

I. Interview guide for HPV vaccination e-tracker users

Demographic Information

1. Age
2. Gender
3. Role/Position
4. Years of experience in healthcare

Experience with the e-tracker system

1. How long have you been using the e-tracker system for HPV vaccination?
2. Can you describe your overall experience using the e-tracker system?
3. How did you initially learn to use the e-tracker system?
4. How frequently do you interact with the e-tracker system in your work?

Usability and User Interface

1. How user-friendly do you find the e-tracker system? Please elaborate.
2. Are there any specific features or functionalities of the e-tracker system that you find particularly helpful or challenging? Why?
3. Do you encounter any difficulties or frustrations while using the e-tracker system? Please tell us more

Data Quality and Accuracy

1. Have you noticed any improvements in data completeness, timeliness, or reliability since the implementation of the e-tracker system?
2. Are there any challenges or concerns related to data entry or data management using the e-tracker system?

Impact on Vaccination Coverage

1. In your opinion, how has the e-tracker system influenced HPV vaccination coverage in your healthcare facility or region?
2. Have you observed any changes in vaccination rates or accessibility to the target population due to the e-tracker system? If yes, please provide examples, if no, please elaborate.
3. Are there any barriers or facilitators related to the e-tracker system's impact on vaccination coverage?

Integration into Routine Practices

1. How well has the e-tracker system been integrated into your daily workflow and routine vaccination practices?
2. Have you encountered any challenges or obstacles in incorporating the e-tracker system into your routine work? Please describe.
3. Are there any suggestions or improvements you would recommend to enhance the integration of the e-tracker system?

Overall Satisfaction and Recommendations

1. On a scale of 1 to 10, how satisfied are you with the e-tracker system? Can you explain the reasons behind your rating?
2. Based on your experience, what aspects of the e-tracker system are particularly successful or beneficial?
3. Do you have any recommendations or suggestions for improving the e-tracker system or its implementation?

Closing

Allow the participant to share any additional comments or concerns; and ask question if they have any.

Thank and appreciate the participant for his/her time and valuable insights in the interview.

II. Interview guide for mUzima users

Demographic Information

1. Age
2. Gender
3. Role/Position
4. Years of experience in healthcare

Experience with the mUzima

1. How long have you been using the mUzima for HPV vaccination and cervical cancer services?
2. Can you describe your overall experience using the mUzima application?
3. How did you initially learn to use the mUzima application?
4. How frequently do you interact with the mUzima application in your work?

Usability and User Interface

1. How user-friendly do you find the mUzima application? Please elaborate.
2. Are there any specific features or functionalities of the mUzima application that you find particularly helpful or challenging? Why?
3. Do you encounter any difficulties or frustrations while using the mUzima application? Please tell us more

Data Quality and Accuracy

1. Have you noticed any improvements in data completeness, timeliness, or reliability since the implementation of the mUzima application?
2. Are there any challenges or concerns related to data entry or data management using the mUzima application?

Impact on HPV vaccination and cervical cancer screening Coverage

1. In your opinion, how has the mUzima application influenced HPV vaccination coverage in your healthcare facility or region?

2. Have you observed any changes in HPV vaccination rates or accessibility to the target population due to the mUzima application? If yes, please provide examples, if no, please elaborate.
3. Have you observed any changes in cervical cancer screening rates or accessibility to the target population due to the mUzima application? If yes, please provide examples, if no, please elaborate

Integration into Routine Practices

1. How well has the mUzima application been integrated into your daily workflow and routine vaccination and screening practices?
2. Have you encountered any challenges or obstacles in incorporating the mUzima application into your routine work? Please describe.
3. Are there any other barriers or facilitators related to the use of mUzima application?
4. Are there any suggestions or improvements you would recommend to enhance the integration of the mUzima application?

Overall Satisfaction and Recommendations

1. On a scale of 1 to 10, how satisfied are you with the mUzima application? Can you explain the reasons behind your rating?
2. Based on your experience, what aspects of the mUzima application are particularly successful or beneficial?
3. Do you have any recommendations or suggestions for improving the mUzima application or its implementation?

Closing

Allow the participant to share any additional comments or concerns, and ask question if they have any.

Thank and appreciate the participant for his/her time and valuable insights in the interview.

III. Interview guide for Open MRS oncology users

Demographic Information

1. Age
2. Gender
3. Role/Position
4. Years of experience in healthcare

Experience with the Open MRS oncology

1. How long have you been using the Open MRS oncology for HPV vaccination and cervical cancer services?
2. Can you describe your overall experience using the Open MRS oncology?
3. How did you initially learn to use the Open MRS oncology?

4. How frequently do you interact with the Open MRS oncology in your work?

Usability and User Interface

1. How user-friendly do you find the Open MRS oncology? Please elaborate.
2. Are there any specific features or functionalities of the Open MRS oncology that you find particularly helpful or challenging? Why?
3. Do you encounter any difficulties or frustrations while using the Open MRS oncology? Please tell us more

Data Quality and Accuracy

1. Have you noticed any improvements in data completeness, timeliness, or reliability since the implementation of the Open MRS oncology?
2. Are there any challenges or concerns related to data entry or data management using the Open MRS oncology?

Impact on HPV vaccination and cervical cancer screening Coverage

1. In your opinion, how has the Open MRS oncology influenced cervical cancer services in your healthcare facility or region?
2. Have you observed any changes in cervical cancer screening rates or accessibility to the target population due to the Open MRS oncology? If yes, please provide examples, if no, please elaborate.

Integration into Routine Practices

1. How well has the Open MRS oncology been integrated into your daily workflow and routine cervical cancer services practices?
2. Have you encountered any challenges or obstacles in incorporating the Open MRS oncology into your routine work? Please describe.
3. Are there any other barriers or facilitators related to the use of Open MRS oncology?
4. Are there any suggestions or improvements you would recommend to enhance the integration of the Open MRS oncology?

Overall Satisfaction and Recommendations

1. On a scale of 1 to 10, how satisfied are you with the Open MRS oncology? Can you explain the reasons behind your rating?
2. Based on your experience, what aspects of the Open MRS oncology are particularly successful or beneficial?
3. Do you have any recommendations or suggestions for improving the Open MRS oncology or its implementation?

Closing

Allow the participant to share any additional comments or concerns, and ask question if they have any.

Thank and appreciate the participant for his/her time and valuable insights in the interview.

IV. Interview guide for M&E and Program managers at central level

Demographic Information

1. Age
2. Gender
3. Role/Position
4. Years of experience in healthcare

Experience with the Digital health interventions for HPV vaccination and/or cervical cancer services

1. How long have you been using Digital health interventions for HPV vaccination and/or cervical cancer services?
2. Can you describe your overall experience using Digital health interventions for HPV vaccination and/or cervical cancer services?
3. How frequently do you interact with the Digital health interventions for HPV vaccination and/or cervical cancer services in your work?

Integration and Adaptation:

1. Could you describe the current state of the HPV vaccination and/or cervical cancer programs in Rwanda, particularly in terms of data collection, management, and integration of digital health interventions?
2. What challenges or opportunities have emerged during the process of integrating these digital health tools? Are there specific aspects that have been more easily adapted, or barriers that have posed challenges?

User Acceptability and Satisfaction:

1. How have end-users, including healthcare providers and beneficiaries, responded to the implementation of digital health interventions for HPV vaccination and cervical cancer services? Have there been any notable changes in user satisfaction or engagement?
2. Can you share any insights into the experiences, preferences, or concerns expressed by end-users while utilizing these digital tools?
3. From your perspective, what factors have facilitated the adoption and utilization of digital health interventions for HPV vaccination and cervical cancer services in Rwanda?

Impact and Outcomes:

1. How have digital health interventions influenced the accuracy and quality of data collection and management for HPV vaccination and cervical cancer services? Have you observed any improvements in data completeness, timeliness, or reliability?
2. Can you share any specific instances or examples where you've observed improvements in data quality or completeness since the adoption of these digital tools?
3. What feedback or suggestions have you received from users, such as healthcare providers or data managers, regarding the impact of digital health interventions on data quality and completeness for HPV vaccination and cervical cancer services?

4. In terms of outcomes, what changes have been observed in HPV vaccination coverage and cervical cancer screening coverage since the implementation of these digital interventions?

Future Directions and Recommendations:

1. Based on your experience, what recommendations or strategies would you suggest to further enhance the effectiveness and sustainability of digital health interventions for HPV vaccination and cervical cancer services in Rwanda?
2. Are there any insights you would like to share regarding potential areas of expansion or improvement for these interventions in the future?

Closing:

1. Is there any additional information or perspective that you believe is important for our research to consider in assessing the impact of digital health interventions for HPV vaccination and cervical cancer services in Rwanda?
2. Is there anything else you'd like to know or any questions you have for us?
3. Thank you very much for your time and valuable insights. We appreciate your participation in this interview.