

# Supporting Community Health Workers in India with Personalized Feedback

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Community Health Workers (ASHAs) provide essential health services to vulnerable populations

ASHA programs have been shown to improve health outcomes





ASHAs collect essential data from target populations using mobile devices



Successful community health programs  
are challenging to run

Supervision is expensive

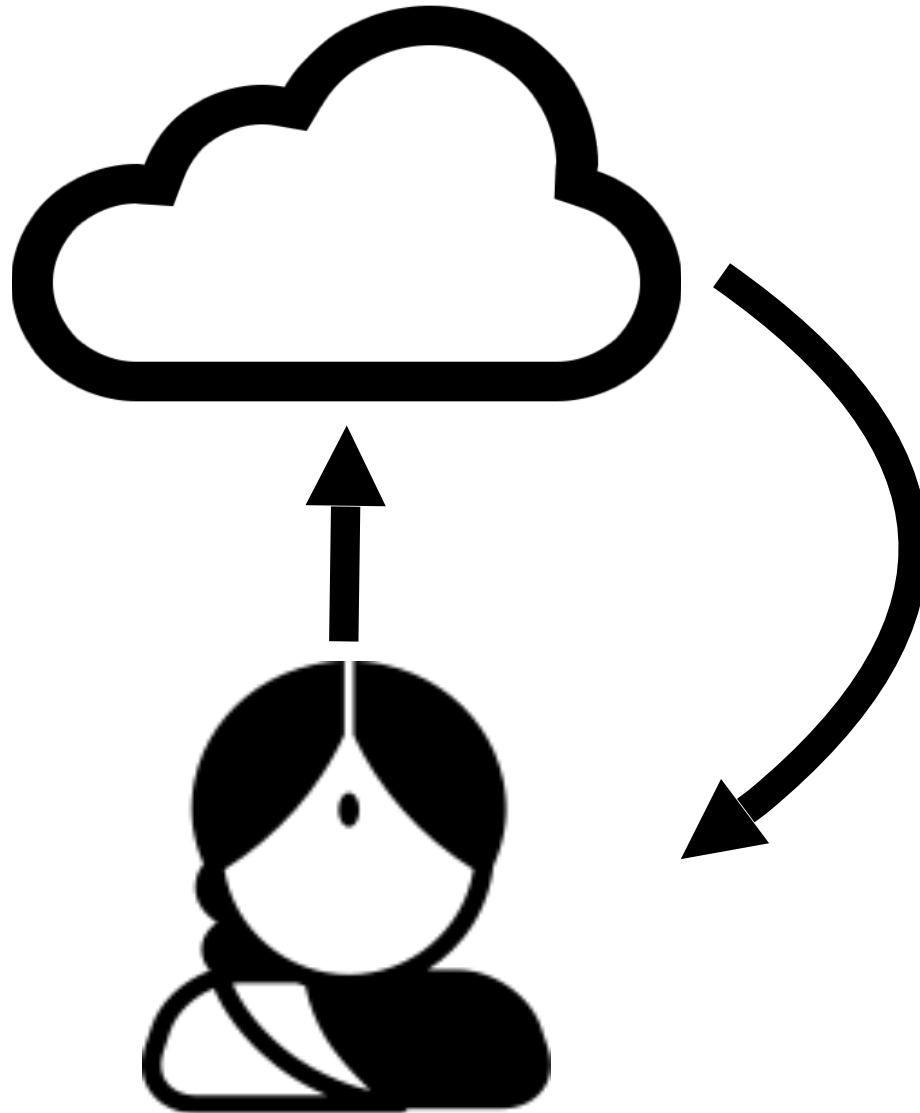
ASHAs do not receive feedback

ASHAs feel isolated

Performance declines over time



Can we motivate ASHAs by providing personalized feedback?





# Design Constraints

Low literacy

Limited education

Unreliable connectivity

Feature phones

Limited supervision



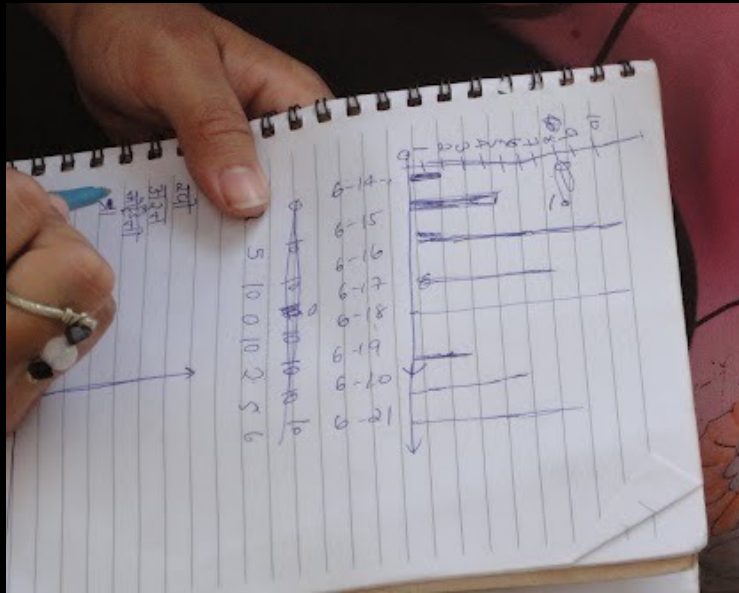


# Kaushambi District, Uttar Pradesh, India





# Iterative Design and Fieldwork





# Context is important

## NUMBER OF VISITS



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# The ASHA Self-Tracking System (ASTA)

**Reshma Devi**

1/3/2014 - 24/3/2014



**Everyone's  
performance**



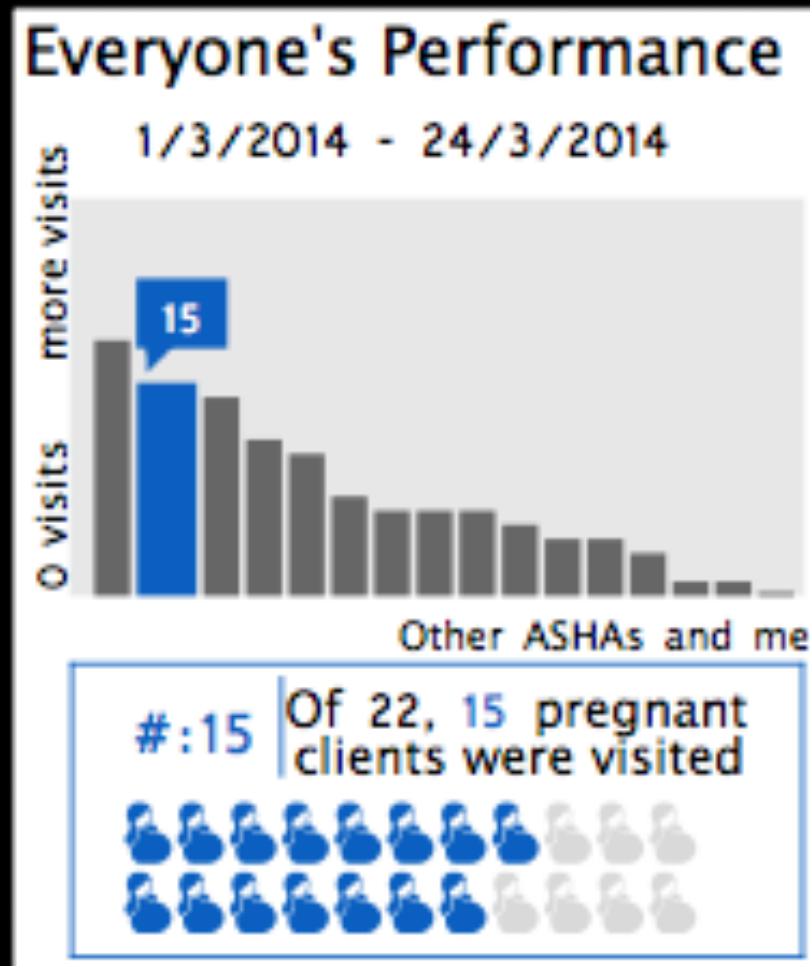
**Calendar**



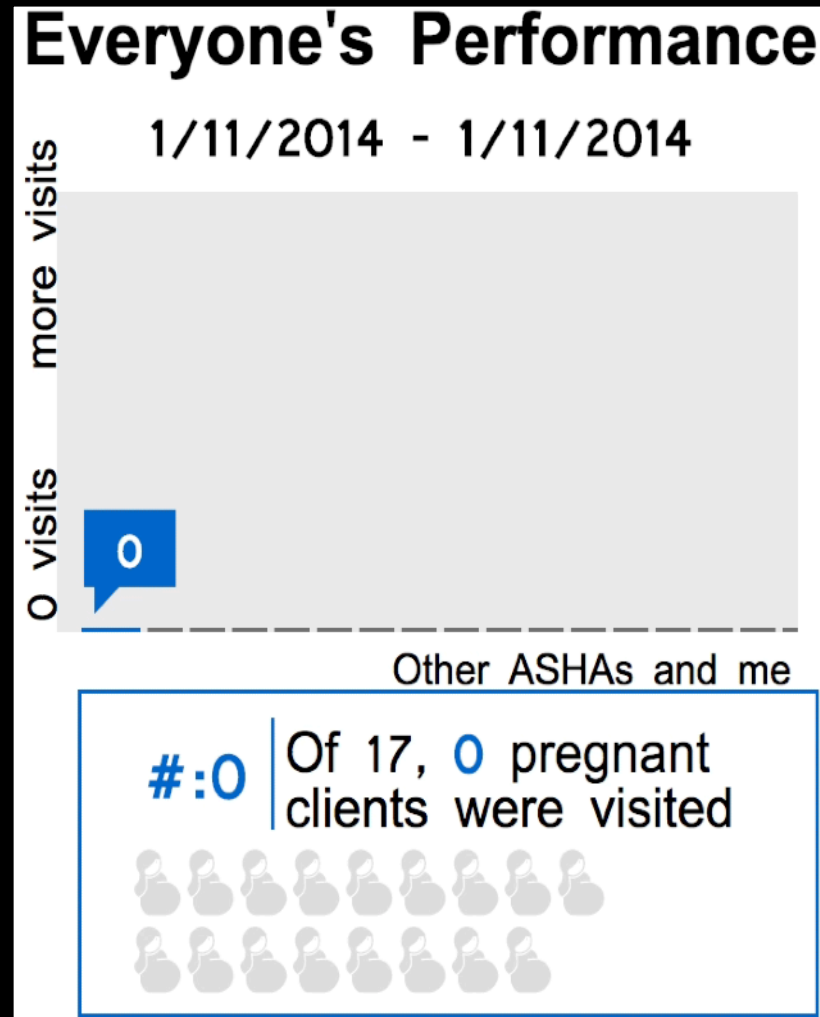
**Past 5 months  
performance**



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**Everyone's performance**



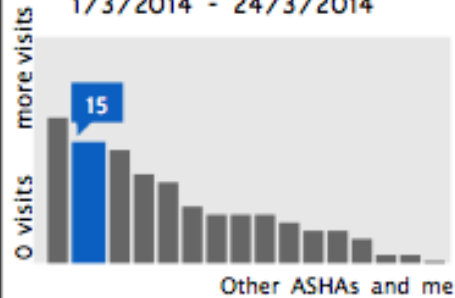
**Calendar**



**Past 5 months performance**

**Everyone's Performance**

1/3/2014 - 24/3/2014

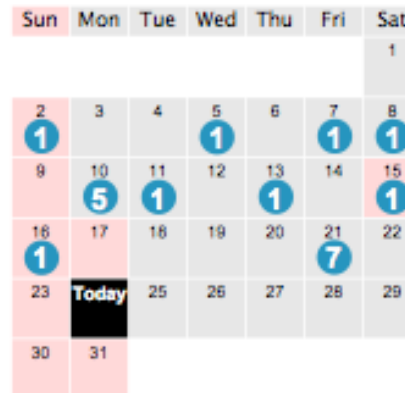


#:15 Of 22, 15 pregnant clients were visited



**Number of visits**

1/3/2014 - 24/3/2014



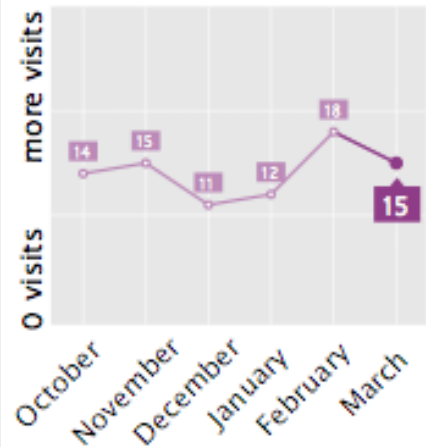
**20 home visits**

15 client visited

7 pregnant clients remain

**Number of visits**

1/3/2014 - 24/3/2014



## A Parallel Voice-Based System

“Hello Meena Yadav. Please listen to your CommCare home visit report carefully. In February, among 15 clients, you have visited 12 and three visits remain. Among 10 ASHAs you are in third place. Thank you.”

# Field evaluation in Uttar Pradesh

Treatment

Control



71 ASHAs

71 ASHAs



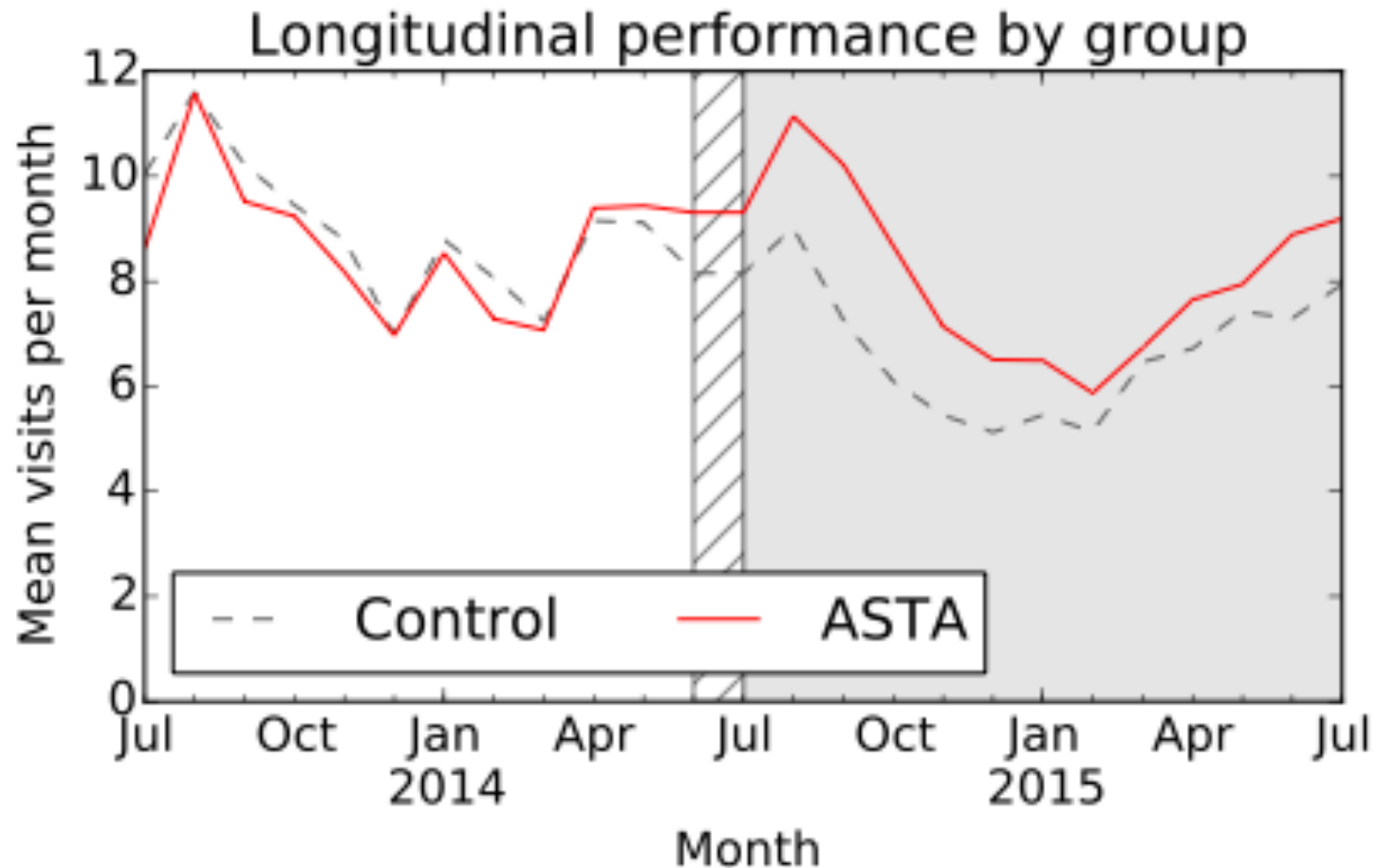
# Field evaluation in Uttar Pradesh

How does the system impact ASHA performance?

How do the ASHAs feel about receiving feedback?

How do the ASHAs use the different parts of the system?

# How did feedback affect performance?



Average monthly visits 21.5% higher with ASTA

## How did ASHAs feel about the feedback?

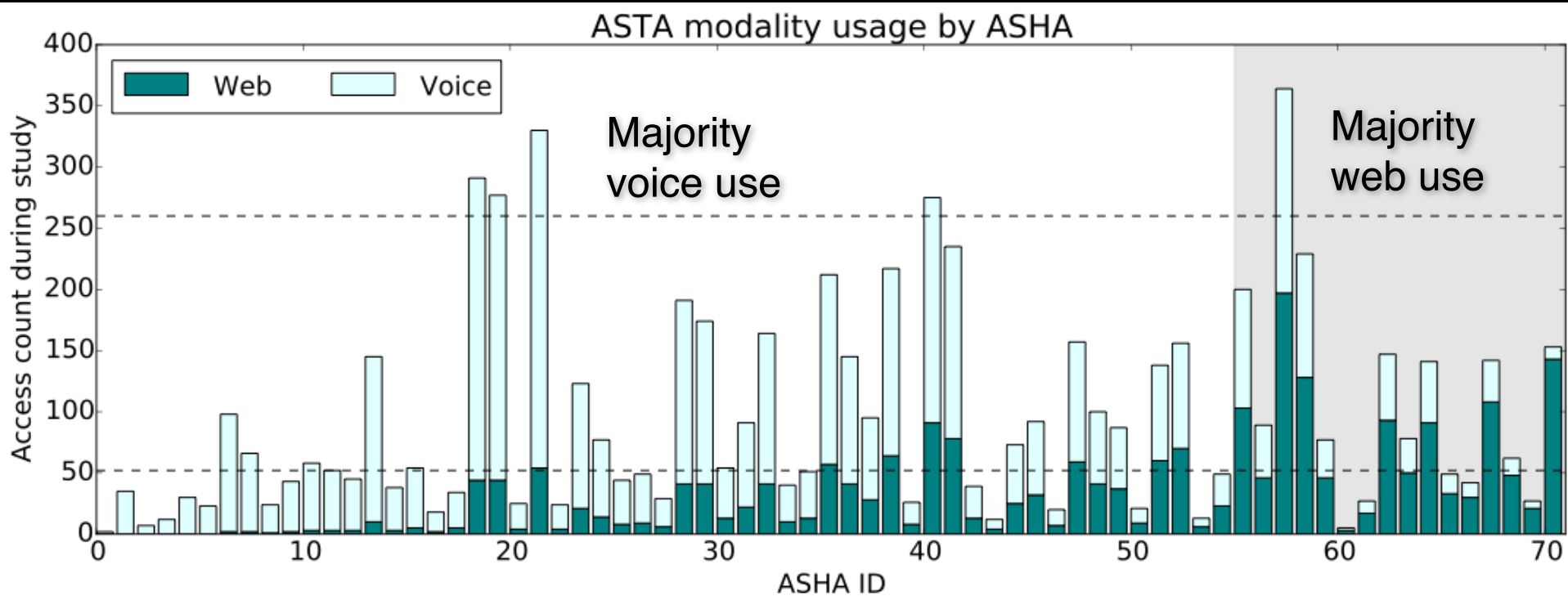
*“I felt motivated . . . like I completed eight home visits so by seeing this it motivated me to do more work. It also motivated me to add new pregnant women in my lists because then I can do more home visits.”*

*“I feel bad when I cannot do much work. When I go to the home visits many people are not available because of harvesting which is why my work is less.”*

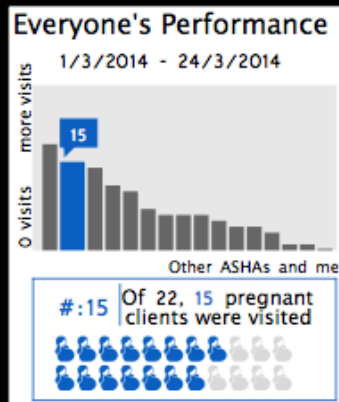
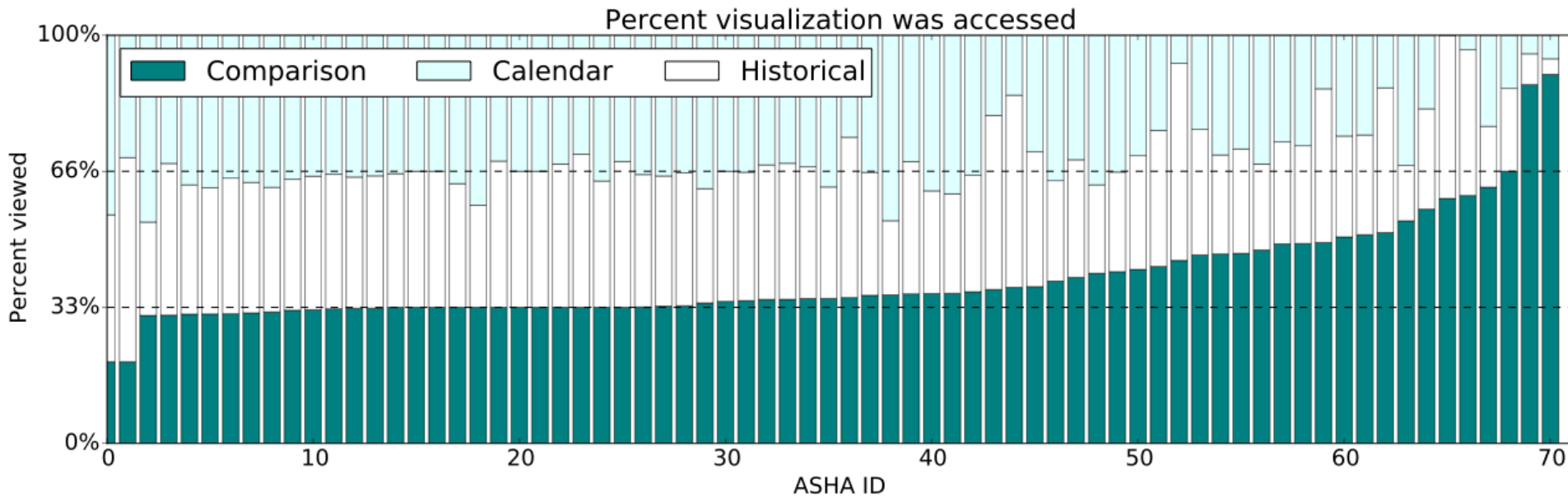
*“When my ranking position was low then I felt badly... but I didn't have any new beneficiary that I could register...”*



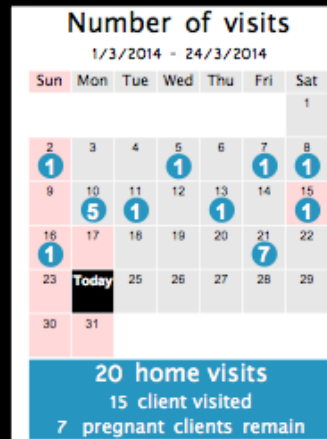
# How did ASHAs use the different systems?



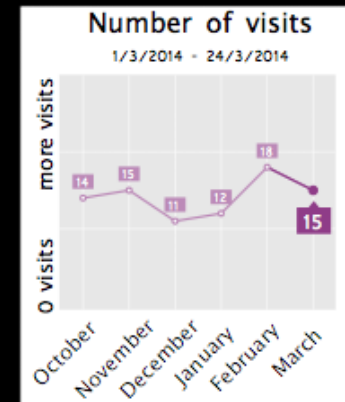
# How did ASHAs use the visualizations?



Comparison



Calendar



Historical

# Key Takeaways

It is essential to pay attention to the context

Metrics are challenging

Providing multiple interaction modalities helps

Interventions do not exist in isolation

Comparative feedback was effective, but not without challenges



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