



Immunization Registry and Vaccine Tracking Application in Vietnam: From pilot to nationwide scale up

Bright Spots Webinar

Tuesday, December 14, 2021

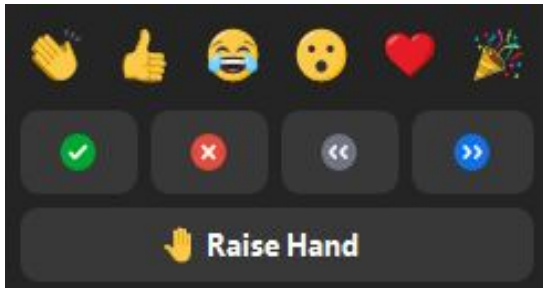
Sang Dao, MPH, Linh Nguyen, MPH, Tu Nguyen, MSc



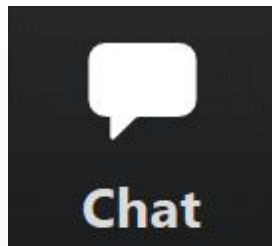
WELCOME & LOGISTICS



Please **mute yourself** (when not speaking) to limit background noise and feedback



Use the **Reactions button** at the bottom of your screen to **Raise your hand** during the session (if you want to speak).



You can engage in dialogue with your peers and workshop facilitators through the **Chat button** at the bottom of your screen



THE BOOST COMMUNITY

A global community where **immunization professionals connect, learn and lead.**



Connect

with fellow immunization peers and experts through virtual small groups or at face-to-face events



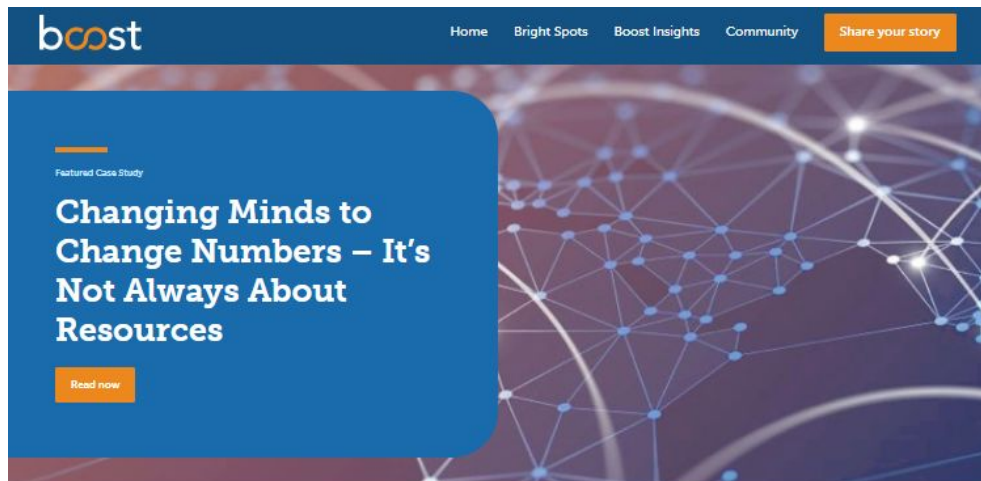
Learn

skills that build capacity and advance careers through Boost's peer and expert-led trainings and curated news section, sorted by topic



Lead

Immunization programs in any circumstance, including challenging contexts, with support from Boost's foundational practice of adaptive leadership

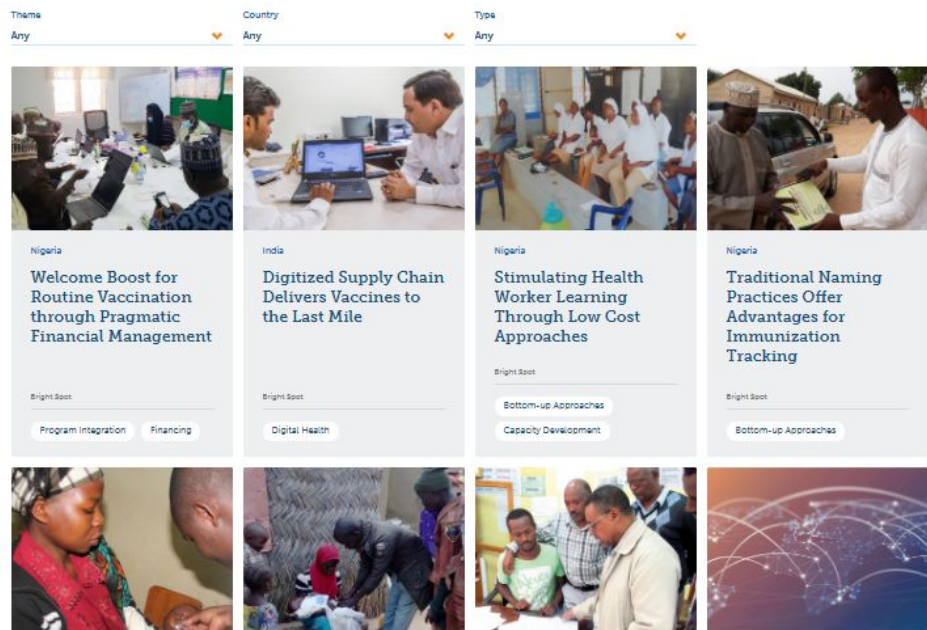


BRIGHT SPOTS

From engaging with religious leaders to improving supply chain to reach the last mile, there is innovation occurring at all levels of the system.

Bright Spots shine a light on the work that is happening on the ground and inspire immunization professionals everywhere to learn, adapt and take action in their own communities.

This second round of stories includes **10 stories from 6 countries** (including Ethiopia, Nigeria, Tanzania, India, Pakistan and Cameroon) occurring at the regional, district or facility level.



<http://brightspots.boostcommunity.org>

Poll Questions

1. Has your country of work developed a national EIR system?
 - a. Yes
 - b. No
2. If yes, please state the current stage of your national EIR system
 - a. Design
 - b. Develop
 - c. Deploy
 - d. Scale-up nationwide



Content

- Vietnam National Expanded Program on Immunization
- Vietnam National Immunization Information System
- Challenges along the way
- Our approach



Vietnam National Expanded Program on Immunization

National Expanded Program on Immunization in Vietnam



Annual birth cohort : ~1.7 million.



Currently, there are 10 vaccines included in the program.



Most vaccines are given at commune health centers on fixed monthly immunization days



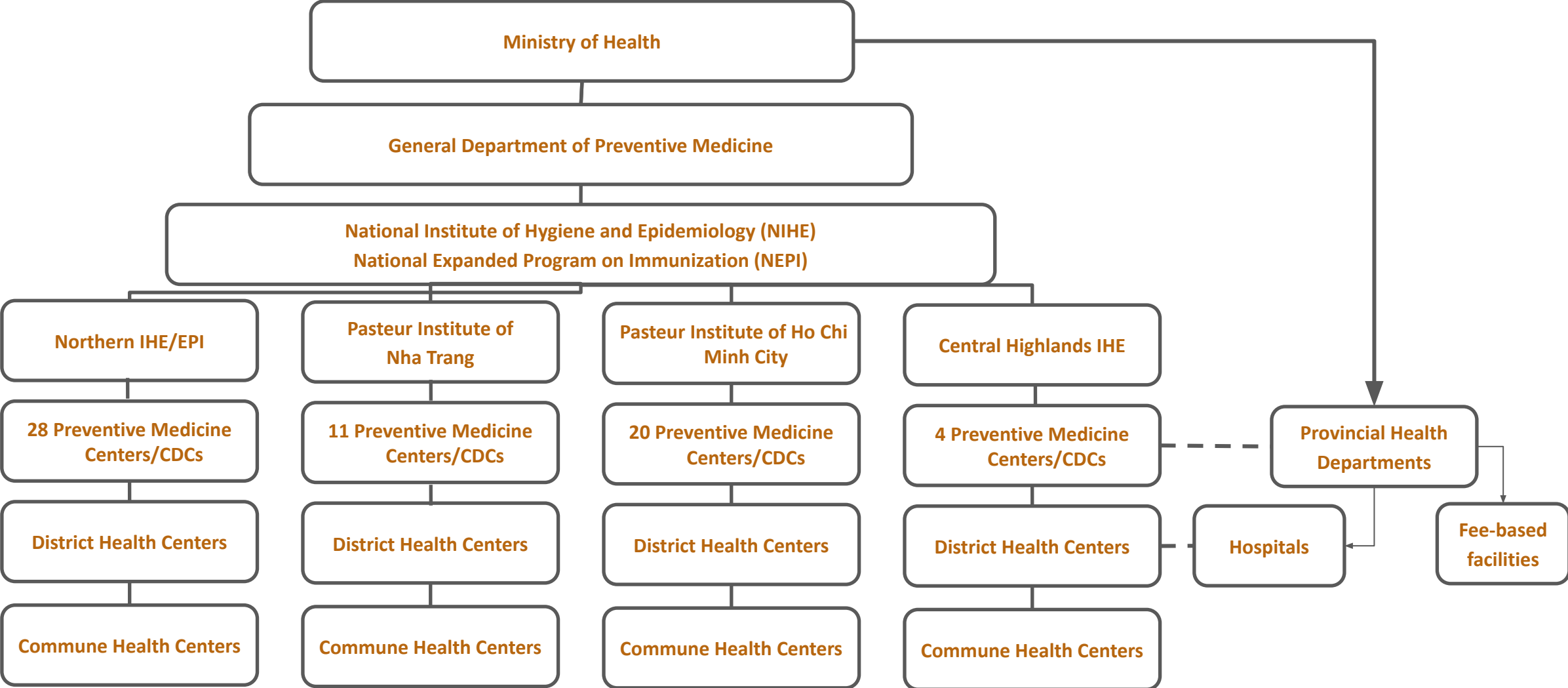
There are geographic inequalities, with lower coverage rates in hard-to-reach mountainous areas.



Before June 2017, immunization information systems were primarily paper-based systems, with some computer-based systems for reporting aggregated data.



EPI structure in Vietnam



Moving beyond paper-based systems for continued improvement

Current paper-based systems are:

- ❑ cause delays
- ❑ time-consuming
- ❑ prone to errors
- ❑ difficult to track clients and stock

They leave children and pregnant women at greater risk of contracting vaccine-preventable diseases.

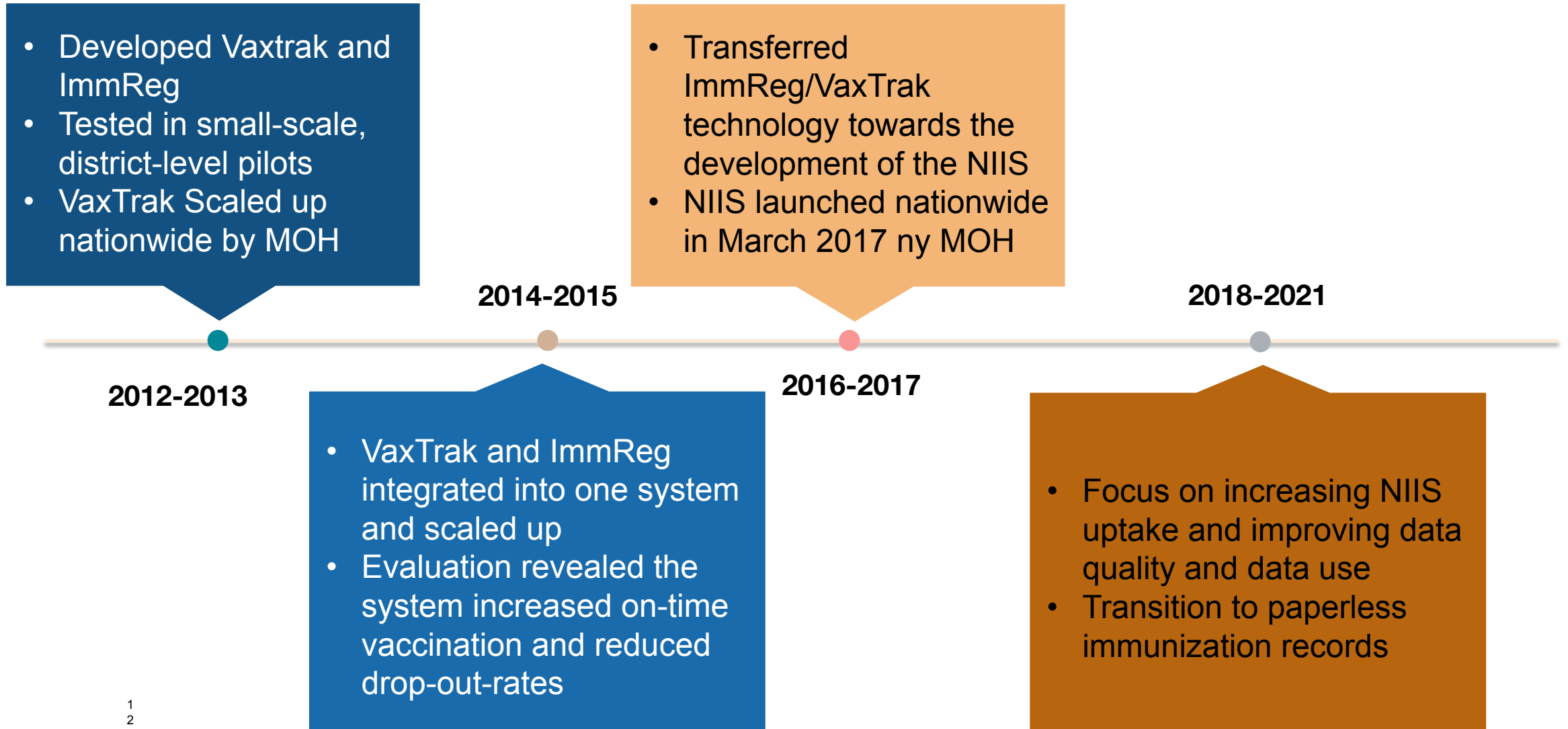
They cause data inaccuracies which result in poor planning and management of both vaccination programs and vaccines and supplies.





Vietnam National Immunization Information System (NIIS)

Timeline of the electronic immunization registry introduction and scale-up in Vietnam



Vietnam National Immunization Information System



Provinces



Facilities



Clients



E-cards



HỆ THỐNG THÔNG TIN
TIÊM CHỦNG QUỐC GIA

Đăng nhập

Nhớ tài khoản [Quên mật khẩu?](#)

Đăng nhập

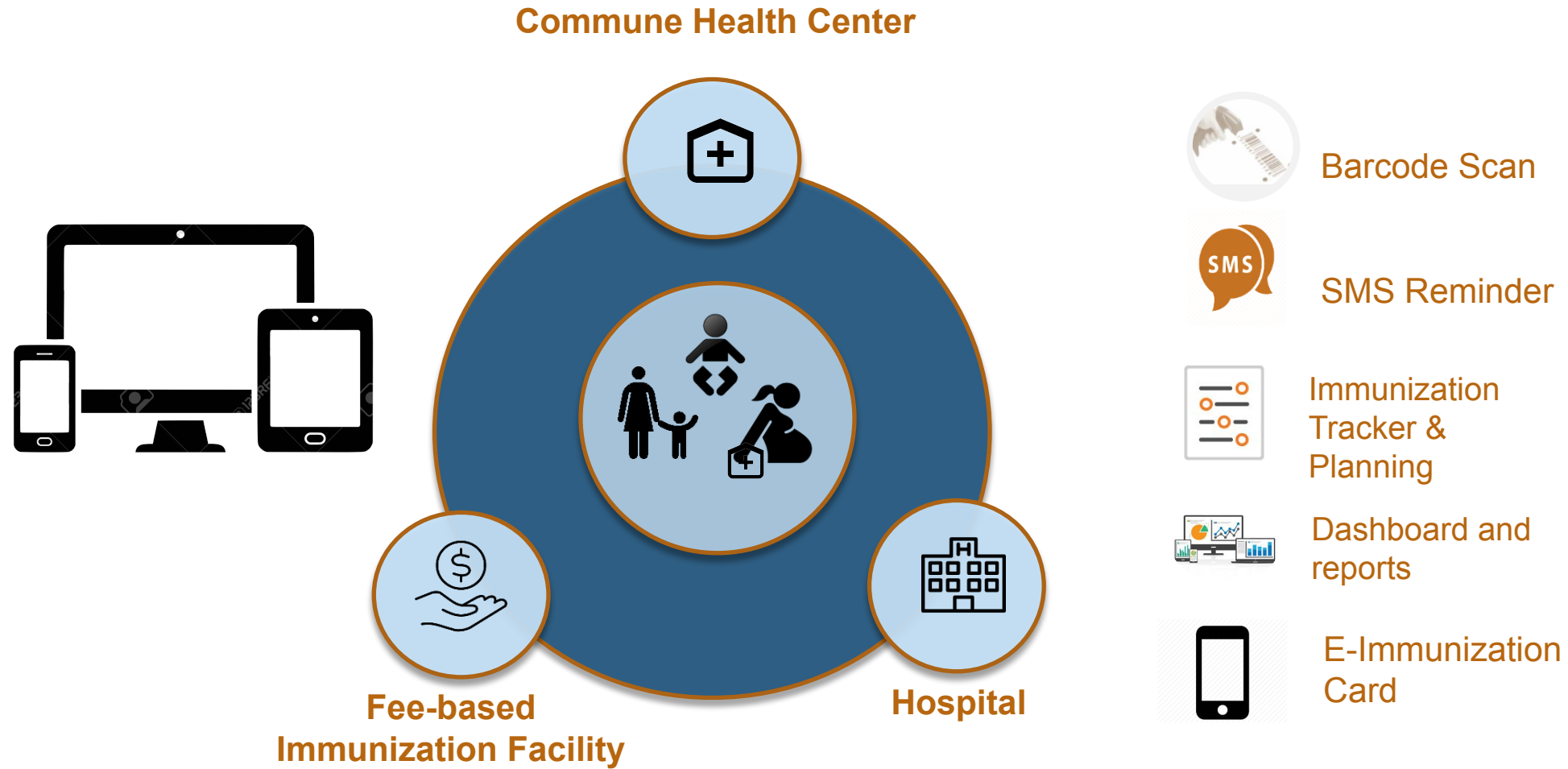
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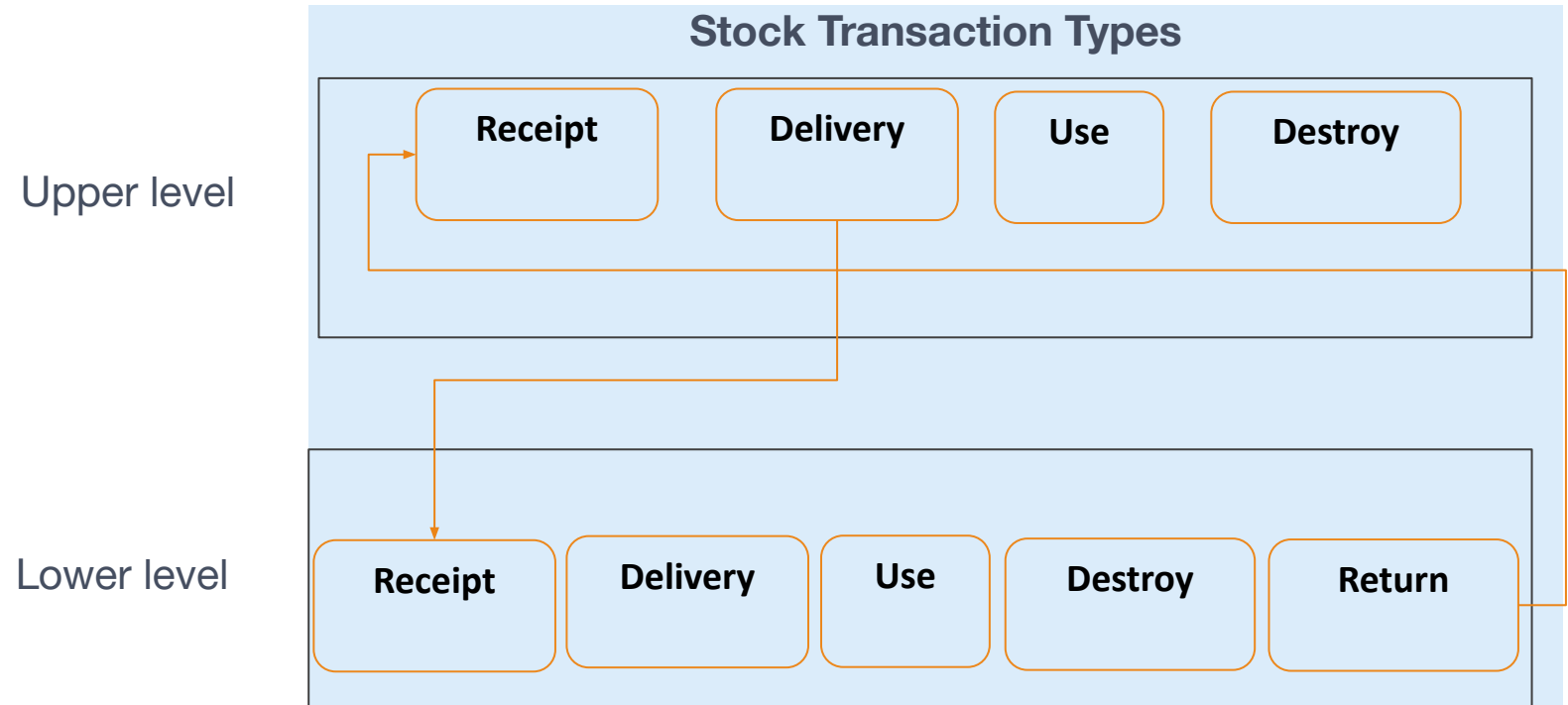
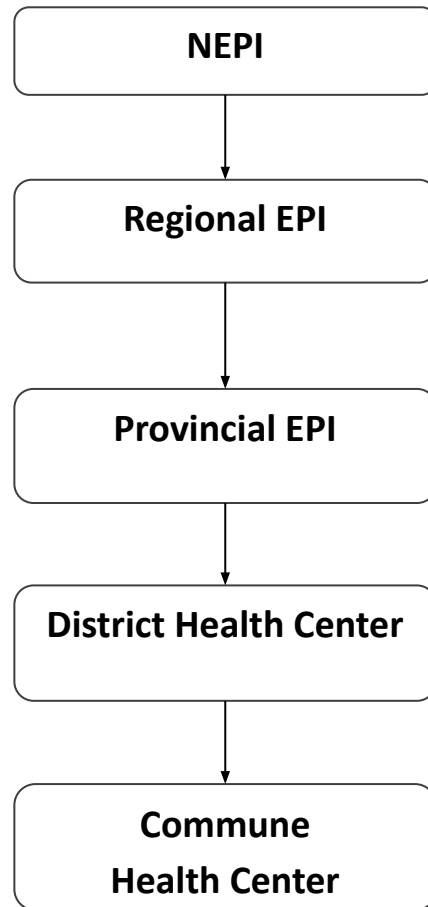
viettel **PATH**
Theo cách của bạn



System main functions: Immunization Registry Module

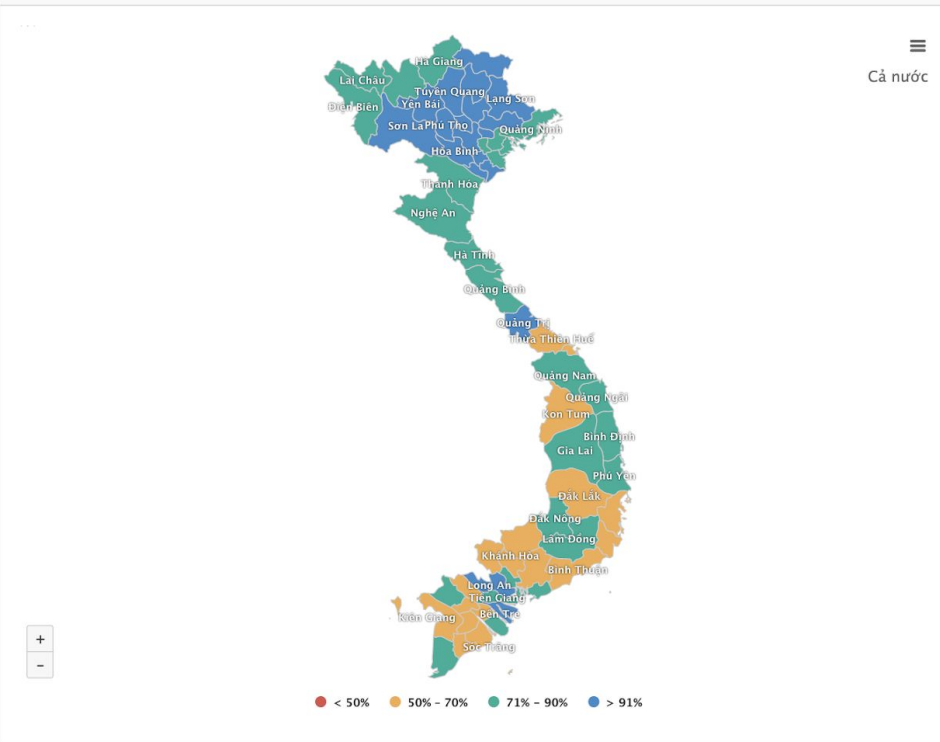


System functions: Stock Tracking Module

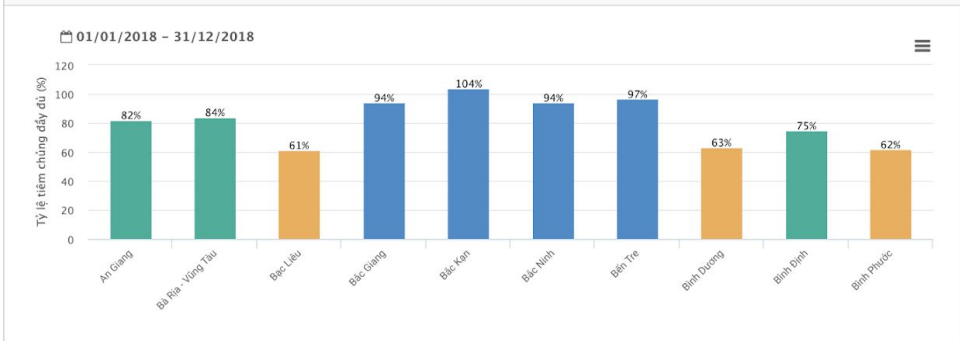


Dashboard

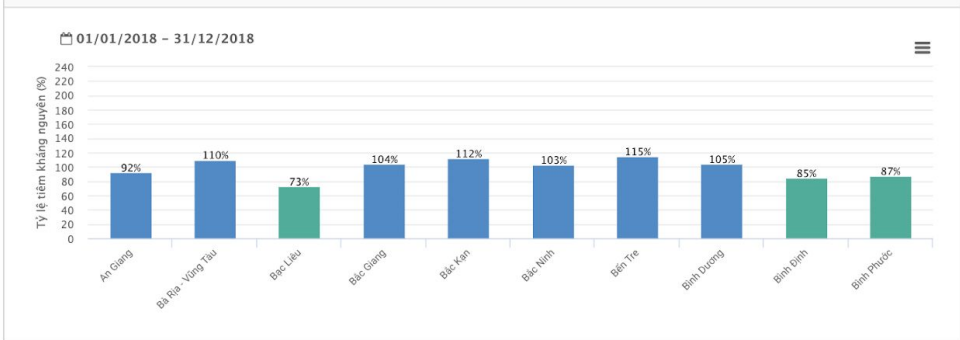
Bản đồ tỷ lệ tiêm chủng đầy đủ



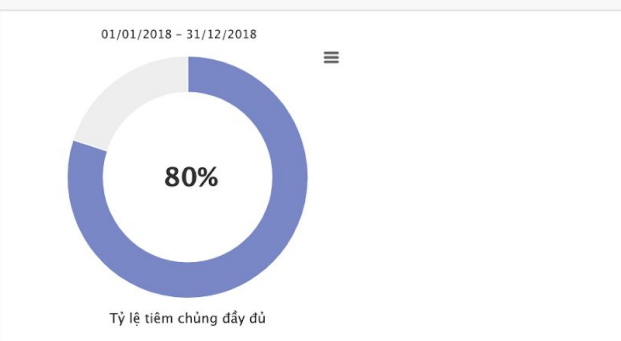
Biểu đồ tỷ lệ tiêm chủng đầy đủ



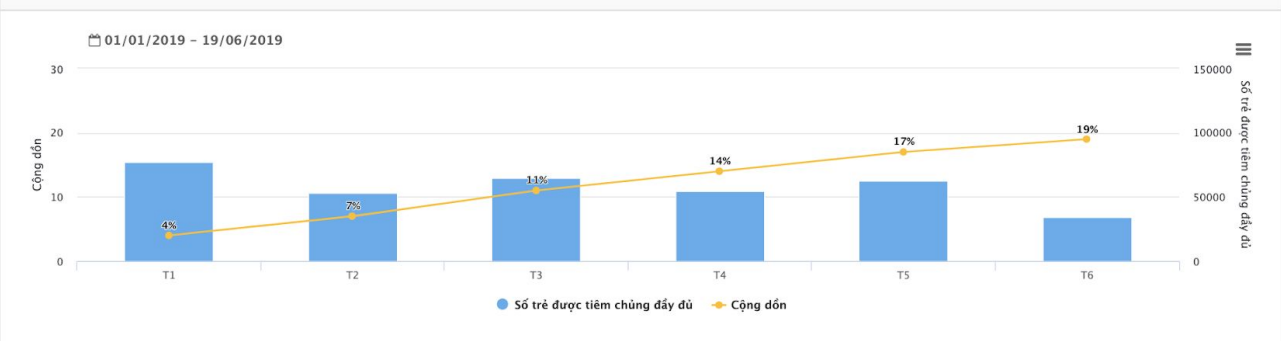
Biểu đồ tỷ lệ tiêm kháng nguyên



Tỷ lệ TCĐĐ



Tiến độ tiêm chủng đầy đủ dưới 1 tuổi



BENEFITS OF NATIONAL IMMUNIZATION INFORMATION SYSTEM (NIIS)



Automated

The system notifies caregivers of the next vaccination date via an SMS.



Time-Saving

Notifies the healthcare worker of the quantity of vaccines each month



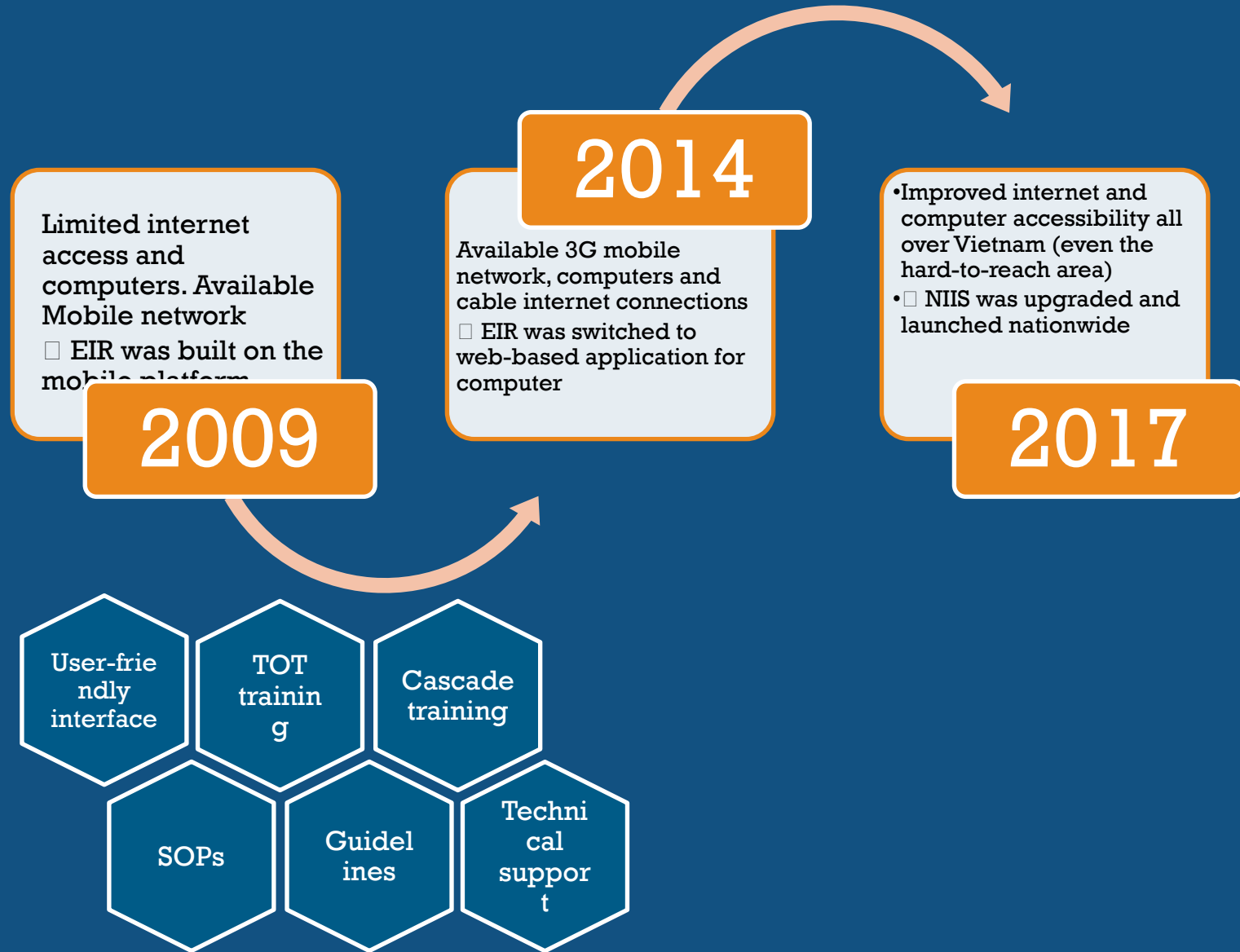
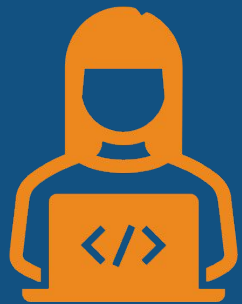
Accurate

Less prone to data errors



Challenges along the way

Challenges at the Facility level (1/2)



Challenges at the Facility level (2/2)



Training



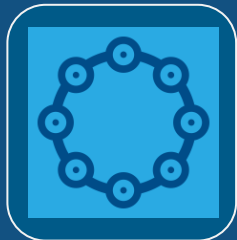
Back Data Entry



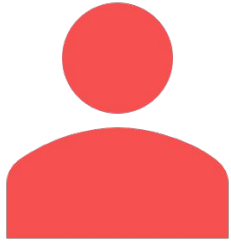
Dual System



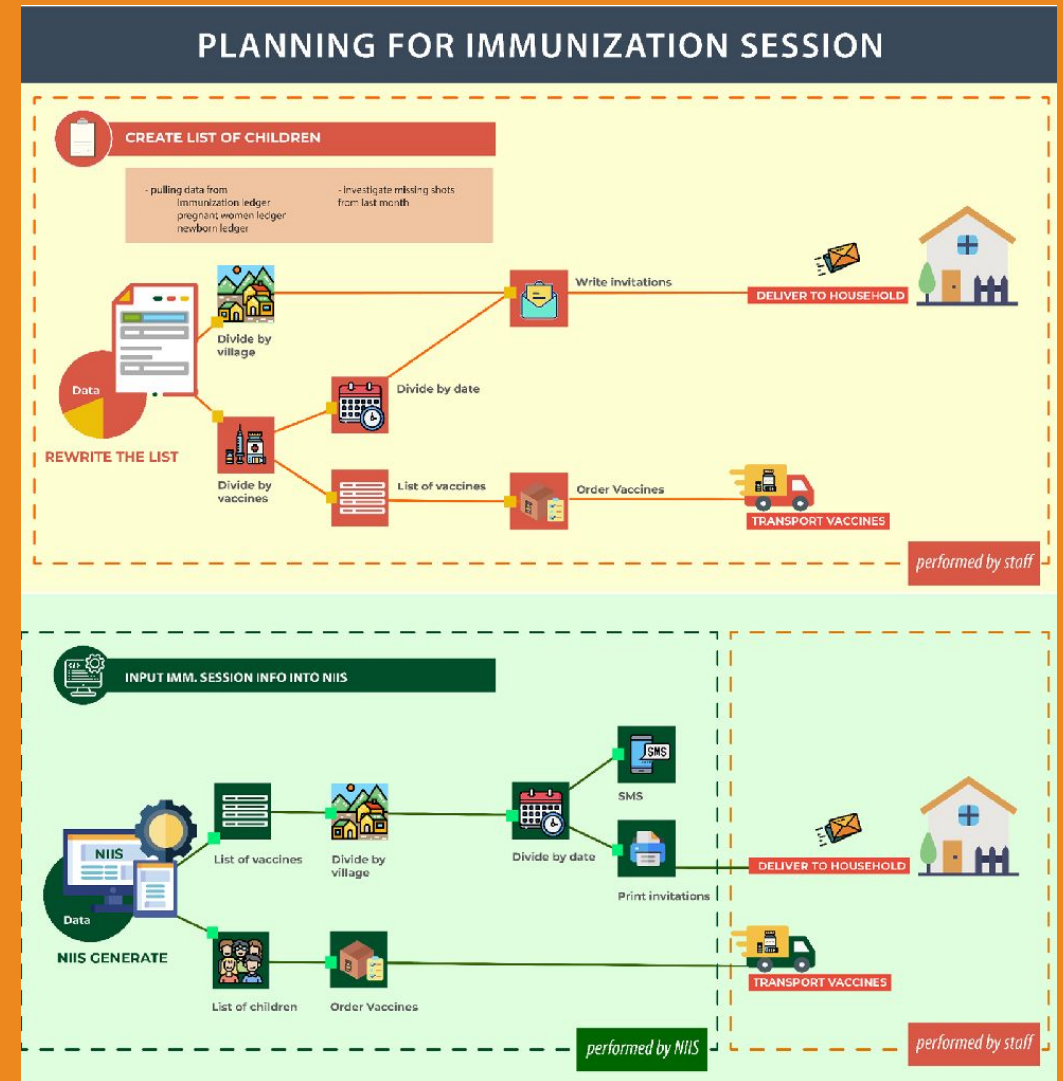
System frequent Update

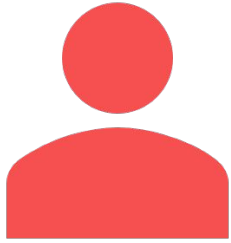


Inter-operability

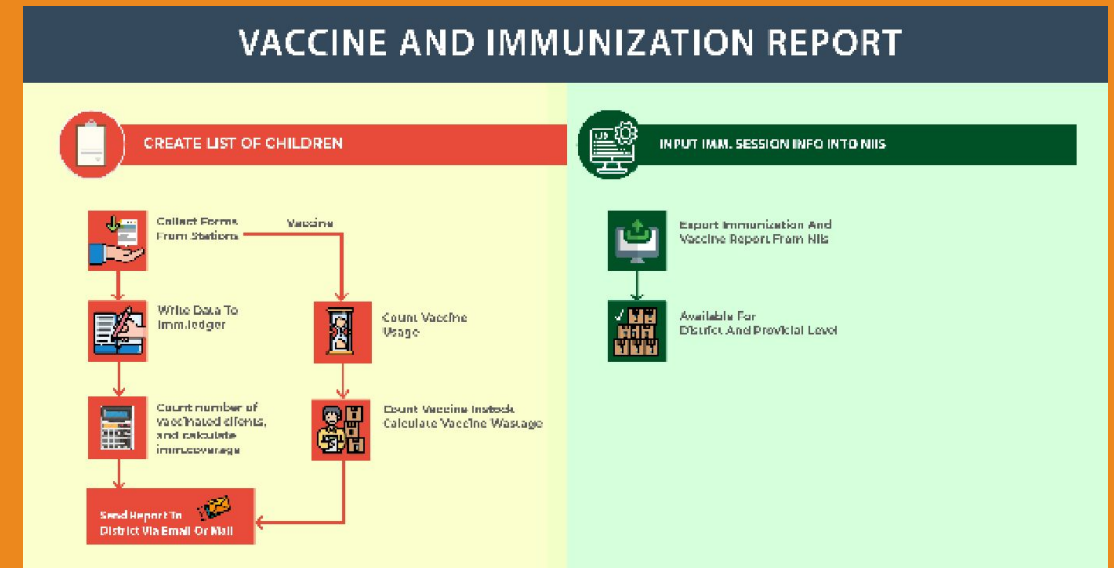


“**The job has become so much simpler with the assistance of [a] computer.** However, automatically generated list[s] and reports still have some errors, [so] that I still have to call the parents to double-check on their information as it might not be updated in a timely manner, especially if they got vaccinated at the private clinic. I also have to edit the automatically generated reports as some new vaccines are not updated. **So, it saved us time and effort but at the same time added other kind[s] of work, especially with our limited computer skill[s].** We are hoping for a more seamless system.”





“**Looking back, the paper-based system for immunization was a nightmare**; besides the official ledgers that we had to store and the reports that we had [to] submit to the district health center and [try] to keep clean, we had to write and re-write the lists of children and vaccines in our draft notebook, using all kinds of [stationery] available (different colored pens, pencils, markers, marking stickers, etc..) to differentiate groups of children and vaccines—that way, we could ensure to count correctly. **Our notebooks were like colorful children’s books.**”



Challenges at the Management level

Resources

Mobilize and allocate resources appropriately

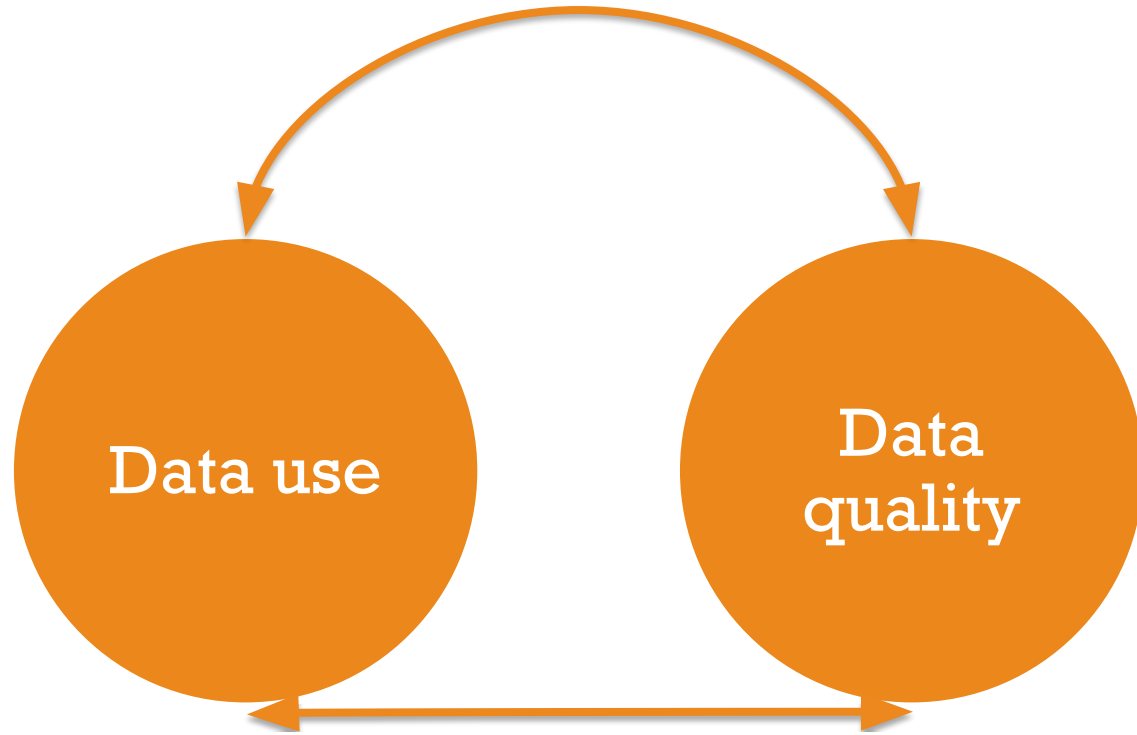
Important liaison between the end-users and technical team

Data

Data quality

Data use

Data Management



“Our work would be more focused and efficient. There are more I think we can do with the data on the system that I have yet to learn.”

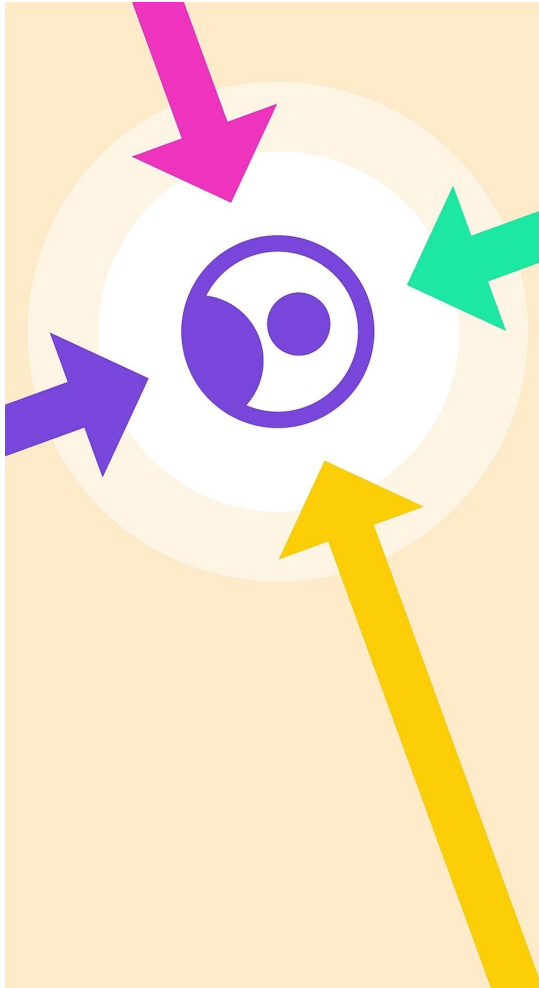
Provincial EPI staff





Our approach

User-centered approach in NIIS implementation





1. **Develop a system with a user-friendly interface**
2. **Developing guidelines and SOPs for immunization on NIS functionalities.**
3. **Training, technical support, supportive supervision**
4. **Allocate appropriate support during initial and transition phase**
5. **Identify champions of the system to share knowledge, skill and create influence to other colleagues to promote the acceptance**
6. **E-learning**
7. **Develop API guideline and SOPs to exchange data among system to reduce double data entry**



“EIR is inevitable in this age of information technology. It is the obvious next step in data management. I can clearly [en]vision the benefit of NIS and fully support the system.”

—Provincial EPI manager



Q & A

If you have any questions or comments you would like to share,
please type them in the chat or raise your hand

CO

WHAT'S NEXT?

The screenshot displays the Boost Community website interface. At the top, there is a navigation bar with the Boost logo, a search bar, and several utility icons. Below this is a main header area with a large image of hands holding a child's hand, overlaid with the text 'Bright Spots'. A 'Manage group' button and a 'Joined' status indicator are visible. The main content area is divided into sections: 'About' (describing the Bright Spots initiative), 'Group Facilitators' (listing Sarah Kester, Sarah Moselle, and Elizabeth Kohivay), and 'Events' (showing a partial event title 'Conflict Doesn't Have to Mean Cut Off...'). A central post area shows a communication titled 'Introducing Bright Spots: Stories of Innovation in Routine Immunization' with a 'Publish' button.

Join or Visit the Boost Community

The Boost Community enables immunization professionals to connect with peers and experts, learn skills that build capacity. Take advantage of our online platform, including online courses, live workshops, webinars, resources and more!

Join Boost's Telegram Channel

Connect with other immunization professionals and get live updates on new courses, webinars and other Boost offerings!

Join Boost's Bright Spots Learning Group

Continue sharing your comments, questions and challenges with your peers and experts in the special *Bright Spots Learning Group*.

Take Our Survey

We want to hear from you! Please share your thoughts with us.

Share Your Spark

Have a story you want to be featured as part of this new series? Share your experience and insights with the Boost team today!

GMVSC EVENT: GLOBAL MASS VACCINATION SITE SETUP & IMPLEMENTATION

The **Boost Community**, in partnership with [Ariadne Labs](#), a joint center for health systems innovation at **Brigham & Women's Hospital** and the **Harvard T.H. Chan School of Public Health**, is excited to present a live engagement, ***Global Mass Vaccination Site Setup & Implementation***, on **Friday, December 17 at 1:00 PM GMT**

The event will feature [VillageReach](#) mass vaccination site operators from the Democratic Republic of Congo (DRC) sharing their experiences and lessons learned in setting up and implementing a site.

During this interactive session, you will have the opportunity to:

- Get an overview on how to setup and implement a mass vaccination site
- Hear current challenges and lessons learned from mass vaccination site operators
- Share your questions and receive real-time feedback on current site operations within your country



Register Today!





THANK YOU

