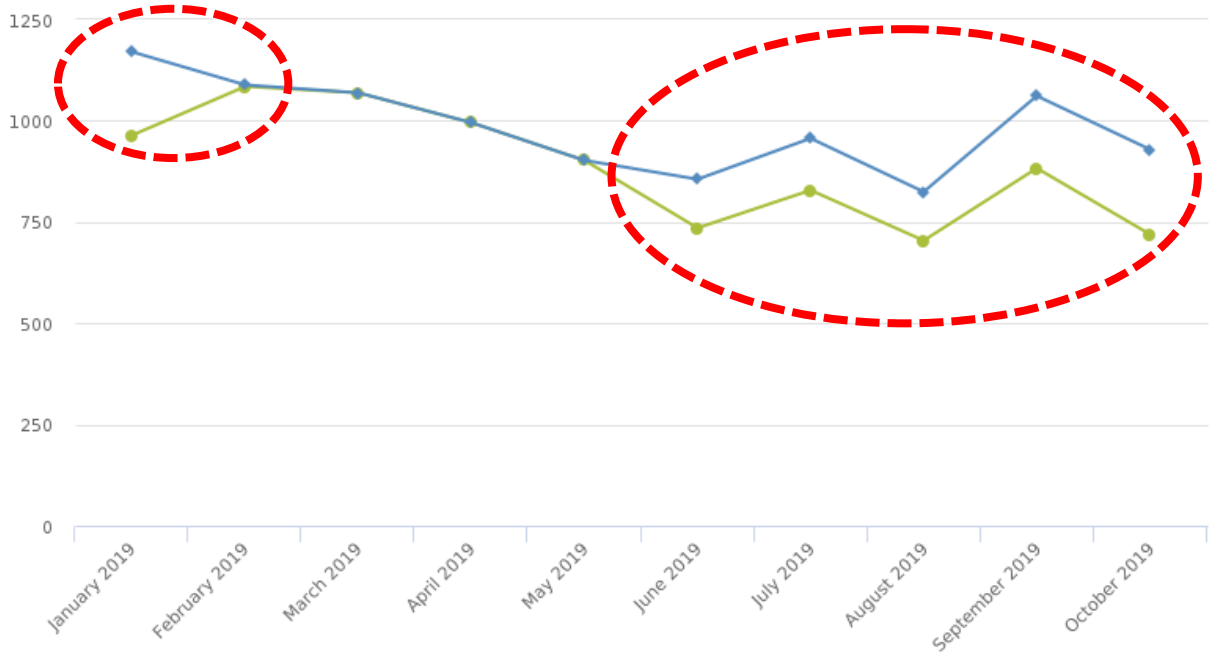
2018			Jan-June 2019		
Total Pentavalent Given	Total Pentavalent used	Pentavalent open vial wastage (%)	Total Pentavalent Given	Total Pentavalent used	Pentavalent open vial wastage (%)
2318	7480	69.4	1055	1055	0
16906	21565	21.6	9020	9020	0
14954	18280	18.2	9173	11366	19.3
10771	12669	15	5752	6086	5.5
2589	2910	12.2	1269	1465	13.4
13074	14867	12.1	7721	9184	15.9
36574	41565	12	17246	19291	10.6
3148	3424	9.5	1425	1586	10.2
32513	32807	0.92	14612	16692	12.5
34806	35032	0.66	20560	17778	-15.6
25568	25616	0.19	12940	10996	-17.7
28555	27765	0.15	12403	14517	14.6
8277	8287	0.12	4335	3719	-16.6
28955	28986	0.11	15026	10309	-45.8
24273	23969	0.01	12247	10273	-19.2
22645	22645	0	12422	14084	11.8
30393	30393	0	17527	15527	-12.9
35453	35452	0	17871	15707	-13.8
22857	22857	0	11630	10105	-15.1
20103	20102	0	10676	9115	-17.1
10338	10338	0	5478	4675	-17.2
13641	13641	0	7259	6195	-17.2
41969	41969	0	22742	19008	-19.6
5315	5295	-0.19	3544	2882	-23
3665	3057	-3.1	1814	1313	-18.5
9186	8602	-6.8	4865	4735	-2.7
46931	43643	-7.5	28140	26448	-6.4
13280	12317	-7.8	6710	6710	0
13909	12905	-7.8	7298	6223	-17.3
12859	11822	-8.8	6808	6664	0
14685	13484	-8.8	7340	7340	0
10168	9313	-9.1	5449	5449	0
24227	22008	-10.1	12801	12801	0
12605	11369	-10.9	6689	6690	0.01
21977	18494	-20.8	11038	9163	-20.5

Examples of coverage data quality issues in DHIS2

Zero monthly stock report



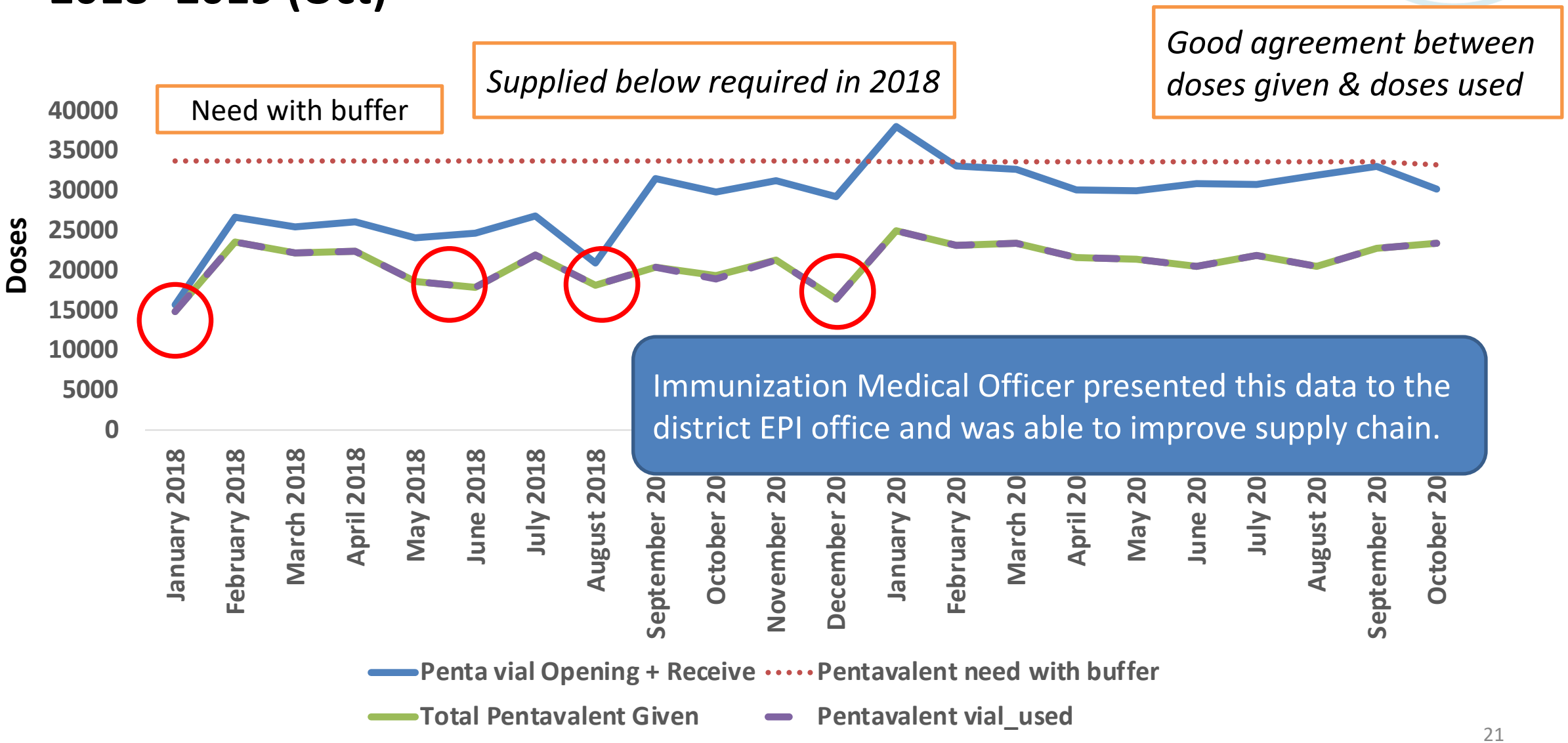
Discrepancies in admin vs stock data



Total Penta Doses Given

Penta vials used

Penta doses available & used vs. doses administered, Municipality X, 2018- 2019 (Oct)



Opportunities for integrating triangulation with existing activities

- Routine analysis
  - Feedback on reported data
  - EPI data review meetings (monthly, quarterly)
  - Annual desk reviews
  - Periodic in-depth assessments
- Ad-hoc evaluations of intervention impact or program implementation
- Outbreak investigations
- Part of Data Quality Reviews, EPI/VPD Surveillance Reviews
- Trainings of Mid-level managers & supportive supervision
- Dashboard design

Suggestions for how you can start *now*

- Review the triangulation guidance ☺
- Use all the data you have available, including vaccine stock and surveillance
- Collaborate across programmes/organizations to discover additional data sources
- Ask more questions — to drive analyses and discover the root causes of problems
- Brush up data analysis/visualization skills by reading tutorials and videos online
- Identify multiple alternative explanations for results, including data limitations
- Brainstorm different possible data-guided actions, the relative impact, and related assumptions
- Seek feedback from colleagues who are good at analysis or presentations

Resources

Technet-21 Topics Page on Triangulation: https://www.technet-21.org/en/topics/triangulation
Triangulation for Improved Decision-making in Immunization Programs: Draft Guidance (July 2020)
https://tinyurl.com/triangulation-July2020 (English)
https://tinyurl.com/triangulationMars2020 (French, currently only available in March 2020 version)

Public Health Data Triangulation for Immunization & VPD Surveillance Programs: Draft Framework (Dec 2019)
https://www.learning.foundation/vpd-triangulation-draft

WHO Effective Communication of Immunization Data (2019)
http://www.euro.who.int/en/health-topics/disease-prevention/vaccines-and-immunization/publications/2019/effective-communication-of-immunization-data-2019

Gavi Analysis Guide:
https://www.gavi.org/sites/default/files/document/guidelines/Analysis-Guidance-2020.pdf

WHO Handbook on the use, collection, and improvement of immunization data (2020 draft):
https://www.dropbox.com/s/vtkm2m1utl3p9e5/Immunization%20Data%2005march2020.docx?dl=0

Webinar resources Scholar course (slides, recordings, background)
www.tinyurl.com/2020-triangulation (English)
www.tinyurl.com/triangulation-2020 (Français)

Data Triangulation: Use of Health Facility Immunization Reporting Tools. John Snow, Inc. (2017):
https://www.jsi.com/resource/data-triangulation-use-of-health-facility-immunization-reporting-tools/

Acknowledgements

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- Danni Daniels, WHO-EURO
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- Riswana Soundardjee, Gavi
- Gustavo Correa, Gavi
- Lee Hampton, Gavi

- Colleagues from organizations who provided valuable feedback on guidance: WHO-Bangladesh, WHO-WPRO, WHO-HQ, JSI, BMGF, Gavi, CDC and SAGE Data Working Group
- Many colleagues who provided feedback through SurveyMonkey®, EPI Partners' Meeting (2018), WHO-EMRO Monitoring Workshop, WHO Scholar course on Triangulation for Immunization Programme Improvement, and country workshops

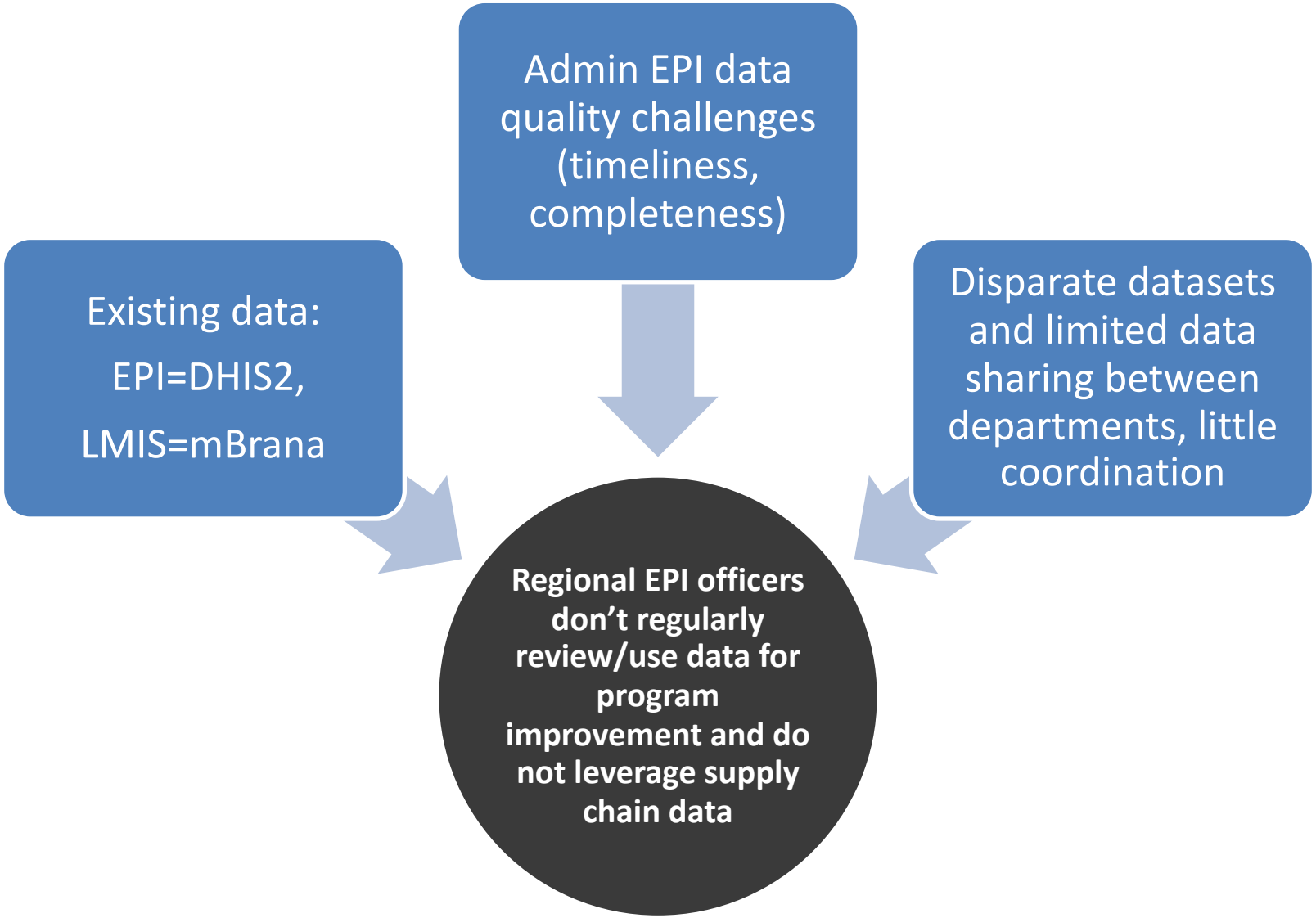
THANK YOU

Triangulating EPI and supply chain data for enhanced data use and decision-making: an example from Ethiopia

Amare Bayeh, JSI, Ethiopia

16th TechNet Conference
Shaping a resilient and adaptive immunization program

Background


Admin EPI data quality challenges (timeliness, completeness)
Existing data:
EPI=DHIS2,
LMIS=mBrana
Disparate datasets and limited data sharing between departments, little coordination
Regional EPI officers don't regularly review/use data for program improvement and do not leverage supply chain data

Objective

Develop a **replicable process for data use** that begins with identification of key indicators, data sources available, and key decisions that need to be made on a regular basis.

Regional (sub-national) consultative workshop-Fall 2019

- Key staff (Regional health managers, Immunization, Supply chain, DHIS/HMIS) who do not always collaborate brought together
- The group discussed the key issues and barriers to data use and data triangulation
- They came out with the priority action being to **develop a user-friendly tool that could bring together EPI and iSC datasets and help interpret information for action**

Resulting activity design

Tool development

Develop Excel dashboard tool	Develop user guide	Develop guidance on conducting data review meetings using tool

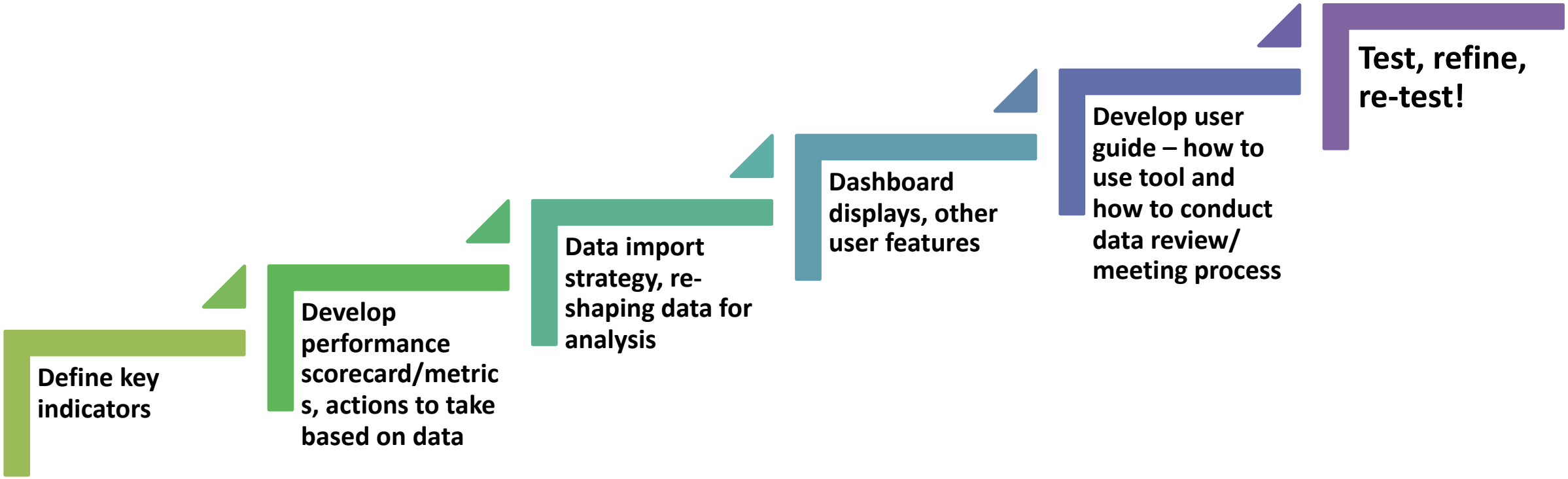
Rollout at RHB (regional) level

PSA, DHIS2 and EPI officers work to compile DHIS2 and mBrana reports	EPI officer leads analysis and monthly review meetings	Joint action planning during meetings (EPI, PSA, and DHIS2 focused staff)

Monitor implementation and analyze use of data

Participate in initial review meetings	Conduct “user documentation” - informal KIIs on tool usability, feasibility as a monthly process	Conduct process documentation on “analysis to decisions to action” continuum

Development of the Immunization Data Triangulation Tool (IDTT)



Indicators for data triangulation

Ratio of PCV1 doses administered to Penta1 doses administered

Ratio of total Penta administered (doses 1, 2, and 3) to Penta issued
*Rolling average over 6 months

Ratio of total measles doses opened to total doses issued
*Rolling average over 6 months

Ratio of ending stock balance for Penta to buffer stock
*Compares end stock balance to buffer stock required

Doses administered for measles
*Rolling average over 3 months

Doses administered for IPV
*Rolling average over 3 months

Data triangulation scoring

- Establishing target ranges for each of 6 indicators (example below)
- Create a summary triangulation composite score –
  - Assign point values to **green**/**yellow**/**red**
  - Add up points for all 6 indicators
  - Overall woreda score also indicated as **green**/ **yellow** / **red** (strong/moderate/poor)

Indicator	Calculation	Target ranges
Ratio of total Penta administered to Penta issued ***Rolling average over 6 months**	$\frac{\text{\# doses administered Penta (1-2-3)}}{\text{\# doses issued Penta (1-2-3)}}$ (Rolling average over 6 months)	**Green**: 0.95 – 1.0 **Yellow**: 0.8 – 0.95 **Red**: <0.8 or >1.0

Region:	Benishangul Gumuz
Ethiopian Month:	Ginbot
Ethiopian Year:	2012

Immunization Data Triangulation Tool (IDTT)

Immunization and Supply Chain Data Triangulation

Purpose: To triangulate immunization program and supply chain data for improved decision-making and action.

Instructions: To begin using this tool, select the region and the most recent month and year for which you would like to **review data** on the Regional and Woreda Dashboards, using the spaces provided at the top right-side of the screen. Once you have selected the data inputs, click on the start button below to being data entry. The tool will navigate to the DHIS2 data entry page where you will be prompted to copy and paste monthly DHIS2 into the tool in the space provided. You will make a separate entry for each month of data you would like to enter into the tool. You will then do the same data entry procedure for mBrana data, using the mBrana data entry page. Once you have completed data entry, you can navigate to the regional and woreda dashboards using the navigation buttons provided.

If you would like to continue to navigate between pages, go back to previous pages and additional resources, use the navigation buttons found on the right or upper right side of your screen. For optimal use, please read and follow all instructions carefully. For more guidance, review the accompanying IDTT user guide.

START

Version: 1.0
Last updated: 8/18/2020

UI-FHS
Universal Immunization through Improving Family Health Services

TOOL NAVIGATION

- DHIS2 data entry
- mBrana data entry
- Data Tri Regional dashboard
- RED Cat Regional dashboard
- Woreda dashboard
- User guide
- Indicator definitions
- Credit

DHIS 2 Data Entry

Use the form below for DHIS2 data entry. Begin by selecting the month and year of the DHIS2 data you will be submitting. Copy the relevant data from the DHIS2 monthly report and paste into the indicated section below. Use the headers as guides to double check you are pasting the correct data into each column. Once you have pasted the proper data into this form, select the "submit data" button to submit the data to the database; this button will also clear the data from the form to make ready for the next month.

Important reminders: There is no need to copy the headers, only the data from the DHIS2 report. Also, this is a month by month submission form. Only submit one month at a time. If you have a need to submit more than one month, follow the instructions above and select "submit data" before proceeding to the next month.

Tool Navigation

Select month: Select year: Submit Data

woreda	BCG	Penta1	Penta3	PCV1	PCV3	Rota1	Rota2	OPV1	OPV3	IPV	Measles1	Measles2	allvaccines	TT	Penta_given	Measles_oper	Penta_open
Select this cel and paste DHIS2 data here																	

After copying the DHIS2 data, select this cell. Then right click and paste data as values.

Benishangul Gumuz Regional Dashboard: DHIS2/mBrana Data Triangulation

The data below provides a snapshot of the status of key triangulated immunization and supply chain indicators for each woreda in this region, using a composite score made up of six key indicators. Green indicates a "strong" score, the woreda is scoring well across the indicators; Yellow indicates a "moderate" score, further review is necessary; and Red indicates a "poor" score, immediate review and action are required. To the right is the zonal summary of these composite scores. To see detailed data for each Woreda across key indicators, navigate to the Woreda dashboard using the blue Tool Navigation buttons to the right of the screen.

Tool Navigation

RED Regional dashboard | Woreda dashboard | Main menu | Indicator definitions

Summary by Woreda

Woreda	Tahesas 2012	Tir 2012	Yekatit 2012	Megabit 2012	Miyazia 2012	Ginbot 2012
Agalo Meti WorHO	*Missing data*					
Asosa Town 1 WorHO	*Missing data*	*Missing data*	*Missing data*	*Missing data*	*Missing data*	*Missing data*
Assosa WorHO	*Missing data*					
Bambasi WorHO	*Missing data*					
Belo Jeganfoy WorHO	*Missing data*	*Missing data*	*Missing data*	*Missing data*	*Missing data*	*Missing data*
Bulen WorHO	*Missing data*	*Missing data*	*Missing data*	*Missing data*		
Dangur WorHO	*Missing data*					
Dibate WorHO	*Missing data*	*Missing data*	*Missing data*	*Missing data*	*Missing data*	*Missing data*
Guba WorHO	*Missing data*	*Missing data*	*Missing data*	*Missing data*	*Missing data*	*Missing data*
Homosha WorHO	*Missing data*	*Missing data*	*Missing data*	*Missing data*	*Missing data*	*Missing data*
Kamashi Primary Hospital						
Kamashi WorHO	*Missing data*					
Kurmuk WorHO	*Missing data*	*Missing data*	*Missing data*	*Missing data*		
Mandura WorHO	*Missing data*	*Missing data*	*Missing data*	*Missing data*	*Missing data*	*Missing data*
Mao Komo Special WorHO	*Missing data*					
Menge WorHO	*Missing data*	*Missing data*	*Missing data*	*Missing data*		
Oda Bilidigilu WorHO	*Missing data*					
Pawi Hospital	*Missing data*	*Missing data*	*Missing data*	*Missing data*	*Missing data*	*Missing data*
Pawi WorHO	*Missing data*	*Missing data*	*Missing data*	*Missing data*	*Missing data*	*Missing data*
Sedal WorHO	*Missing data*					
SherKole WorHO	*Missing data*					
Wembera WorHO	*Missing data*	*Missing data*	*Missing data*	*Missing data*	*Missing data*	*Missing data*
Yaso WorHO	*Missing data*	*Missing data*	*Missing data*	*Missing data*	*Missing data*	*Missing data*

Summary by Zone for Ginbot 2012

Zone	Green	Yellow	Red	Missing data
Assosa ZHD	0	3	3	2
Kamashi ZHD	0	2	1	2
Mao Komo Special ZHD	0	1	0	0
Metekel ZHD	0	1	1	6

Agalo Meti WorHO Woreda Dashboard

To see detailed data across key indicators, select the woreda of interest from the dropdown menu below. Review the data and decide on priority actions to take or discuss with the woreda. To see detailed calculations and definitions for displayed indicators, please navigate to the Indicator Definitions tab or consult the User Guide.

Woreda: Agalo Meti WorHO

Tool Navigation

RED Cat Regional dashboard | Data Tri Regional dashboard | Main menu | Indicator definitions

Woreda Data Triangulation

	Tahesas 2012	Tir 2012	Yekatit 2012	Megabit 2012	Miyazia 2012	Ginbot 2012	Action to take
Ratio of PCV1 doses administered to Penta1 doses administered	1.00	1.00	1.00	1.00	1.00	**1.00**	
Ratio of total Penta administered to Penta issued **Rolling average over 6 months*	0.15	0.15	0.15	0.15	0.15	**0.15**	Indicates high closed-vial wastage due to cold chain failure or similar issue. Follow up with woreda on vaccine management.
Ratio of total Measles doses opened to total doses issued **Rolling average over 6 months*	1.87	1.87	1.87	1.87	1.87	**1.87**	If ratio <1.0 may be too many vaccine issues or too few vaccines opened. If ratio >1.0 may be an issue with data quality. Review data and plan for supportive supervision.
Ratio of ending stock balance for Penta to buffer stock *Compares end stock balance to buffer stock required*	4.54	4.54	4.54	4.54	4.54	**4.54**	Indicates extreme quantities, leading to inefficiencies. Check if VRF was submitted, supply missed or over consumption due to seasonal influx, CC failure, etc.
Doses administered for measles *Rolling average over 3 months*	88	77	98	68	80	**147**	Doses administered in Ginbot 2012 are above the +/-20% range of doses administered in the previous three months. May be due to data recording errors or revisions. Review and correct/adjustment errors and plan for supportive supervision.
Doses administered for IPV *Rolling average over 3 months*	42	98	80	55	64	**76**	Doses administered in Ginbot 2012 are within +/-20% range of doses administered in the previous three months.

Woreda Vaccine Coverage

	Tahesas 2012	Tir 2012	Yekatit 2012	Megabit 2012	Miyazia 2012	Ginbot 2012	Action to take
RED categorisation	**Category 2**	**Category 1**	**Category 1**	**Category 3**	**Category 3**	**Category 3**	Conduct supportive supervision; Identify pregnant women and register infants; Review static/outreach functionality; Discuss with QITs/command posts and re-map catchment area

…Implementation ongoing….!

- Tool rollout is happening
- Conduct tool usability assessment in the coming months
- Conduct informal KIIs with users to understand:
  - how the tool has facilitated data review and
  - how they have USED the data from this triangulation tool

Thank You

Visit our website: uifhs.jsi.com

IMPACT Teams for improving immunization data quality and use

Harrison Mariki & Daniel Kinyanjui

inSupplyHealth
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16th TechNet Conference
Shaping a resilient and adaptive immunization program

About inSupply Health Limited

inSupply Health, an affiliate of JSI Research & Training Institute, is an independent supply chain advisory firm based in East Africa that provides clients with customized guidance on supply chain management and design.

We specialize in

Developing supply chain **maturity strategies**

Building organizational capacity for supply chains

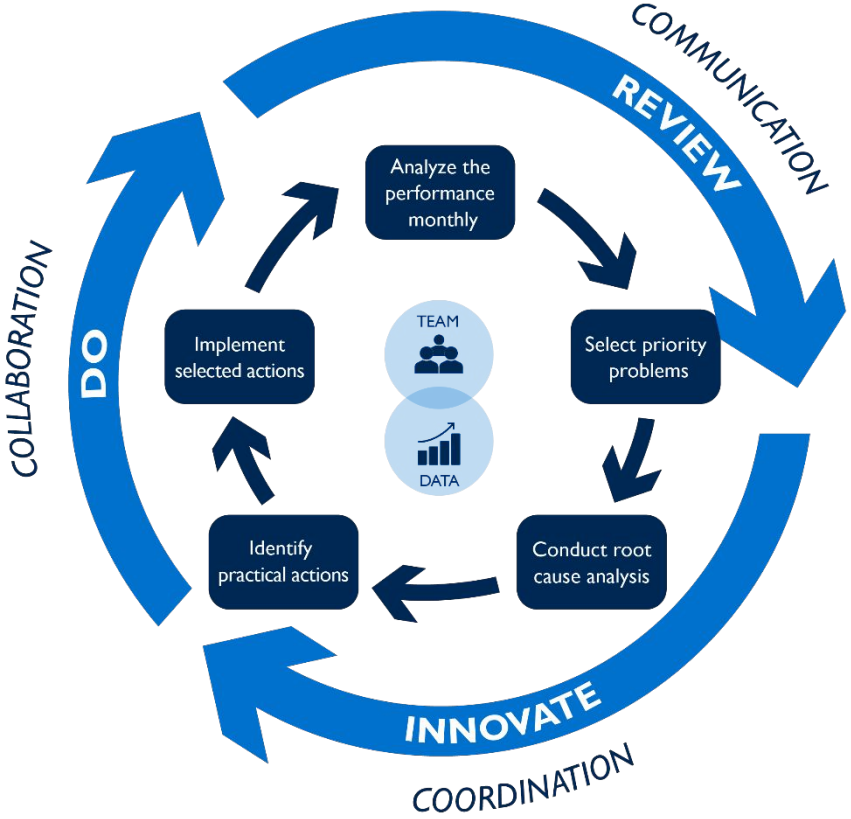
Designing and implementing **data-driven, optimized** supply chain systems

Forecasting health commodity needs

IMPACT Teams provide a structured and rigorous process for supply chain problem-solving

A system of interconnected teams, made up of people across functions and disciplines who meet routinely and are:

- Trained to develop, interpret and set targets for key supply chain indicators, and use action oriented dashboards
- Encouraged to follow a structured, problem-solving process
- Empowered to use their data for operational and strategic decisions with ultimate goal of improving the performance of their supply chain



IMPACT teams implemented in 10 countries, across programs and health system levels

Country	Vaccines	FP/RH	TB	HIV	Malaria	MCH
Ethiopia	●	●	●	●	●	●
Guinea	●	●				
Indonesia		●				
Kenya	●	●				●
Malawi		●			●	●
Myanmar		●			●	●
Nigeria		●				
Pakistan	●					
Rwanda		●			●	●
Tanzania	●	●	●	●	●	●

PEOPLE

Establish multi-disciplinary, multi-level teams

PROCESSES

Build on existing mechanisms for sustainability

DATA

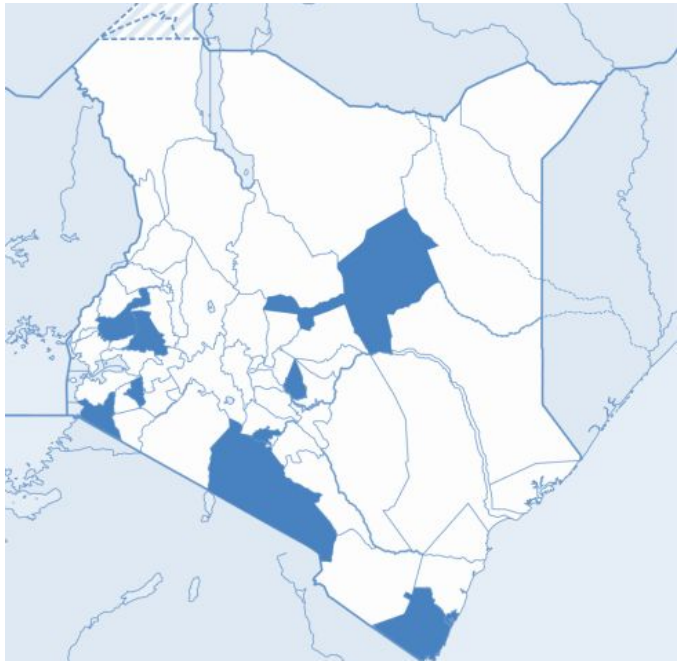
Access, enhance existing data, making it visual, easy-to use and actionable

IMPACT Teams implemented across 17 counties in Kenya

inSupply implemented IMPACT Teams across 10 counties in 2016-2018

A number of studies have demonstrated effectiveness of IMPACT teams in improving supply chain outcomes. A 2018 study on the use of RTM data and IMPACT teams found **significant increases in CCE uptime** associated with IMPACT team interventions from 59 devices and 36 locations..

However, the approach was <u>not institutionalized and sustained</u> after the project ended.



"[The IMPACT Team] has slowed down its activities….The coordination of the meeting was mainly being done by JSI. They would remind us on when we would have the next meeting and what he agenda would be."

-Kenya

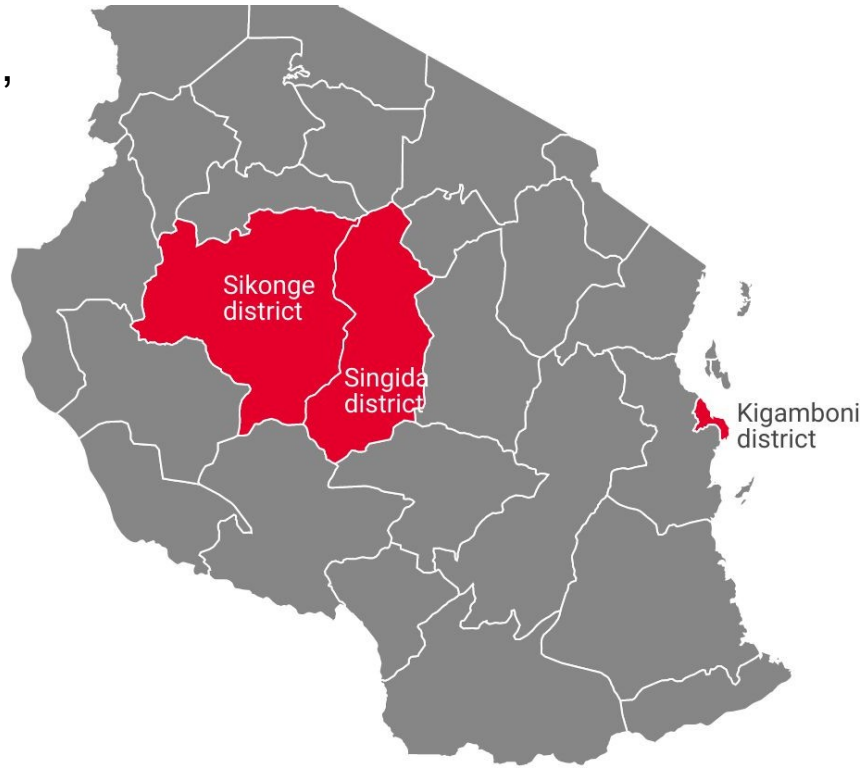
IMPACT Team Implementation Progress in Tanzania

The IMPACT Team approach has been scaled up to 13 regions across Tanzania with support from multiple partners (GHSC, inSupply Health, THPS etc.)

inSupply Health is supporting the evolution of maturity in 3 ITs:

- Conducted a rapid assessment of all trained ITs
- Identified 3 district council ITs that demonstrated potential for evolution in maturity
- Assessed maturity level to customize further capacity building.

All the teams assessed started at the intermediate level.



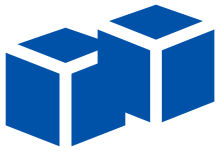
The IMPACT Team approach has been well adopted by the Ministry of Health, (MOHCDGEC) & PORALG but questions around monitoring and support as the approach is scaled in more countries by different partners

-Tanzania

How might we make the approach more scalable and sustainable?

GOAL: To build on previous IMPACT team experience to develop adaptable models for operationalizing and scaling the people and process components of the approach

Evaluate, identify, and document the conditions for success and critical enablers of the IMPACT team and other data use approaches, to ensure that health workers can easily and sustainably use data to transform supply chain performance.



Develop implementation packages that can be adapted for different contexts depending on existing capacity and maturity of the system.

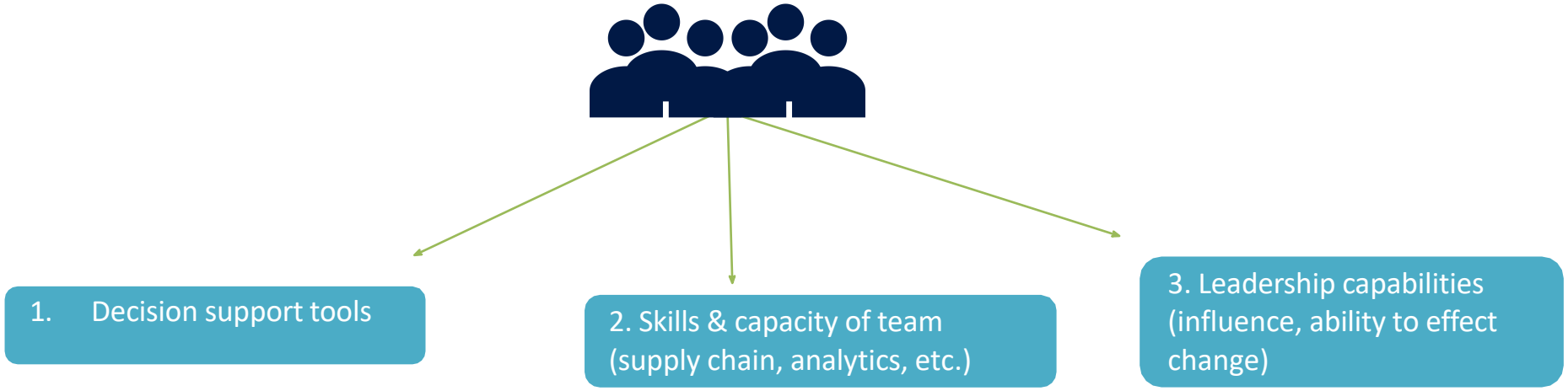
Collaborate with a variety of partners to enhance the IMPACT team data use approach and ensure the packages can be used by any implementing partner.

Institutionalization and sustainability of IT are an important challenge

HCD and Adaptive Learning provided a learning platform to:

- Identify the right composition of the IT members, their motivation
- Engage leaders to foster and support data use and IT processes
- Motivate regular meetings and consistent attendance
- Help teams overcome barriers to action and escalation mechanisms for issues outside the IMPACT teams control
- Recognize good performance

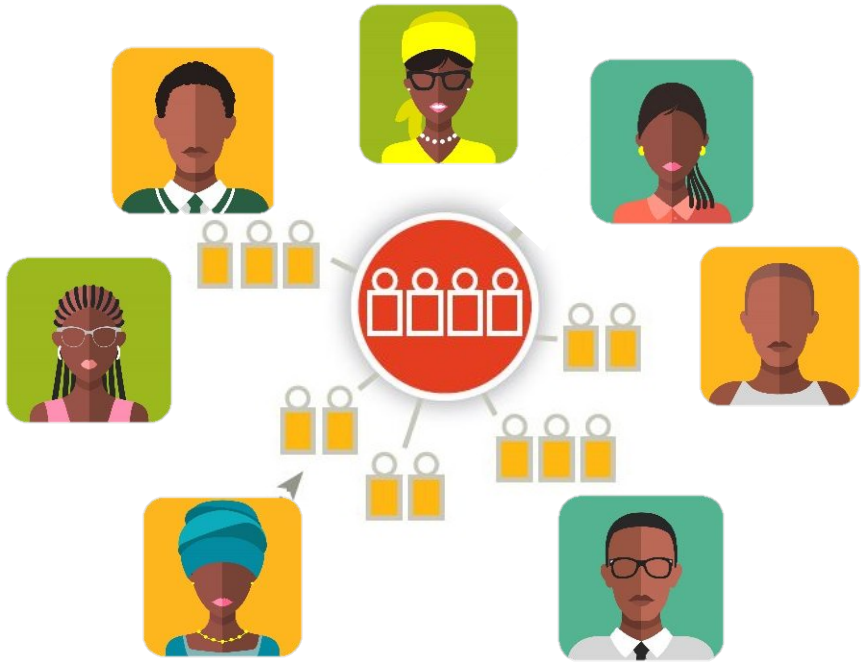
Insights from HCD process: 3 factors influence the maturity of IMPACT teams



Each maturity stage is associated with a different package for operationalization, e.g. process guides for design, implementation, governance and performance management, and requires different support to get to the next level of maturity.

HCD & Adaptive Learning: From System Archetypes to Role Profiles

- Our initial HCD prototypes looked at three system archetypes
- Our adaptive learning helped us realize we needed a more granular model for differentiated implementation support for helping teams evolve their maturity levels.
- Revisiting our HCD research we asked:
  - Which IMPACT team members are critical for the success of the approach?
  - And what are the **knowledge, skills and competencies** needed in each IMPACT Team to creating meaningful change?



Adapting the IMPACT Team tools and processes to provide better support:

- Updated training materials
- Developed learning packages and motivation strategies to facilitate continuous learning
- Revising action plan tools to facilitate micro and macro tasks
- Collecting and visualizing IMPACT Team process data for better management

IMPACT Team Role Profiles

By assessing each profile based on key technical competencies, we can target capacity building efforts to build a team with a holistic skill set for creating meaningful change

Organizing Otto

He calls meetings, ensures logistics are in place, creates agenda and takes notes. People expect to hear from him about how work is delegated.

Peter Problem Solver

He is constantly questioning “but why” when it comes to challenges. He is good at thinking and steering the team towards actionable and practical next steps.

Data Wiz Diana

She understands the indicators and can interpret data for non-data people. She is familiar with SC data sources and can analyze raw data from a spreadsheet and graph trends.

Supply Chain Sam

He has a deep understanding of supply chain processes. When challenges are identified, he can critically analyze the system and suggest SC-specific solutions.

Core roles

Influencing Irene

She has strong relationships with and easy access to key decision makers and her input holds weight. When she suggests actions, it is taken seriously.

Resource Ritah

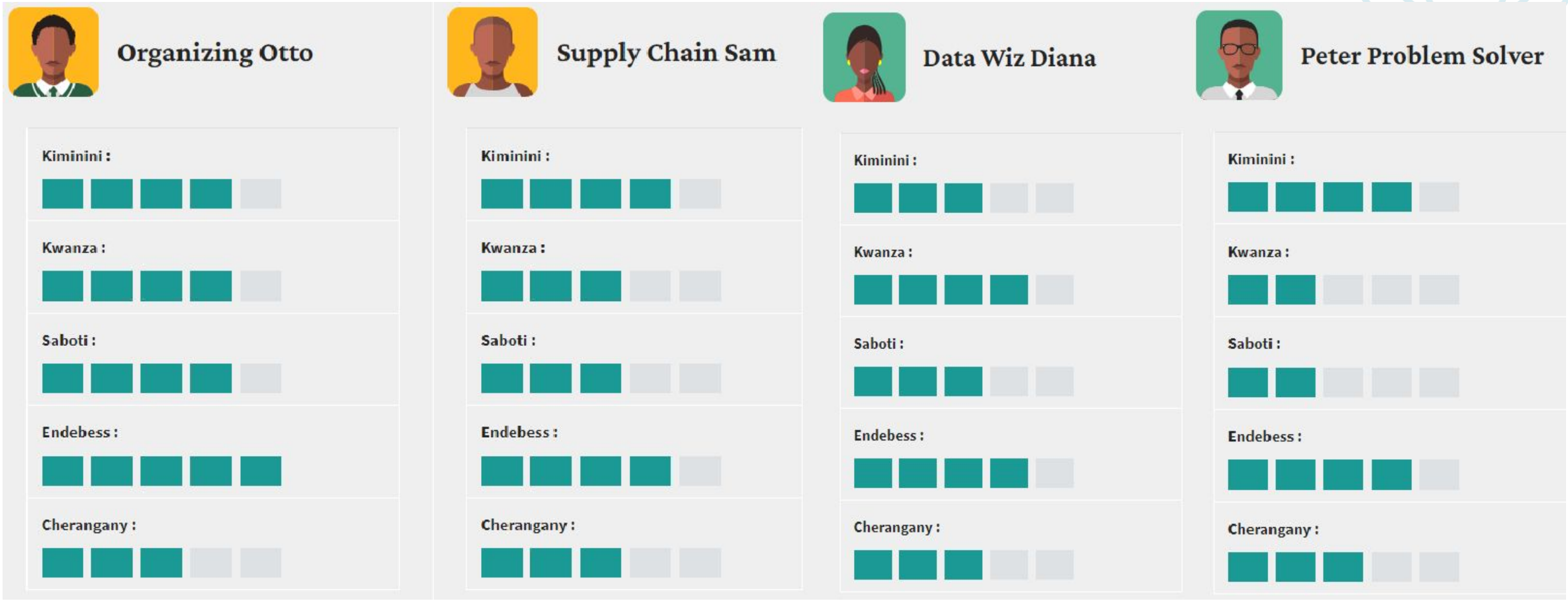
She influences the purse strings. She knows what money is available, how to advocate for it and how to present it in a way that can be approved.

Lucy Leader

She holds authority. Everyone knows that if she doesn’t endorse or support the meeting, it doesn’t happen as planned. She has a big picture view into activities to leverage to carry out solutions.

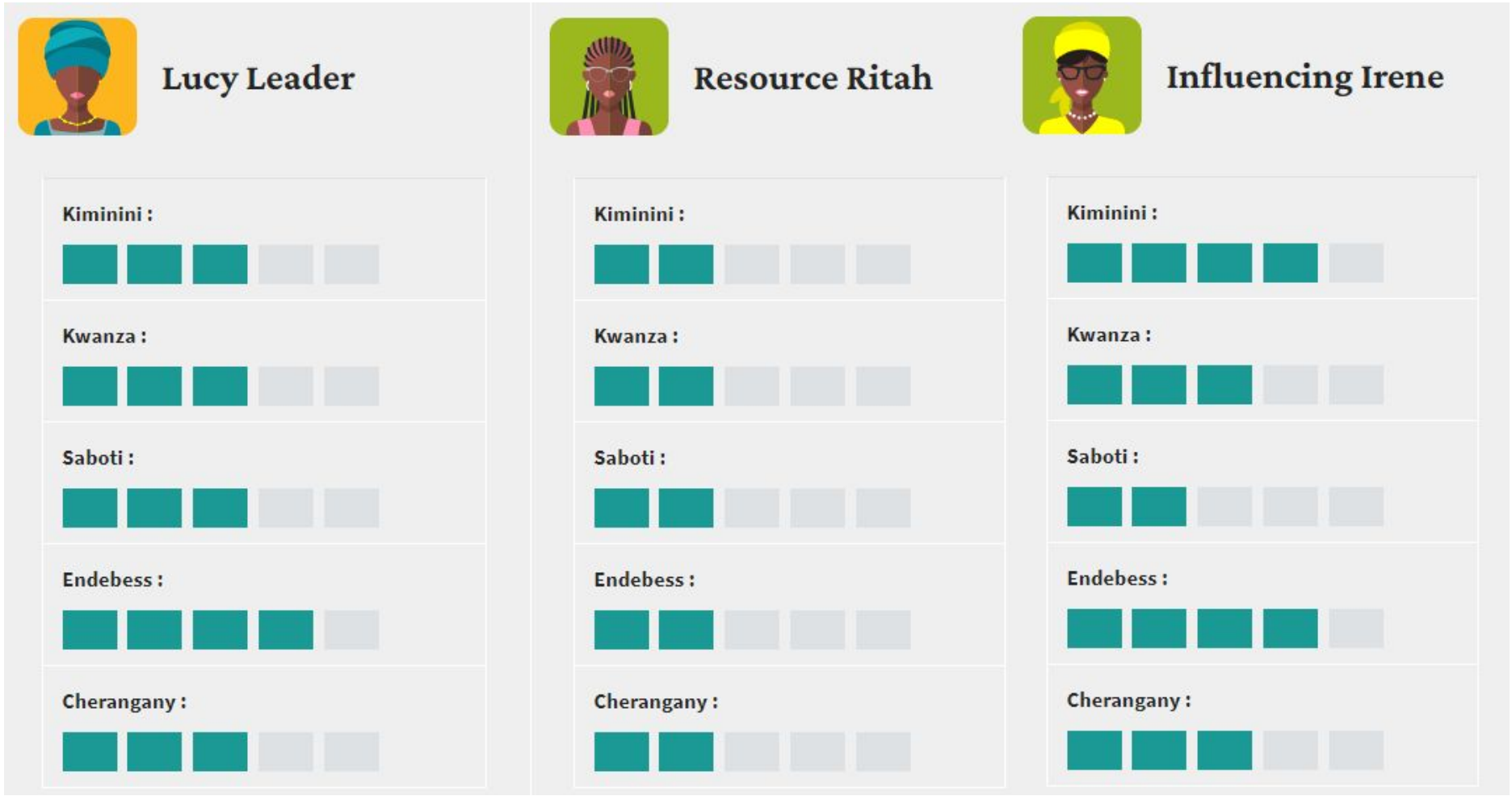
Enabling roles

Snapshot of IMPACT Teams Role Profile comparison from Kenya



These are the **core** role profiles. Capacity building needs cuts across the sub counties; problem solving and prioritization appear to be the greatest gaps at a glance

Snapshot of IMPACT Teams Role Profile results from Kenya



These are **enabling** role profiles (not required for every meeting). Scores are low at sub county levels. implying these profiles are present at county levels

Snapshot of District IMPACT Team Role Profile results from Tanzania

Supply Chain Sam

Supply chain concepts

Supply chain goal & performance indicators

Application of supply chain knowledge

Availability/Accessibility

Organizing Otto

Planning and organizational skills

Coordination skills

Minutes and report writing skills

Availability/Accessibility

Influencing Irene

Advocacy skills

Relationship management

Information synthesis and presentation skills

Availability/Accessibility

Peter Problem Solver

Analytical and critical thinking skills

Solution oriented

Creative and innovative thinking

Availability/Accessibility

Data Wiz Diane

Supply chain indicators

Data visualization and interpretation

Data analytics

Availability/Accessibility

Lucy Leader

Change management and conflict management

Performance management

Decision making

Availability/Accessibility

Resource Rita

Budgeting, planning, and prioritization

Communicating priorities and actions into budgets

Networking skills

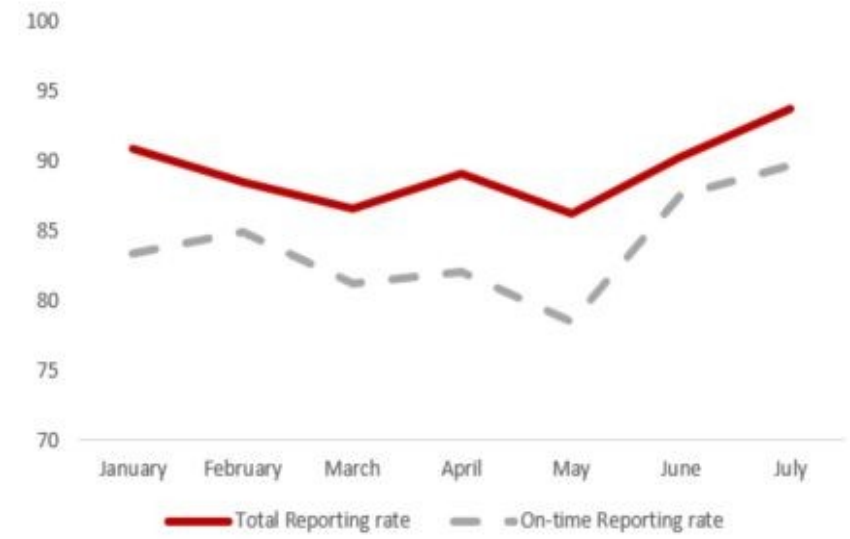
Availability/Accessibility

In this example Influencing Irene, Peter Problem solving and Resource Rita stand out as areas that need capacity building

Kenya County Snapshot: Key Immunization Indicators

Jan-July 2020

1. Reporting Rates

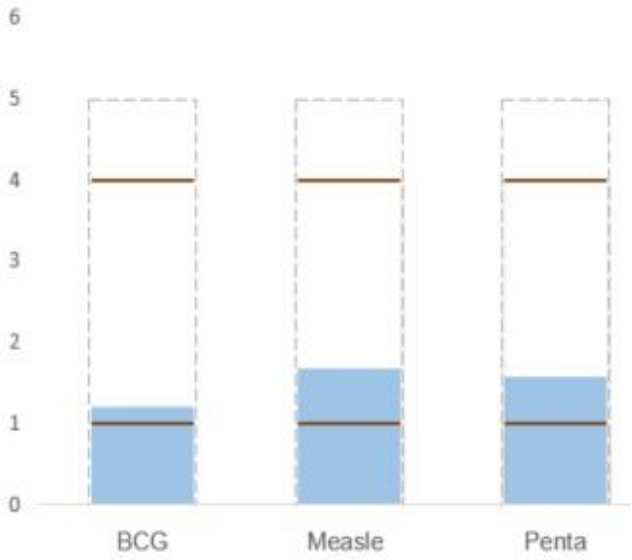


2. Stock out Rates

Month	BCG	Measles	Penta
January	6%	8%	8%
February	18%	10%	10%
March	21%	12%	11%
April	17%	11%	10%
May	20%	16%	12%
June	7%	8%	6%
July	7%	5%	5%

3. Coverage

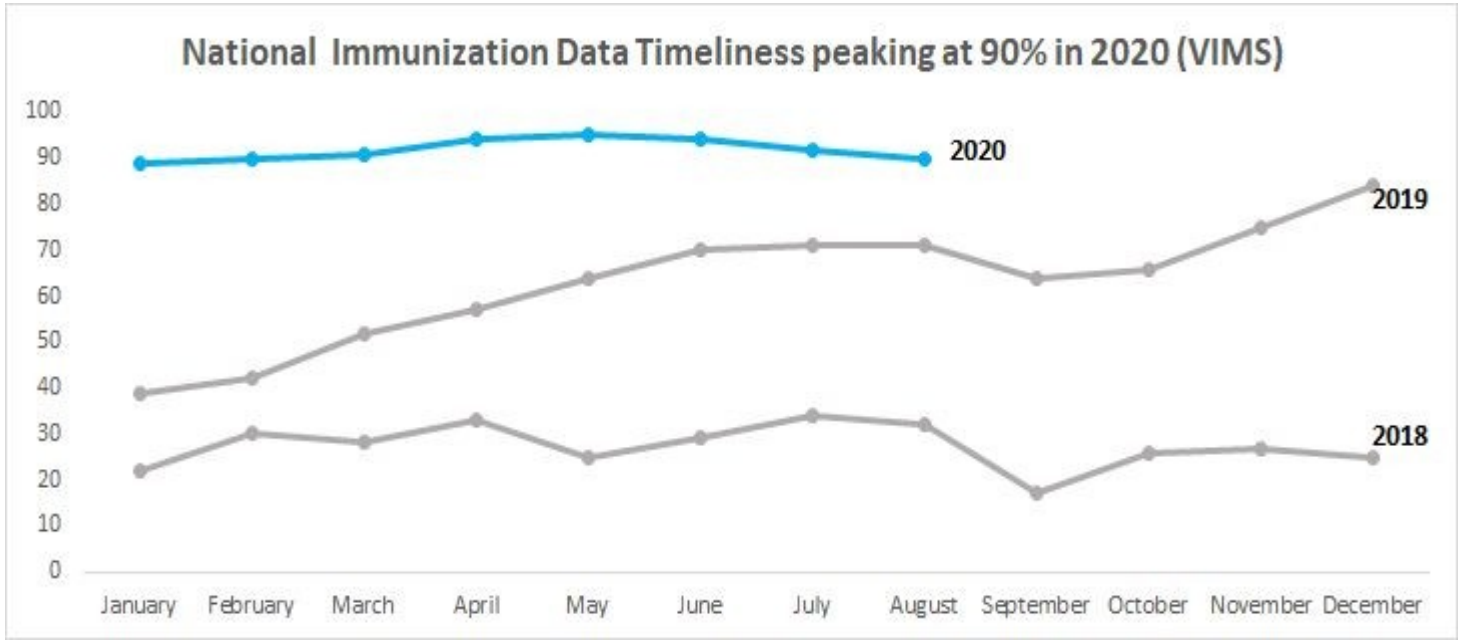
4. Stock Status



As data becomes available, tackling other supply chain issues like stock outs becomes easier. Having adequate stock helps reduce stock out rates. BCG for example is almost getting to the minimum level compared to Measles and Penta and their stock levels are 7%, 5% and 5% respectively

Data source: KHIS and ITT

Snapshot of Results from Tanzania



With implementation of IMPACT Teams approach VIMS reporting timeliness has significantly improved. Having achieved this target throughout 2020, the program has now introduced indicators for monitoring vaccine availability and potency.

Continued Adaptation: What next for IMPACT teams

Evolving the use of decision support tools;

- The IMPACT Teams portal is the home for IT resources including learning packages, role profile assessments, IT activity calendar etc.
- The IT portal links the IMPACT team approach (process indicators) with the supply chain performance. It helps identify areas that need strengthening to ensure the IT objectives are met.

Strengthening IT capacity through Self-directed online learning packages based on the role profile assessments that identify the gaps

Co-creating CCE data use priorities with IMPACT teams by applying HCD to optimize visualization of RTM data for users at all levels and to

THANK YOU

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