

# Electronic Immunization Registry implementation in the view of its end-users

How the National Immunization Information System changed their work – perspective from immunization staff in Vietnam

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1

## Vietnam National Immunization Information System

2

Overcoming the challenges of innovative technological adoption for new users

3

Workload reduction and efficiency enhancement for immunization program

Recommendations

# Vietnam National Immunization Information System



**Provinces**



**Facilities**

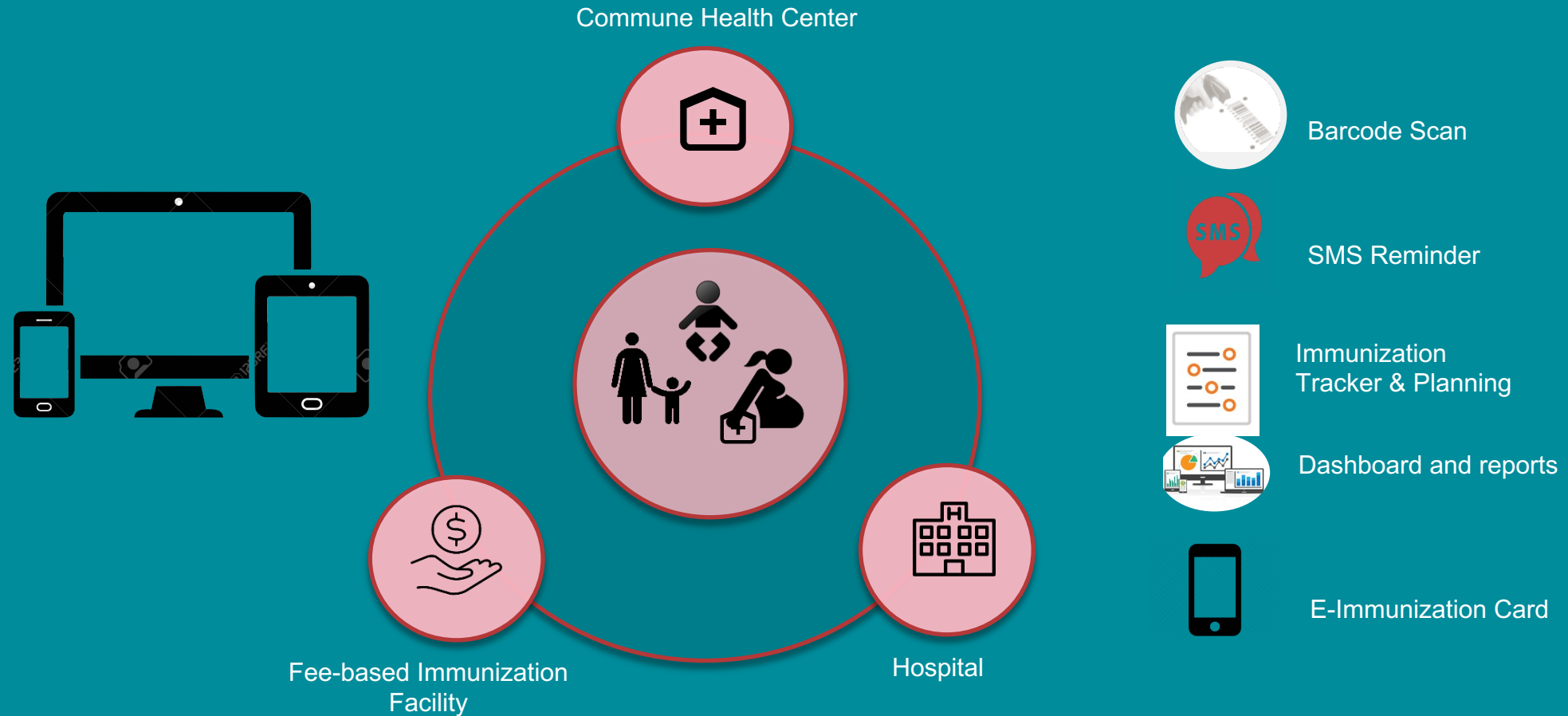


**Clients**



**E-cards**

# System main functions: Immunization Registry Module







HỆ THỐNG THÔNG TIN  
TIÊM CHỦNG QUỐC GIA

### Đăng nhập

Nhớ tài khoản [Quên mật khẩu?](#)

Đăng nhập

Điện thoại hỗ trợ: 1800 8000 (Nhánh 4)



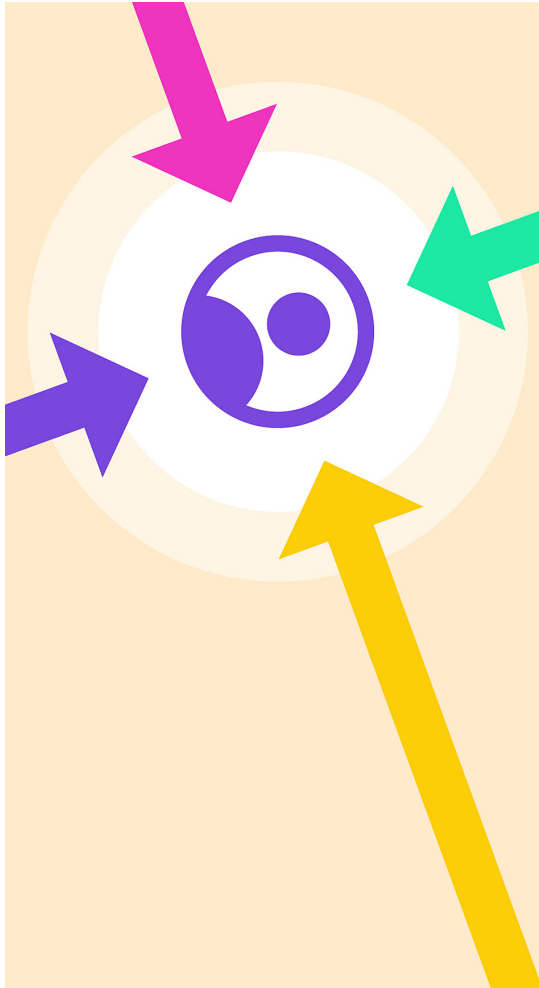
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Theo cách của bạn 10:30-11:20



**PATH**  
10:30-11:20



# User-centered approach in NIIS implementation



1

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# OVERCOMING THE CHALLENGES OF INNOVATIVE TECHNOLOGICAL ADOPTION FOR NEW USERS IN ELECTRONIC IMMUNIZATION REGISTRY IMPLEMENTATION

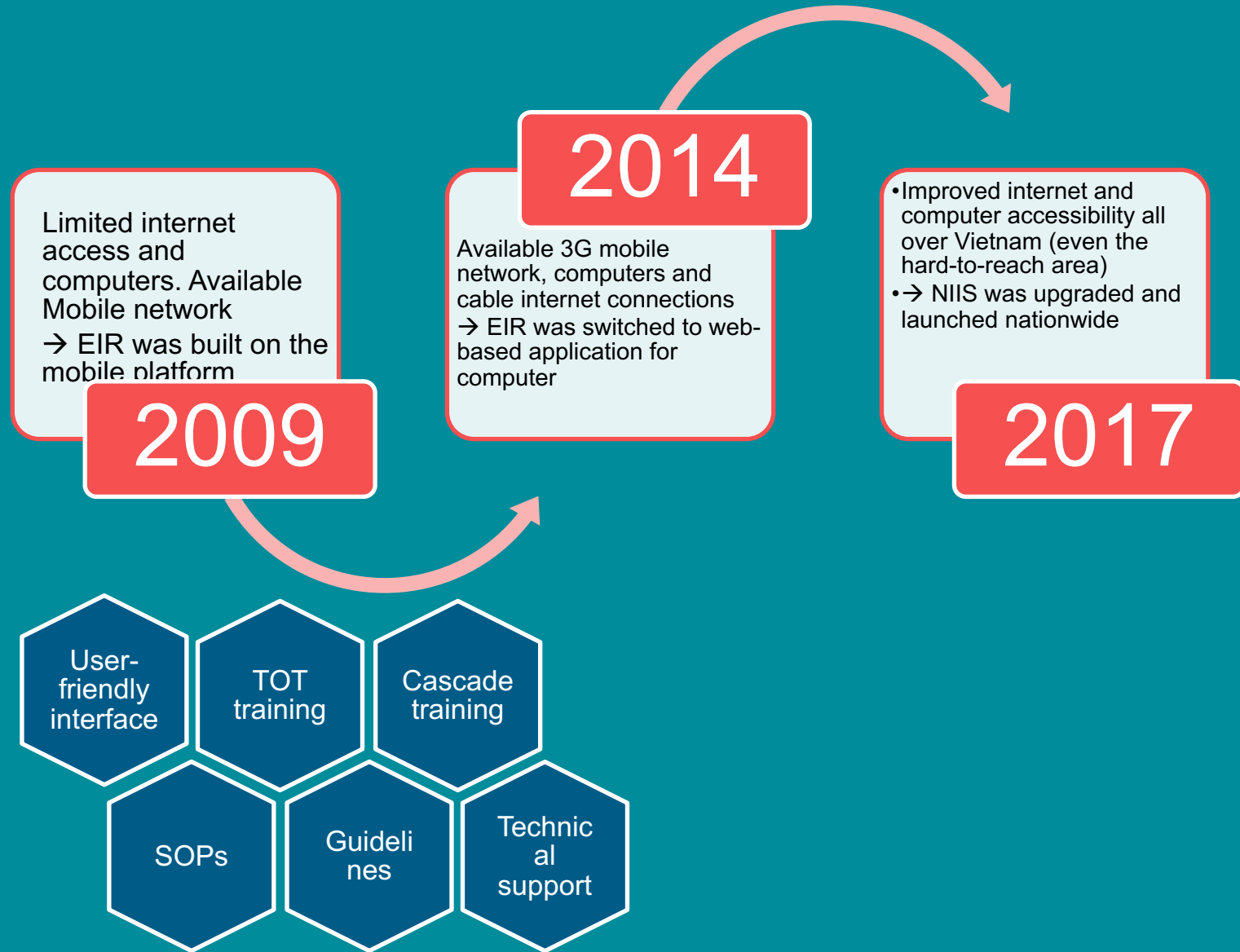
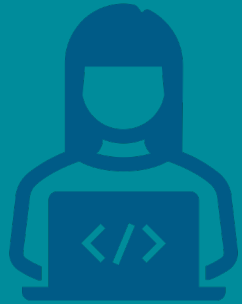
—A CASE STUDY FROM VIETNAM—

**...user-centered approach to system design, development, and now improvement is the key to successful EIR implementation and sustainability in Vietnam...**

[https://www.technet-21.org/media/com\\_resources/tr/6747/multi\\_upload/LL7\\_final\\_EN.pdf](https://www.technet-21.org/media/com_resources/tr/6747/multi_upload/LL7_final_EN.pdf)



# 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

# 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

**“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 NIIS and fully support the system.”**

—Provincial immunization manager



1

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**Workload reduction and efficiency enhancement for immunization program**

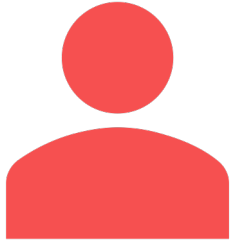
Recommendations

## ELECTRONIC IMMUNIZATION REGISTRY IN WORKLOAD REDUCTION AND EFFICIENCY ENHANCEMENT FOR IMMUNIZATION PROGRAM IN VIETNAM

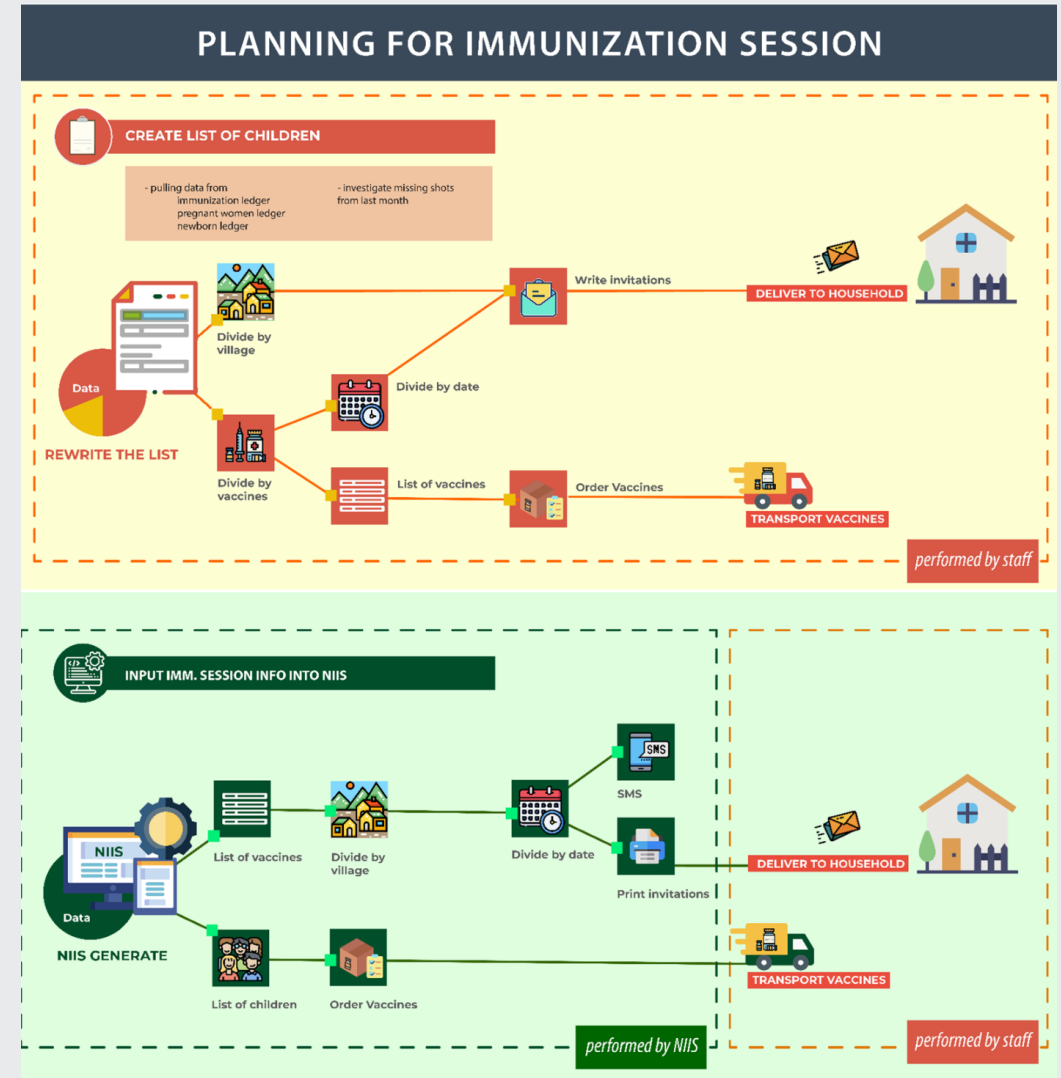
**...there is not always a parallel relationship between  
advanced technology and workloads of those who directly  
perform the work...**

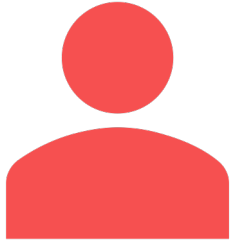
[https://www.technet-21.org/media/com\\_resources/tr/7122/multi\\_upload/LL8\\_final0105.pdf](https://www.technet-21.org/media/com_resources/tr/7122/multi_upload/LL8_final0105.pdf)



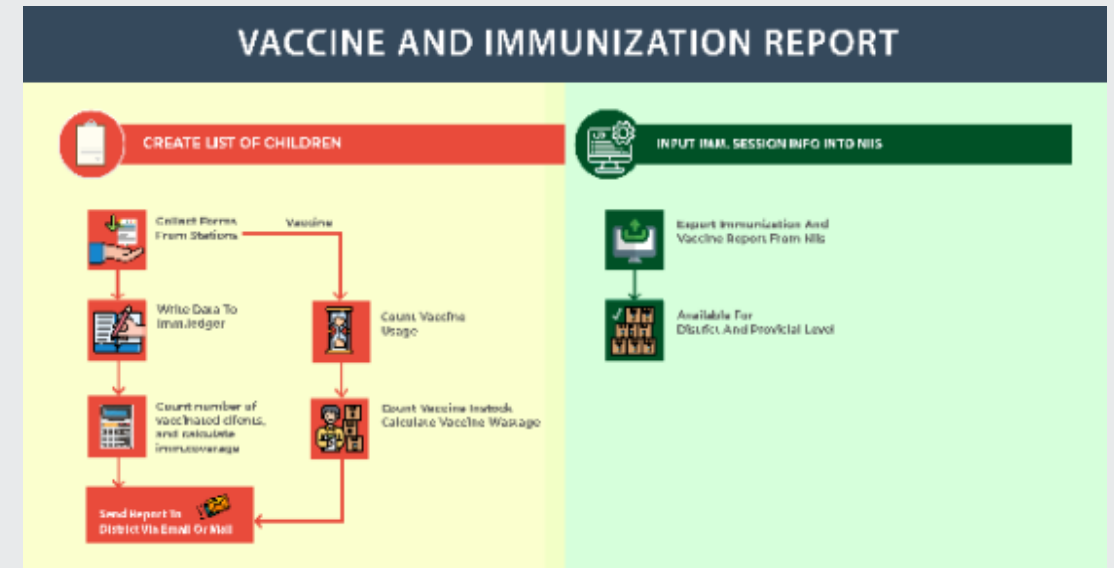


“The job has become so much simpler with the assistance of [a] computer. However, automatically generated list[s] and reports still have some errors, [so] that I still have to call the parents to double-check on their information as it might not be updated in a timely manner, especially if they got vaccinated 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.”



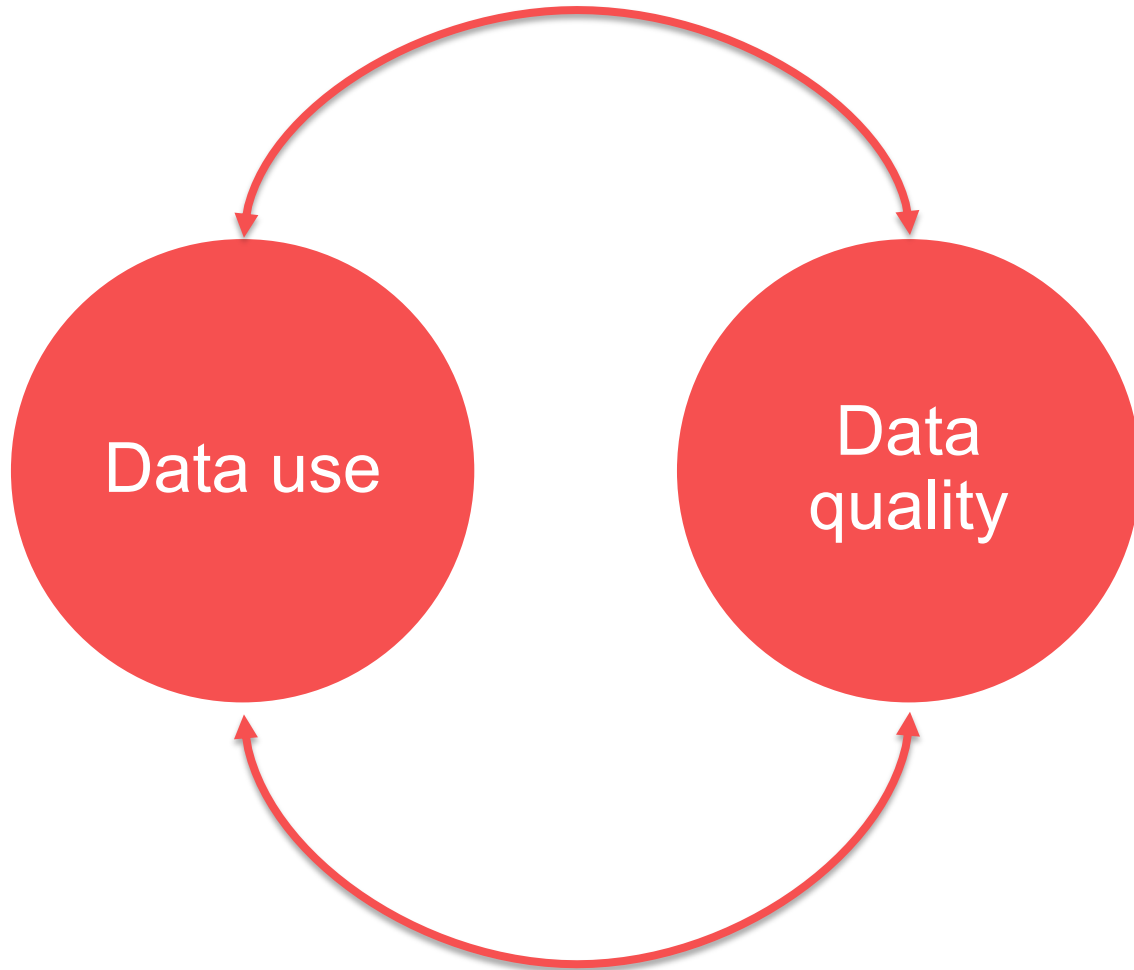


“Looking back, the paper-based system for immunization was a nightmare; besides the official ledgers that we had to store and the reports that we had [to] submit to the district health center and [try] to keep clean, we had to write and re-write the lists of children and vaccines in our draft notebook, 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.**”





# 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 -**

1

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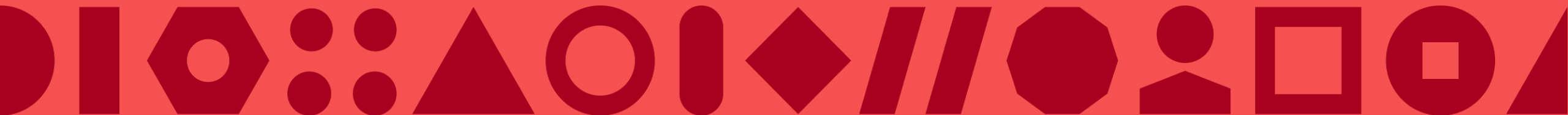
Workload reduction and efficiency enhancement for immunization program

**Recommendations**

**User-centered approach**  
in design, development, and  
deployment of EIR system



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





# Q&A





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information  
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**PATH**  
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