



# Building AI Readiness and Digital Competency Among Frontline Health Workers



**AI**  
IMPACT  
SUMMIT  
भारत 2026 INDIA

सर्वजन हिताय | सर्वजन सुखाय  
WELFARE FOR ALL | HAPPINESS OF ALL

 17 February 2026  
 05:30 PM - 06:25 PM

 **Room - 9,  
Bharat Mandapam, New Delhi**

5:30 PM

**WELCOME & INTRODUCTIONS**

5:40 PM



**Dr. Valerie Jean Laloo**

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SHSRC, Meghalaya



**Dr. Sampath Kumar, IAS**

Principal Secretary &  
Development Commissioner,  
Government of Meghalaya



**Shyamashree Das**

Senior Program Officer,  
Gates Foundation, India



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World Health  
Organization

5:40 PM

SETTING THE STAGE

5:55 PM

Digital Competency Measurement



**Dr. Amnesty LeFevre**

Associate Professor  
University Of Cape Town  
Associate, Johns Hopkins University  
Director, EDiT Consortium



**Dr. Nayanjeet Chaudhury**

Senior Consultant  
SHSRC, Meghalaya



**Dr. Marbabiang Syiemlieh**

Senior Consultant  
SHSRC, Meghalaya

5:55 PM

INTERACTIVE SESSION

6:15 PM

Implementing digital competency assessments

LEAD MODERATOR



**Dr. Diwakar MOHAN**

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## DISCUSSION QUESTIONS

### Question #1

You have a draft of your survey tool.

**How do you ensure that your respondents will understand and interpret the questions in the way you intend?**

You have now identified 30 different digital skills that you want to assess. You have the option of either observing health workers perform the skill or asking them to report what they can perform.

### Question #2

**Which approach would you recommend?**

### Question #3

**Do you think people will over-report their ability to perform digital skills?**

### Question #4

All ASHAs in your State have been provided with a new smartphone to support their work. You have been asked to send out a survey to measure their digital skills via the health app on their phone.

**What challenges do you think ASHAs may have in completing the survey?**

### Question #5

You have hired a local survey company to implement your digital competency survey.

**What measures could you take to ensure high quality survey data?**

### Question #6

You now have data on ±30 digital skills across 5 competency areas.

**What's more useful programmatically – showing the data by**  
**(a) Level of digital skill → Skills grouped by competency domain**  
**(b) Individual skill**

### Question #7

You now have data on ±30 digital skills across 7 digital competency domains for 5 cadres of health workers.

**How will you use those data?**

Question #1

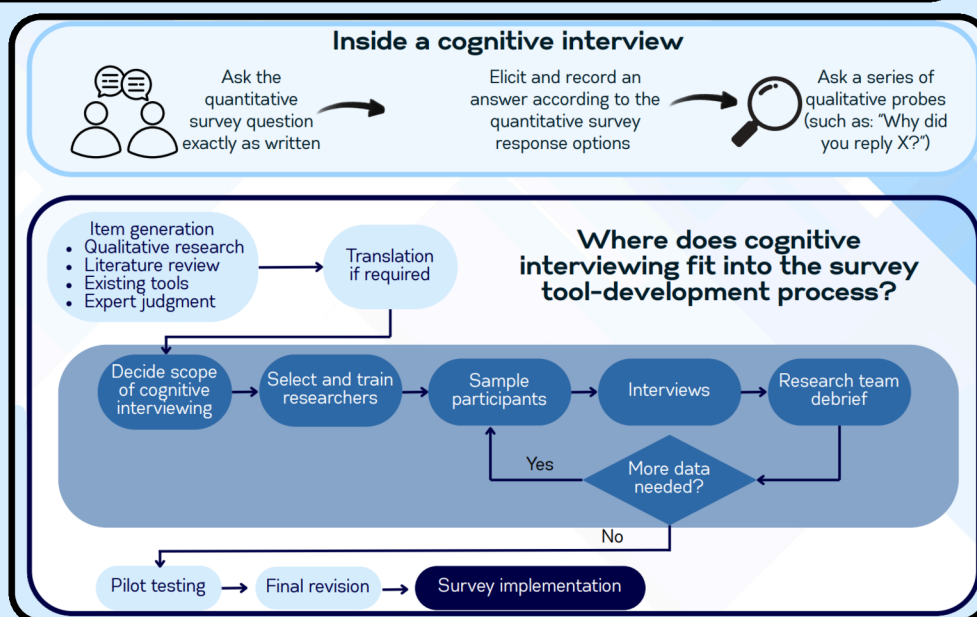
You have a draft of your survey tool.

How do you ensure that your respondents will understand and interpret the questions in the way you intend?

- Think about what factors would affect the interpretation of questions and the various ways in which this might influence responses.
- Think about what methodologies would ensure that questions yield the expected response in a measurable and reliable way

	Cognitive interviewing	Pilot testing
Focus	Assessing and improving cognitive match between researcher intent and respondent interpretation of survey questions.	Assessing and improving practical mechanisms of survey implementation (survey length, skip patterns, and modality)
Role in addressing content	Captures cognitive failures that would not be detected without qualitative probing	Catches obvious problems with content and translation
Researchers involved	Specially trained qualitative researchers	Members of the quantitative survey team who will conduct the survey at scale
Portion of survey instrument assessed	A subset of questions	Whole survey tool
Key output	Refined question wording + improved validity	Refined survey tool + implementation plan
Core question answered	"Are respondents understanding questions as intended?"	"Can this survey be implemented smoothly?"

Our comprehensive guide to cognitive interviewing has everything you need for testing survey questions and ensure respondent comprehension and expected response patterns.



You have now identified 30 different digital skills that you want to assess. You have the option of either observing health workers perform the skill or asking them to report what they can perform.

### Question #2

Which approach would you recommend?

### Question #3

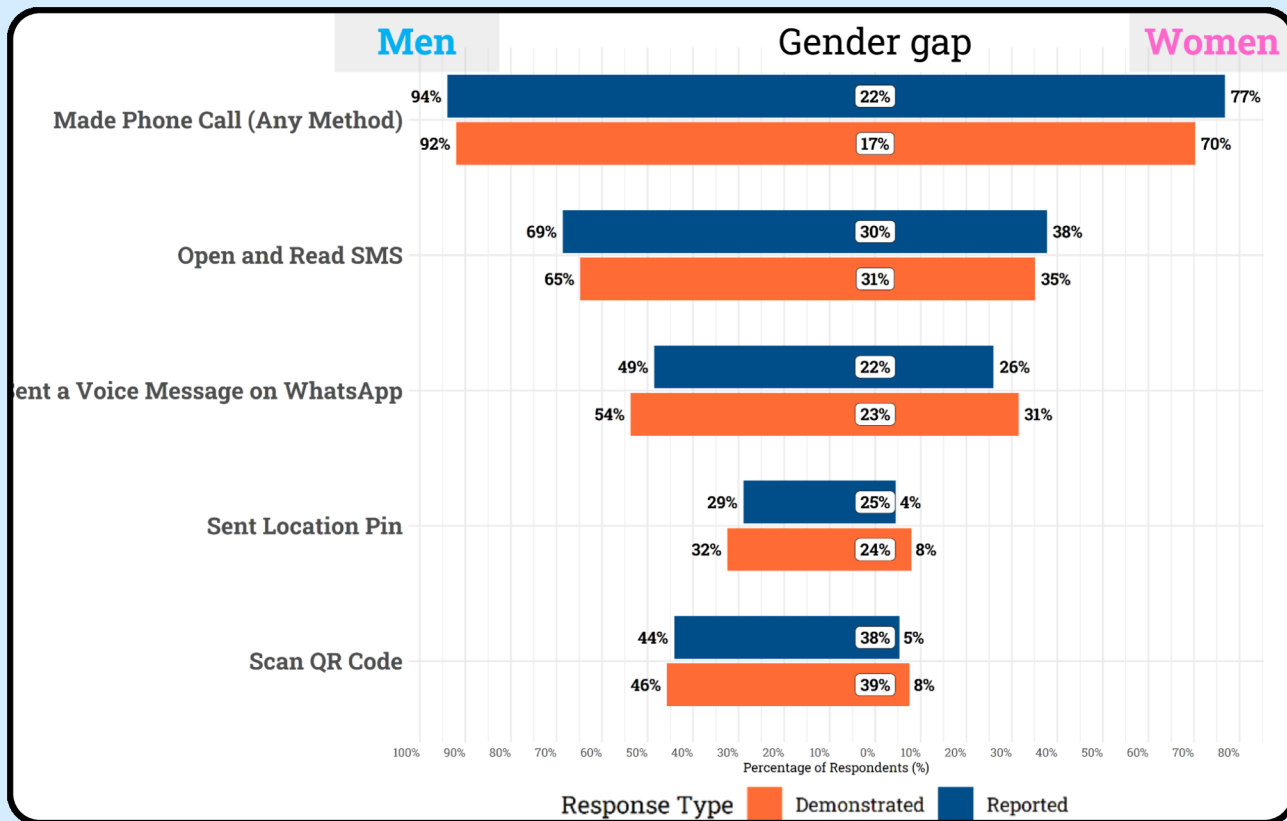
Do you think people will over-report their ability to perform digital skills?

#### Consideration 1. Reporting bias

To what extent will respondents over- or under-report their digital skills?

- Self-reports are vulnerable to:
  - Social desirability bias (wanting to appear competent)
  - Confidence gaps (e.g., gender differences in self-assessment)
  - Misunderstanding of task difficulty
- Evidence from a population based survey carried out in North India suggests that there is
  - Strong agreement between observed and reported skills overall
  - But systematic differences exist across tasks and gender

👉 **Implication: Self-reports may be acceptable for some skills, but require validation.**



## Consideration 2. Nature of the Skill Being Measured

Are the skills observable within the constraints of your study?

👉 **Implication: Use multiple modalities when skills are complex, latent, and when resource and time constraints permit.**

## Consideration 3. Ethical considerations

**1. Informed Consent & Transparency: Participants must clearly understand**

- What tasks they will be asked to perform
- Whether they are being observed or evaluated

**2. Privacy & Data Protection: Observing digital behavior may expose:**

- Personal messages
- Contacts
- Sensitive apps or data

**3. Gender & Social Norm Sensitivity:**

- Women may underreport skills or have restricted access to devices
- Observation may conflict with norms (e.g., phone use in public)

**4. Psychological Harm & Dignity: Skill testing can create embarrassment, anxiety or shame**

**5. Power Dynamics & Coercion: Participants may feel pressured to perform well**

**Equity & Accessibility: Observed assessments may disadvantage older or low-literate populations**



All ASHAs in your State have been provided with a new smartphone to support their work. You have been asked to send out a survey to measure their digital skills via health app on their phone.

#### Question #4

What challenges do you think ASHAs may have in completing the survey?

ASHAs may struggle due to a mix of

- digital skills gaps,
- infrastructure limitations,
- language barriers, and
- confidence issues.

Addressing these proactively (e.g., training, simple survey design, offline options, and support systems) can improve participation and data quality.

#### Implications for Survey Completion

- **Low response rates:** ASHAs with limited digital skills or poor connectivity may not start or complete the survey.
- **High drop-off (partial completion):** Technical issues, long surveys, or confusion can cause respondents to abandon midway.
- **Delayed submissions:** Connectivity problems or time constraints may lead to late or missed responses.
- **Non-representative participation:** More digitally skilled ASHAs are more likely to respond → results may exclude less skilled workers (selection bias).

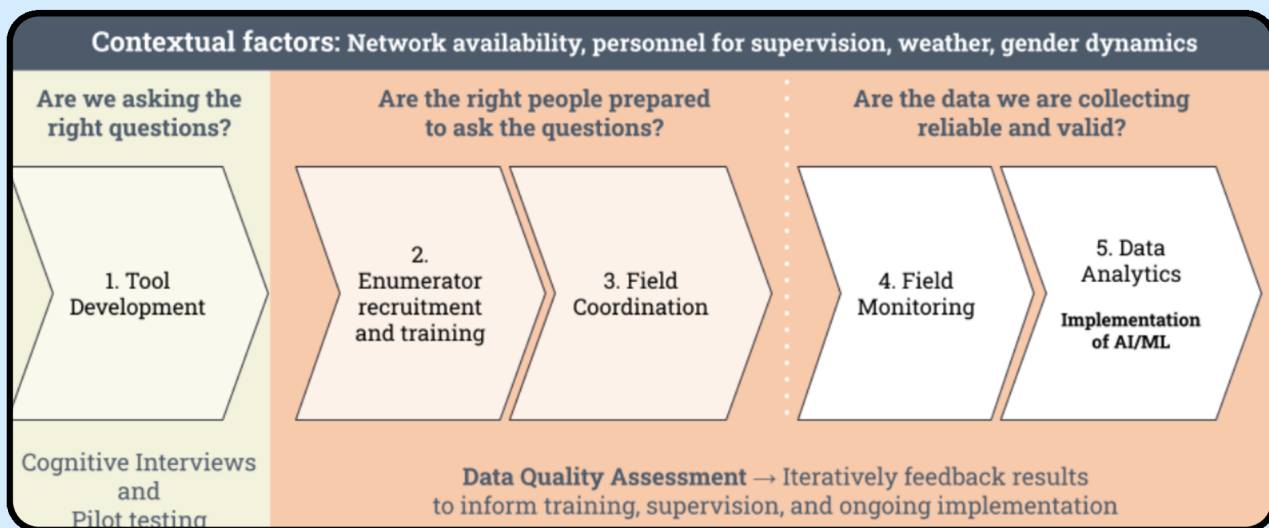
#### Implications for Data Quality

- **Inaccurate responses:** Misunderstanding questions (due to language or literacy issues) can lead to incorrect answers.
- **Random or rushed answers:** ASHAs may quickly select options just to finish the survey, especially if they feel burdened.
- **Missing data:** Skipped questions due to confusion or technical glitches reduce completeness of datasets.
- **Response bias:** Fear of judgment may lead ASHAs to overstate their digital skills (social desirability bias).
- **Inconsistent data:** Lack of familiarity with digital formats may result in contradictory or illogical responses.

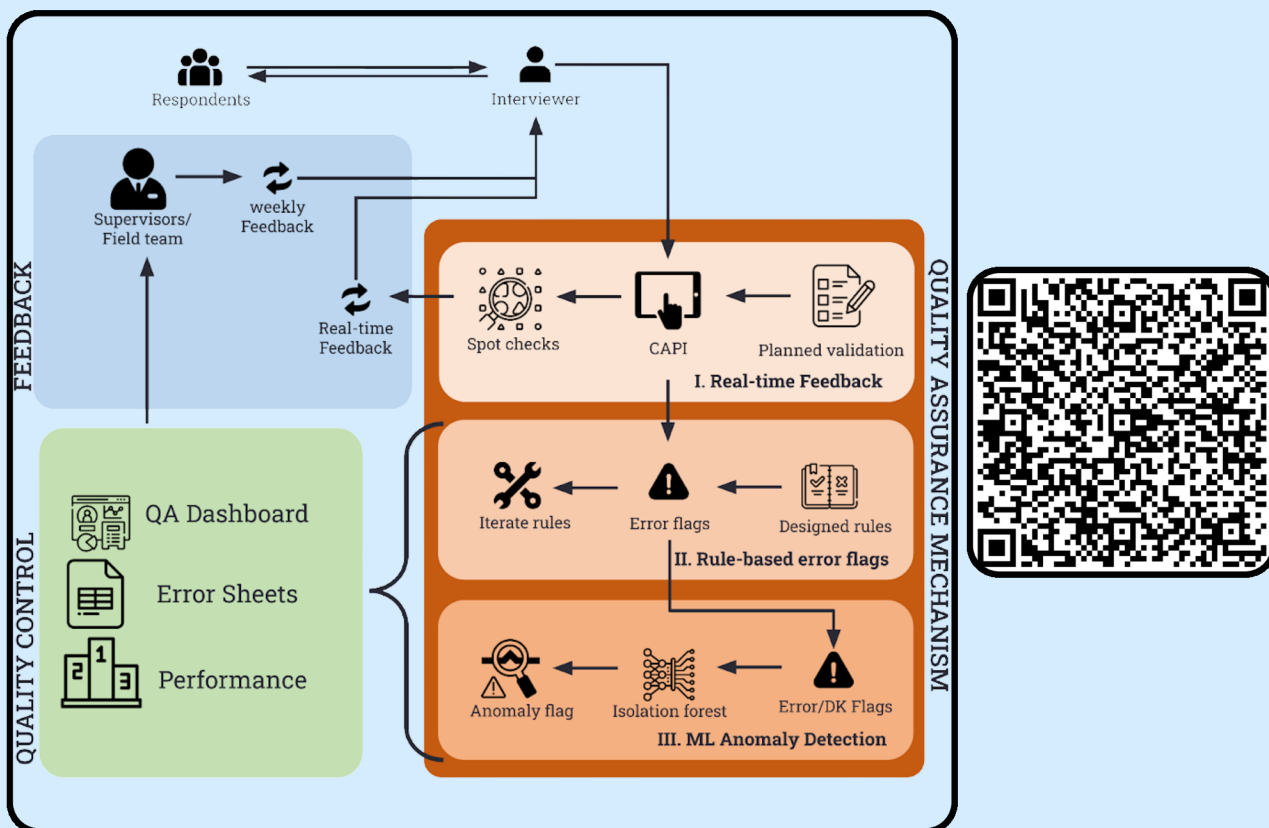
### Question #5

You've hired a local survey company to implement your digital competency survey.

What measures could you take to ensure high quality survey data?



Our framework outlines a comprehensive and systematic approach to strengthening survey data quality. It was implemented during a primary data collection initiative in a state in India, resulting in an 85% improvement in data quality within the first month of rollout.



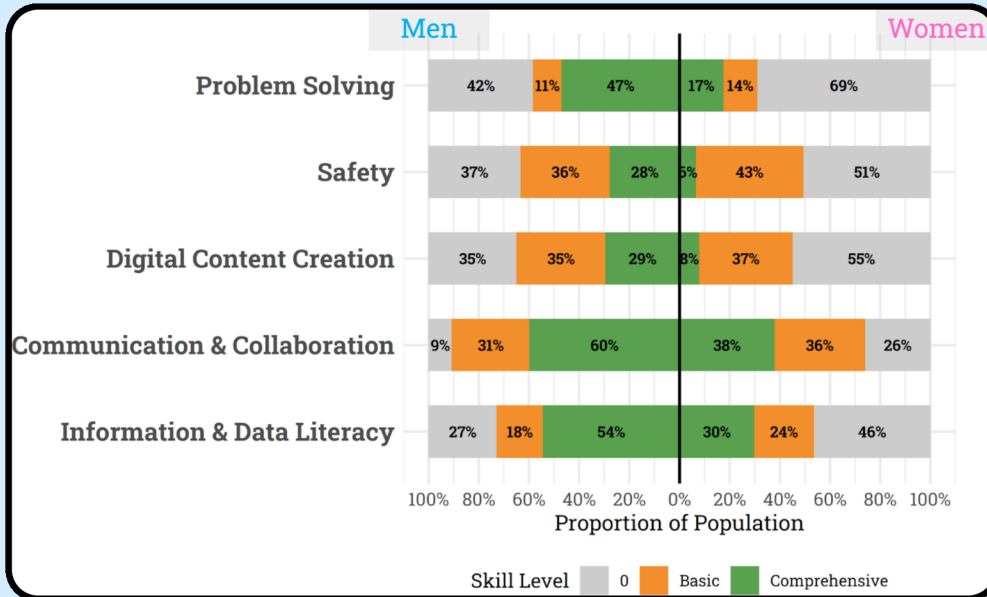
You now have data on ±30 digital skills across 5 competency areas.

### Question #6

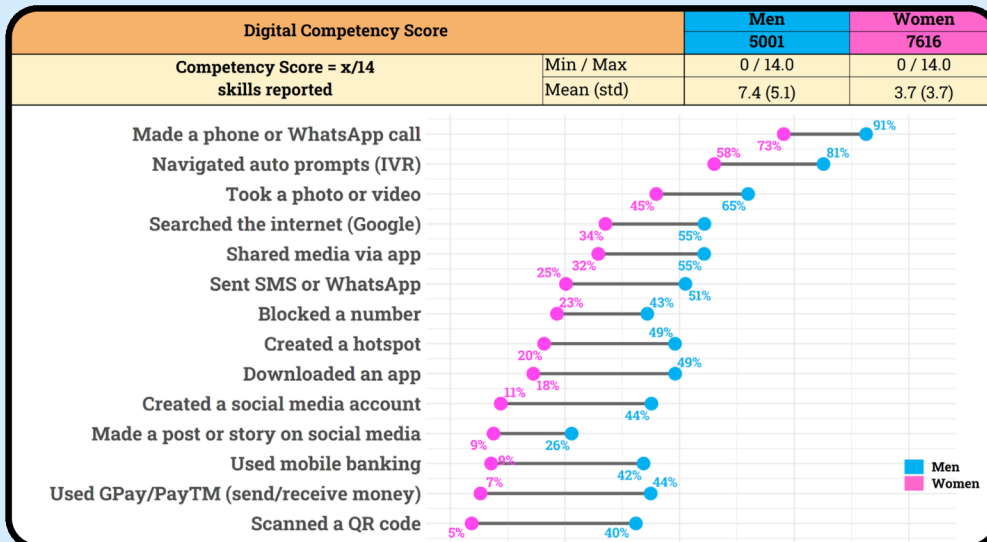
What's more useful programmatically – showing the data by

- (a) Level of digital skill → Skills grouped by competency domain
- (b) Individual skill

(a) Report on SDG 4 indicators



(b) Understanding the competency level of your target demographic



**Digital Access and Use Index** - Digital competence can be used as a covariate in analyses as well as part of creation of a composite index to measure digital access and use at a population level.



You now have data on ±30 digital skills across 7 digital competency domains for 5 cadres of health workers.

### Question #7

How will you use those data?

#### 1. Targeted capacity building

- Identify skill gaps by cadre
- Design tailored training programs
- Develop digital competency pathways

#### 2. Data-driven decision making

- Prioritise high-impact skill areas
- Guide resource allocation and investments
- Inform national/state digital health strategies

#### 3. Strengthening digital systems

- Align tools with user skill levels
- Simplify interfaces where capacity is low
- Improve usability and adoption

#### 4. Performance monitoring & feedback

- Establish baseline for digital competencies
- Track progress over time
- Create feedback loops for continuous improvement

#### 5. Innovation and solution design

- Identify opportunities for new tools/apps
- Support development of user-centered innovations
- Integrate digital workflows across cadres

#### 6. Workforce planning

- Identify need for upskilling vs. new hiring
- Support role definition and competency standards
- Enable career progression pathways

#### 7. Enhancing service delivery

- Improve data quality and reporting
- Strengthen decision support at point of care
- Increase efficiency and health outcomes



6:15 PM

SUMMARY REFLECTIONS

6:20 PM



**Dr. Karthik Adapa, IAS**  
*Regional Adviser, Digital Health*  
WHO-SEARO

6:20 PM

CLOSING REMARKS

6:25 PM



**Dr. Sampath Kumar, IAS**  
*Principal Secretary & Development Commissioner,*  
Government of Meghalaya



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 [www.evidence-digital.org](http://www.evidence-digital.org)

