**Additional Files**

**Additional File 1. Interview Guide**

Country of work: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Profession/role: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Part A: Your experience with implementation science training**

1. How long have you been working in the area of implementation science?
2. How do you apply implementation science knowledge and tools in your work?
3. What implementation science topics and tools are most relevant to your work?
4. Possible probe: how would you define IS—do you use CFIR, other specific frameworks?
5. How did you learn about these topics? [please state all your training programs, including self study]
6. To what extent were your training programs useful in helping you learn what you need for your work?
7. What gaps were there between your training programs and what you need to know for your work? How did you close those gaps?
8. How do you continue to learn in this emerging field? How do you decide what new knowledge is most useful for you?

**Part B: Creating an optimal implementation science learning program**

1. Imagine someone in the same professional role as yourself who has not received any training in implementation science. What would an ideal training/support program that met your learning needs look like in terms of:

Probes:

1. Topics to be emphasized
2. Duration of training (single day short course, multiday course, multiple days spread over several months)
3. Delivery format (online, face to face, hybrid)
4. Training mode (self study with expert support, didactic teaching of key concepts, workshop mode with case study/worked examples)
5. Training participants (people with similar roles, people with different roles in the same training program)
6. Training instructors (what kinds of peoples should teach, and how should they collaborate?)
7. Post-training support/opportunities for ongoing learning?

10. Do you have any other thoughts about the best way to enhance implementation science learning for someone in your role?

**Additional File 2. Critical Moments Rubric**

RUBRIC FOR DOUBLE LOOP LEARNING ASSESSMENT OF THE LEARNING NEEDS INTERVIEW ANALYSIS

Double Loop Learning Example:

*To give a simple analogy: a thermostat that automatically turns on the heat whenever the temperature in a room drops below 68 degrees is a good example of single-loop learning. A thermostat that could ask, “Why am I set at 68 degrees?” and then explore whether or not some other temperature might more economically achieve the goal of heating the room would be engaging in double-loop learning*(Argyris, 1977*).*

Basis for the rubric:

*Derived from the frameworks on Critical Moments by McDowell et al. (2005) and on Reflection on Action by Smyth (1989) as reported by Greenwood (1998).*

* As you reflect on this interview, were there “critical moments” that stood out you as representative of the LMIC context?
* Why do you consider these to be critical moments?

**MEMO LEVEL RUBRIC**

|  |  |
| --- | --- |
| **Interview #** | * **As you reflect on this interview, were there “critical moments” that stood out you as representative of the LMIC context?** * **Why do you consider these to be critical moments?** |

**Additional File 3. Standards for Reporting Qualitative Research Checklist**

|  |  |
| --- | --- |
| **Topic** |  |
| ***Title and abstract*** |  |
| Title | ✓ |
| Abstract | ✓ |
| ***Introduction*** |  |
| Problem formulation | ✓ |
| Purpose or research question | ✓ |
| ***Methods*** |  |
| Qualitative approach and research paradigm | ✓ |
| Researcher characteristics and reflexivity | ✓ |
| Context | ✓ |
| Sampling strategy | ✓ |
| Ethical issues pertaining to human subjects | ✓ |
| Data collection methods | ✓ |
| Data collection instruments and technologies | ✓ |
| Units of study | ✓ |
| Data processing | ✓ |
| Data analysis | ✓ |
| Techniques to enhance trustworthiness | ✓ |
| ***Results/findings*** |  |
| Synthesis and interpretation | ✓ |
| Links to empirical data | ✓ |
| ***Discussion*** |  |
| Integration with prior work, implications, transferability, and contribution(s) to the field | ✓ |
| Limitations | ✓ |
| ***Other*** |  |
| Conflicts of interest | ✓ |
| Funding | ✓ |