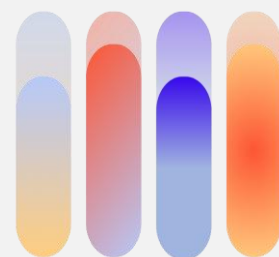


Improving Disability Inclusion in Surveys

10 Practical Strategies

September 2026





About this guidance

Why this guidance? An estimated 1.3 billion people or 16% of the global population live with a disability¹. Yet people with disabilities are consistently underrepresented in development data. When disability is not measured, it is not planned for, funded, or addressed.

What type of surveys? This guidance is for surveys such as baselines, midlines and endlines in development projects. These projects focus on topics like water security, food security, livelihoods, and climate resilience. Typically, these surveys include a wide range of participants, yet increasing recognition of disability inclusion means surveys should also investigate experiences of and outcomes for people with disabilities. Many study teams start thinking about inclusion too late and miss important steps and insights.

Who is this guidance for? This guidance is for project staff of development activities such as inclusion, monitoring, and technical advisors.

What is this guidance aiming to achieve? This guidance provides 10 practical strategies to improve disability inclusion in quantitative surveys enabling better insights. The guidance is designed to support initiatives that are **sensitive** or **responsive** to disability inclusion, but does not provide strategies for disability-focused or more transformative surveys.



Figure 1: A spectrum of integrating disability into quantitative surveys. From *insensitive* (ignoring), to *sensitive* (recognising), *responsive* (considering), and *transformative* (addressing).

1 Clarify your objective early for including disability

Before designing your survey, clearly define what you want to learn about disability and impairment. Teams that identify their disability data objectives from the start are more likely to collect useable data. Combining surveys with qualitative data further strengthens findings. Some possible objectives for good disability inclusive or responsive survey design include:

- **Exploring:** Clarifying which types of people participate in an activity or access a service (e.g. participation in community meetings), in order to understand who is included or not included.
- **Learning:** Identifying patterns of experience for different types of participants with disabilities (e.g. toilet access for women with vision impairment) in order to inform program adaptation and inclusive design.
- **Comparing:** Assessing different outcomes/indicators for particular groups (e.g. wellbeing for individuals with and without functional difficulties) in order to measure outcome-level change
- **Prevalence:** Determining how many individuals within a community are living with which types of functional difficulty (e.g. number of people with cognitive difficulties in a community) in order to strengthen program design and identify reasonable accommodations. This requires specialized sampling not covered in this guidance.

These objectives influence aspects such as sampling (see Strategy 5) and intersectional analysis (see Strategy 9).



2 Use the Washington Group questions to ask about disability

The Washington Group Short Set (WGQ-SS) are the six standard questions to measure functional difficulty.

The WGQ-SS is the recommended standard because it is validated across diverse contexts, enables international comparability, and is aligned with the social model of disability. Using a consistent tool also makes it possible to compare findings across programmes and countries. The WGQ-SS comes in many languages with adaptations for children and youth.

However, the WGQ-SS does not include all forms of disability. Psychosocial and intellectual disabilities in particular may not be fully reflected. For more tailored measurement, consider the extended set or complementary qualitative approaches.

The WGQ-SS asks about:

- Vision
- Hearing
- Mobility
- Cognition (remembering)
- Self-Care
- Communication

What is the Washington Group?

The Washington Group on Disability Statistics, formed under the United Nations Statistical Commission, develops and promotes standardized, internationally comparable questions for measuring disability in censuses and national surveys.



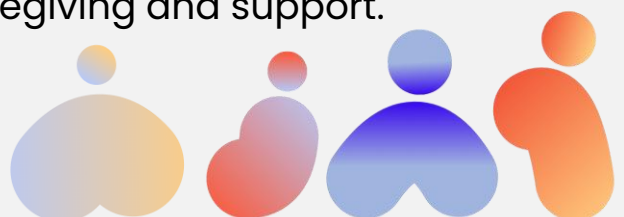
3 Prioritize individual over household measurement

Often, surveys seek responses from one person, a 'head of household', about the circumstances of the household as a whole. This focuses on things that are shared by the household and hides any differences in circumstances of individuals, including the influence of disability. There is also risk that households hide people with disabilities or proactively exclude them from outside engagement.

Revisit your survey objective and consider when individual-level measurement would provide deeper, more accurate insights, as functional impairment is experienced by individuals, even if its impacts extend across the household.

Several options include:

- Ensuring that people with a **disability within relevant households are included** as respondents for a survey through purposeful sampling (see more in Strategy 5).
- Exploring **intra-household dynamics** by conducting the survey with multiple people within a single household including household members with impairments.
- Exploring **the impacts of having a household member with a functional difficulty**, by asking all study participants if anyone else in the home has a functional difficulty – this can help explore the experiences of caregiving and support.



4 Formulate concise, well-structured and clear surveys

Good survey design is critical to ensuring ethical and supportive interviews for participants with disabilities. As such, it is important to consult with people with disabilities throughout the process.

- **Keep surveys to a manageable length** – Long surveys increase fatigue and dropout rates, disproportionately affecting respondents with cognitive, visual, or physical impairments.
- **Use plain language and clustered questions** – Avoid technical terms, double-barrelled questions, complex sentence structure, and unstructured question order that can create barriers for respondents with lower literacy or cognitive disabilities.
- **Pilot the survey with participants with disabilities** – This surfaces accessibility issues, ambiguous wording, question order, and other challenges missed by standard pre-testing.
- **Balance standardized questions with open text boxes.**
Question sets such as measures and scales can help streamline survey design and analysis processes, but open space and questions can document responses and experiences that don't fit the standard questions.
- **Make surveys accessible to all impairments** – explicitly consider and support accommodations for respondents with disabilities to ensure all levels of accessibility.
Accommodations might include additional time, alternative question formats (e.g., braille), or the presence of a support person.



5 Intentionally include a larger number of participants with disabilities

Identifying who to speak with in a survey can be complex. It is often linked to resources including staffing and time.

As the prevalence of disability in most communities ranges between 2–17%, it is often valuable to oversample people with disabilities, in order to draw meaningful conclusions. This means increasing the number of respondents who have disabilities.

Organisations of Persons with Disabilities (OPDs) can help identify and reach participants with different types of disability through purposive sampling. This is particularly important given that people with disabilities are sometimes hidden or proactively excluded from outside engagements.

Your study objective (see Strategy 1) will shape your sampling:

- **Exploring:** No minimum or oversampling required – aiming to understand who is included within an activity or group. Instead, your sampling is based on who is typically involved in an activity or group.
- **Learning:** ~50 people with disabilities – aiming to understand broad trends and patterns for participants with disabilities
- **Comparing:** ~100 people with disabilities and people without disabilities, aiming to compare and see more nuanced differences, often for measuring outcomes

Intentional sampling is important for intersectional analysis. You may also consider other aspects such as gender and age (see Strategy 9).



6 Prioritize respondent wellbeing and ensure ethical survey design

Prioritising respondent wellbeing and ethical study design matters and requires careful support for participants with disabilities.

- **Involve people with disabilities** – As much as possible, involve people with disabilities across design, data collection, and interpretation through appropriate accommodations. This can include having a carer supporting in interviews.
- **Ensure strong ethics protocol and actually obtain relevant approvals** – Wherever possible create an ethics protocol and risk mitigation strategies and apply for an external review of the study plan and ethics protocol.
- **Train enumerators on good enumeration practices** – Training should emphasise informed consent, the option to withdraw from the study at any time, asking questions verbatim as written, avoiding interpretation or diagnosis, and responding neutrally to uncertainty. Training should also cover respectful, disability-inclusive communication, unconscious bias, and awareness of common barriers.
- **Train enumerators on distress protocols** – Distress protocols help enumerators to know what to do mitigate harm in the case that someone becomes distressed during a survey. More on distress tracking in Strategy 7.

The [WASH-GEM training site](#) has detailed information on survey ethics and do-no-harm including distress protocols and training materials.



7 Track and respond to potential respondent distress appropriately

Disability questions may surface unmet needs, trauma, or distress. Clear protocols help enumerators pause interviews, provide referrals, and respect people's choice to withdraw consent at any time. Tracking distress also provides critical feedback for the survey team.

- **Use distress protocols** – As indicated in the last strategy, it is important to use a distress protocol during the interview and pause if a respondent is visibly in distress.
- **Track respondent distress** – Tools such as the *Distress-4 Measure*, a set of four multiple choice questions, help track respondent comprehension, privacy, interview ease, and visible distress. These questions are answered by the enumerator at the end of the survey
- **Identify referral pathways** – Before data collection begins, compile a localised list of relevant support services (health, psychosocial, legal). Identify pathways for mandatory reporting and share the contact list with participants and/or carers at the end of each interview.



8 Group indicators and other characteristics to simplify analysis

In order to simplify analysis, it is important to cluster or bucket responses to questions about aspects such as impairments, age (e.g. 18-30, 31-50, 51+), education (e.g. primary, secondary, tertiary), ethnicity (e.g. minority, majority), and poverty status. Having too many categories can make analysis difficult.

For impairments, while using the Washington Group Short Set (WGQ-SS) there are several ways to use responses.

- **With difficulties / Without difficulties** – The six questions are summarized into *Yes/No* (binary indicator), condensing any "a lot of difficulty" or "cannot do at all" responses into "Yes". This approach is best for detailed intersectional analysis (see Strategy 9).
- **Severity of disability** – The six questions are summarized into spectrum of *none – milder – moderate – more severe* (ordinal indicator).
- **Number of functional difficulties** – The questions are summed into numeric indicator out of six giving a simple count in how many domains a person experiences difficulty.
- **Type of functional difficulties** – The six questions are explored as individual indicators (vision, hearing, mobility, cognition, self-care, communication) to help identify which types of disability are most represented and inform what accommodations or services are needed.



9 Conduct intersectional analyses cautiously as sub-groups get smaller

Intersectional analysis is essential for understanding how disability interacts with gender, age, poverty, education, ethnicity, and other characteristics. Gender is often significant. However, each additional intersection reduces the size of the sub-group being analysed, which affects how confidently we can interpret results. Smaller groups are more sensitive to outliers, and findings must be interpreted with care.

When sub-group sizes are small, learning value comes from transparency (including information on the group size [n=]), cautious framing (including if the sub-group size allows for strong, cautious, or descriptive comparisons) and combination with qualitative data, rather than from statistical comparison.

A sub-group could be:

- Older women with a disability
- Ethnic minority men with a disability

Sub-group sizes for statistical comparisons

- ~100 per intersectional group – stronger comparison possible
- ~50 per intersectional group – cautious comparison possible
- ~20–30 per intersectional group – descriptive patterns only
- <20 per intersectional group – indications of inclusion only*

**Data from small sub-groups can confirm people with disabilities participated, but should not be used to draw conclusions about experiences or outcomes.*



10 Conduct collaborative interpretation and use complementary qualitative data

Collaborative interpretation and use of qualitative insights helps ground quantitative findings in lived experience. This is particularly important when small samples limit statistical certainty but real-world implications for inclusion are significant.

- **Host sensemaking workshops with Organisations of Persons with Disabilities (OPDs)** – Sensemaking workshops explore data, identify surprises, clarify insights, spark questions, and design recommendations. Actively include OPDs and support their participation. This could include sign language interpreters, transport for participants and carers, and compensation for opportunity costs.
- **Ensure reporting uses accessible document design** – Use universal design principles so everyone can read reports. Microsoft Word and Google Docs have built-in accessibility checkers and alt text features. Plan for accessibility from the start, as retrofitting takes significant time.
- **Consider creating interactive dashboards** – Interactive dashboards help support ongoing access to, and learning from, survey results. They are often more useable than static reporting.



Further Reading

- CBM and the Nossal Institute for Global Health (2025). *Using the Washington Group questions on disability data in development programs: A learning brief*
- Crawford et al. (2015). 'Triple jeopardy: Ethical considerations in researching violence against women with disability in Cambodia', ACFID University Network Case Study Series Ethical Research in Development,
- MacArthur et al. (2025). Quantifying participant distress: Validity and applicability of a distress measure to evaluate harm in quantitative assessments. *PLOS ONE* 20(7): e0326957. <https://doi.org/10.1371/journal.pone.0326957>
- Plan International, CBM, and the Nossal Institute for Global Health (2015). *Collecting and using data on disability to inform inclusive development: Practice Note*
- PWDA (2021). *PWDA Language Guide: A guide to language about disability*.
- Washington Group on Disability Statistics. *Question Sets and Implementation Guidance*.
 - *Analytic Guidelines: Creating Disability Identifiers Using the Washington Group Short Set on Functioning (WG-SS)*
 - *Disability Severity Indicators Using the WG Short Set on Functioning (WG-SS)*
- World Health Organization & World Bank (2011). *World Report on Disability*.
- UTS-ISF. *WASH-GEM Online Training Portal*

Microsoft Copilot and Claude were used as early reflection and editing partners in the development of this guidance.



The Washington Group Short Set (Ages 18+)

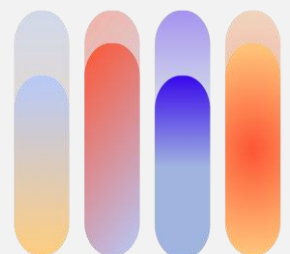
1. Do you have difficulty seeing, even if wearing glasses?
2. Do you have difficulty hearing, even if using a hearing aid?
3. Do you have difficulty walking or climbing steps?
4. Do you have difficulty remembering or concentrating?
5. Do you have difficulty (with self-care such as) washing all over or dressing?
6. Using your usual (customary) language, do you have difficulty communicating, for example understanding or being understood?

Response options

Would you say...

- a. No difficulty.
- b. Yes, some difficulty.
- c. Yes, a lot of difficulty.
- d. Cannot do at all.

Washington Group on Disability Statistics. *Question Sets and Implementation Guidance*.



Distress Measure (Version 3)

These questions are to be filled in by the enumerator after the survey is finished.

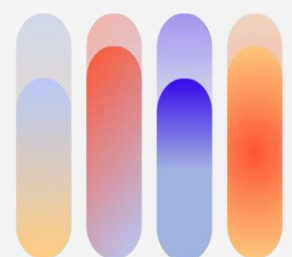
1. (ease) To what extent was the interview easy to conduct?
2. (stress) To what extent did the participant remain calm?
3. (privacy) To what extent was the interview setting private?
4. (comprehension) To what extent did the participant understand the questions?
5. (optional open text box) Please provide any other comments or observations.

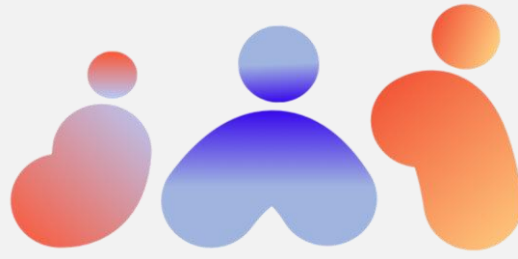
Response options

- a. Very much – 0
- b. Somewhat – 1
- c. A little bit – 2
- d. Not at all – 3

Responses are scored and averaged to calculate a Distress-Score. Higher scores indicate more distress.

MacArthur et al. (2025) Quantifying participant distress: Validity and applicability of a distress measure to evaluate harm in quantitative assessments. *PLOS ONE* 20(7): e0326957. DOI: [10.1371/journal.pone.0326957](https://doi.org/10.1371/journal.pone.0326957)





REVEALING RESILIENCE

Individual-Level Data for Inclusive Climate Resilience

This guidance was compiled by Jess MacArthur, Juliet Willetts, Georgina Robinson, Cliantha Dawit-Dessay and Jo Crawford with external review provided by Priya Nath (WaterAid), Rivika Bisht (World Vision), Tracy McDiarmid (World Vision), Kien Nguyen-Trung (Monash University), and Jan Edwards.

The team recognises this guidance is just a start. There is much more to be written, refined and explored and further ideas are welcome.

Suggested citation: MacArthur, J., Robinson, G., Dawit-Dessay, C., Crawford, J. and Willetts, J. 2026. Improving Disability Inclusion in Surveys: 10 Practical Strategies. Prepared by the University of Technology Sydney and International Women's Development Agency.



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Funded by the Australian Government through the Department of Foreign Affairs and Trade (DFAT), Revealing Resilience is led by the University of Technology Sydney-Institute for Sustainable Futures with the International Women's Development Agency's flagship program Equality Insights.