Form Approved

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**Global Public Health Data Innovation Performance Monitoring.**

**Data Collection Instrument (Performance Monitoring questions)**

| **Question #** | **GPHDI Component** | **Question** | **Guidance and Definition of Terms** | **Question Type, Logic, Criteria** | **Response options** | **Follow up Questions** |
| --- | --- | --- | --- | --- | --- | --- |
| 0.00 | Intro | Please state your name and the role that you have on your organization’s GPHDI project (s)? |   | Open ended |  |  |
| 0.01 | Intro | What does your organization identify as? |  | Select one option | 1. INGO
2. Local NGO
3. Government Agency

Academic Institution |  |
| 0.02 | Intro | What type of GPHDI work does your organization perform? |  | Select one option | 1. GPHDI IP performing cross-cutting activities that are not country specific
2. GPHDI IP performing Both country specific and cross-cutting activities

GPHDI IP performing Both country specific and cross-cutting activities |  |
| 1.00 | 1. Policy Governance Leadership | Did your organization support any of the following during the reporting period?- The governing body that oversees digital health- The development of policy and governance documents or governing bodies for digital health |  This does not include data standards, which are covered in another section.  | Yes [Go to 1.01]No [Go to 2.00] |  Yes No  |   |
| 1.01 | 1. Policy Governance Leadership | Which jurisdiction(s) did your organization perform this work in? |  | Select all that apply | 1)Global (not country specific)2) Kenya3)Uganda4) Zambia5)Sierra Leone6) Colombia7) Honduras8)Paraguay9) Thailand10) Georgia11) Ukraine12) Other ECCA countries |  |
| 1.02 | 1. Policy Governance Leadership | In [COUNTRY NAME],what activities did your organization support during the reporting period? Choose all that apply. | . | Select all that apply  | 1)Establishment:  Lead establishing or supporting the eHealth/digital health governing body.2)Policy: Develop national digital health strategy or other policy documents, such as policies for data sharing and use, privacy, and security.3) Stakeholder engagement: strengthen national, regional, or international collaboration with multiple stakeholders, such as government agencies, health care providers, technology vendors, civil society organizations, and academia to develop and implement digital health policies.4) Advocacy: engage in advocacy efforts with policy- and decision-makers to prioritize digital health on the national agenda.5) Landscape assessment: assess the digital health or health informatics landscape.6) Other: country specific activities not listed above or **cross-cutting activities that don’t fit into the options above**. [Specify in the follow-upnarrative question] | If you selected 6, briefly describe for the entire period of GPHDI funding: ● Activities you supported● Kind of support/advice/assistance you provided for each activity● Progress you made for each activity |
| 1.03 | 1. Policy Governance Leadership | In [COUNTRY NAME], what kind of support/advice/assistance did your organization provide for each of the selected activities? Choose all that apply. |  | Select all that apply | 1) External review of materials, documents, policies, etc.2) Engaging subject matter experts.3) Logistics support: transportation, venue, etc.4) Project management and coordination.5) Other. [Specify in the follow up narrative question.] | If you selected 5, briefly describe for the entire period of GPHDI funding: ● Activities you supported● Kind of support/advice/assistance you provided for each activity● Progress you made for each activity |
| 1.04 | 1. Policy Governance Leadership | You selected:“*Lead establishing or supporting the eHealth/digital health governing body*” for [COUNTRY NAME]. What progress did your organization make for this activity during the reporting period? Choose all that apply, and use the follow up narrative question to provide additional information or reports that describe the specific progress of the selected activities. |  | Select all that apply**ONLY ASK this question** if IP selects option 1 in 1.02 | 1) Define Objectives: Clearly define the objectives and goals of the governing body, including its scope of authority and responsibilities.2) Needs Assessment: Conduct a comprehensive assessment of the country's digital health landscape, including existing policies, infrastructure, and stakeholders.3) Identify Stakeholders: Identify key stakeholders, including government agencies, health care providers, technology vendors, patient groups, and civil society organizations.4) Stakeholder Consultation: Engage in consultations with stakeholders to gather input and build consensus on the need for a governing body and its functions.5) Review Existing Laws: Assess existing health care and data protection laws and regulations to identify gaps and necessary amendments.6) Draft Legislation: Develop draft legislation or regulatory frameworks outlining the establishment, mandate, and powers of the governing body.7) Define Structure: Determine the organizational structure of the governing body, including the composition of its board or council, leadership roles, and staffing requirements.8) Budget and Funding: Develop a budget plan for the governing body's operations and activities.9) Expertise: Recruit individuals with expertise in digital health, data governance, and health care policy to serve on the governing body.10) Other. [Specify in the follow up narrative question.] | For each selected **Option (including Option 10)**, provide additional information or supplemental reports on the progress. |
| 1.05 | 1. Policy Governance Leadership | You selected “*Policy: Develop national digital health strategy or other policy documents” for* [COUNTRY NAME]. Please provide the title or draft title of each strategy or policy document.For each named strategy or policy document, what progress did your organization make during the reporting period? Choose all that apply.  |  | Select all that apply. **ONLY ASK** if IP selects option 2 in 1.02 | 1) Draft policy document is in development and has not been completed.2) Draft policy document has been completed for review by the governing body.3) Draft policy document has been shared with the governing body for approval.4) Draft policy document has been approved by the governing body and is awaiting launch.5) Policy document was launched by the governing body.6) Policy document is being disseminated.7) Other [Specify in follow up narrative question]. | If you selected 7, provide additional information or supplemental reports on the progress. |
| 1.06 | 1. Policy Governance Leadership | You selected “*Stakeholder engagement: strengthen national, regional, or international collaboration with multiple stakeholders, such as government agencies, health care providers, technology vendors, civil society organizations, and academia to develop and implement digital health policies” for* [COUNTRY NAME]. What progress did your organization make for this activity during the reporting period? Choose all that apply. | **Stakeholder engagement**: Strengthen national, regional, or international collaboration with multiple stakeholders, such as government agencies, health care providers, technology vendors, civil society organizations, and academia to develop and implement digital health policies | Select all that apply**ONLY ASK this question** if IP selects option 3 in 1.02 | 1) Identified stakeholders.2) Stakeholder mapping: The identified stakeholders were assessed and categorized based on their level of influence, interest, and relevance to particular digital health projects.3) Developed engagement plan.4) Started communication with stakeholders.5) Conducted initial stakeholder meeting or workshop.6) Regular stakeholder meetings and decision-making have been underway.7) Other. [Specify in follow up narrative question.] | If you **selected 7**, provide additional information or supplemental reports on the progress. |
| 1.07 | 1. Policy Governance Leadership | You selected  “*Advocacy: engage in advocacy efforts with policy- and decision-makers to prioritize digital health on the national agenda”* for [COUNTRY NAME]. What progress did your organization make for this activity during the reporting period? Choose all that apply. |  | Select all that apply**ONLY ASK this question** if IP selects option 4 in 1.02 | 1) Identified and analyzed issue/challenge for advocacy.2) Identified stakeholders as the targets of advocacy.3) Developed advocacy message.4) Engaged with stakeholders to communicate advocacy messages.5) Achieved goals for advocacy.6) Other. [Specify in follow up narrative question.] | If you **selected 6**, provide additional information or supplemental reports on the progress. |
| 1.08 | 1. Policy Governance Leadership | You selected *“Landscape assessment: assess the digital health or health informatics landscape” for*  [COUNTRY NAME]. What progress did your organization make for this activity during the reporting period? Choose all that apply. |  | Select all that apply**ONLY ASK this question** if IP selects option 5 in 1.02 | 1) Planning has not started.2) In plan, but data collection has not started.3) Data collection has started.4) Finished data collection, but no preliminary results.5) Preliminary results are available, and formal reports are being drafted.6) Finalized and submitted formal reports.7) Other. [Specify in follow up narrative question.] | If you **selected 7**, provide additional information or supplemental reports on the progress. |
| 1.09 | 1. Policy Governance Leadership | In your opinion, what has been the most important activity or initiative contributing to progress in this area (Governance and Policy) for [COUNTRY NAME]? |  | Only ask IPs working on this componentOpen ended | Open-ended narrative response |   |
| 1.10 | 1. Policy Governance Leadership | To what extent has GPHDI's contribution to governance and policy influenced the formulation and integration of digital health initiatives/strategies within the national digital transformation strategy in [COUNTRY NAME]? |  | Only ask IPs working on this componentOpen ended | Open-ended narrative response |   |
| 1.11 | 1. Policy Governance Leadership | What are some aspects/domains of policy development that GPHDI has not yet addressed but are crucial for achieving and maintaining data modernization goals in [COUNTRY NAME]? |  | Only ask IPs working on this componentOpen ended | Open-ended narrative response |   |
| 2.00 | 2. Workforce | Did your organization support any informatics workforce development activities during the reporting period?  | These activities include training, fellowship, e-learning platform. As long as your project includes any workforce development activities, please choose “Yes.”  |  If Yes [Go to 2.01]If No [Go to 3.00]  | Yes No  |   |
| 2.01 | 2. Workforce | Which jurisdiction(s) did your organization perform this work in? |  |  Select all that apply  | 1)Global (not country specific)2) Kenya3)Uganda4) Zambia5)Sierra Leone6) Colombia7) Honduras8)Paraguay9) Thailand10) Georgia11) Ukraine12) Other ECCA countries |  |
| 2.02 | 2. Workforce | In [COUNTRY NAME], what workforce development activities did your organization support during the reporting period? Choose all that apply  | . | Select all that apply  | 1) Long-term (6-24 months) training/fellowship programs.2) Informatics/digital health/data science training for leaders.3) Informatics/digital health/data science training for frontline personnel.4) Tool-based training (e.g., Power BI training).5) Informatics topic/competency training (e.g., Fast Healthcare Interoperability Resources [FHIR] training, data warehouse training, security training).6)Supporting an e-learning platform or other access to learning resources.7) Others, including **cross-cutting activities** that are not specific to certain countries. [Specify in the follow up narrative question; go to 3.00.] | For **each** selected option (including Option 7), briefly describe:1) Name of the training, fellowship, or platform that was supported 2)Target audience 3) Topics or competencies covered  |
| 2.03 | 2. Workforce | In [COUNTRY NAME]. what kind of support/advice/assistance did your organization provide for each of the selected activities in 2.02? Choose all that apply. |  | Select all that apply | 1) Curriculum development and program design2) Training facilitation3) Content creation on the e-learning platform 4) Training planning or logistics5) Other [Specify in follow up narrative question.]  | If you **selected Option 5**Briefly describe the kind of support/advice/assistance that you provided for which activity. |
| 2.04 | 2. Workforce | In [COUNTRY NAME], please indicate the number of training and workforce development outputs in the following categories: | Please provide additional information or supplemental reports on the progress or output of the activity. |  | [**If response to 2.02 is 1**] 1) Number of curriculums developed or programs designed: [Insert Number].[**If response to 2.02 is 1, 2, 3 or response to 2.03 is 2**] 2) Number of people trained: [Insert Number].[**If response to 2.02 is 1**] 3) Number of fellows enrolled in a fellowship program during the reporting period.[**If response to 2.02 is 1**] 4) Number of fellows that completed their fellowship during the reporting period.[**If response to 2.02 is 4 or response to 2.03 is 3**] 5) Number of people that accessed the e-learning platform: [Insert Number]. | Please Provide additional information or supplemental reports on the progress or output of the activity. |
| 2.05 | 2. Workforce | In your opinion, what has been the most important activity or initiative contributing to progress in the Workforce Development area in [COUNTRY NAME]? |  | Only ask IPs working on this component | Open-ended narrative response |   |
| 2.06 | 2. Workforce | What plans have been implemented to transition the informatics workforce development activity(ies) to local institutions in [COUNTRY NAME] |  | Only ask IPs working on this component | Open-ended narrative response |   |
| 2.07 | 2. Workforce | What are some aspects of workforce development that GPHDI has not yet addressed but are crucial for achieving and maintaining data modernization goals in [COUNTRY NAME]?  |  | Only ask IPs working on this component | Open-ended narrative response |   |
| 3.00 | 3. Integration | Did your organization support any activity that integrates data (aggregate or individual-level) from multiple sources for the purpose of disease surveillance? | **Data integration** establishes a process and architecture for the integration of data from multiple sources to improve decision-making and situational awareness. It aims to enable seamless integration of data across different systems, enabling a comprehensive view of public health information. |  If Yes [Go to 3.01]If No [Go to 4.00] | Yes No  |  |
| 3.01 | 3. Integration | Which jurisdiction(s) did your organization perform this work in? |  |  Select all that apply | 1)Global (not country specific)2) Kenya3)Uganda4) Zambia5)Sierra Leone6) Colombia7) Honduras8)Paraguay9) Thailand10) Georgia11) Ukraine12) Other ECCA countries |  |
| 3.02 | 3. Integration | In [COUNTRY NAME], what data sources (aggregate or individual- level) are integrated for the purpose of disease surveillance? Choose all that apply. |   | Select all that apply | 1) e-systems for program-specific disease surveillance (HIV, TB)2) Lab systems.3) EHRs.4) Animal system records: please specify.5) Environmental data: please specify.6) Paper systems.7) Any other e-sources/systems: please specify.8) No data are integrated, or your organization conducted **cross-cutting** activities that are not specific to certain countries. [Specify in the follow up narrative question; go to 4.00.] | If you **selected 8**, briefly describe for the entire period of GPHDI funding: - Activities you supported- Kind of support/advice/assistance you provided for each activity- progress you made for each activity. |
| 3.03 | 3. Integration | In [COUNTRY NAME[, which integration activities did your organization provide or support during this reporting period? Choose all that apply. |  **master patient index (MPI)** is a database that contains a list of all patients in a healthcare organization and their corresponding medical records. The purpose of an MPI is to ensure that each patient has only one record, even if they have visited multiple healthcare facilities or have been treated by multiple providers. An MPI is an important tool in record matching and deduplication.   | Select all that apply | 1) Develop data warehouse.2) Maintain an existing data warehouse3) Develop scripts, routines, or tools for efficient integration of data.4) Develop and implement of standard operating procedures (SOPs) for improved practice of integration.5) Standards work to support data integration.6) Patient identity management solution (including master patient index [MPI]) to support integration.7) Patient matching and deduplication process for linking and managing individual-level data as part of the data integration.8) Other. [Specify in follow up narrative question.] | If you **selected 8**, provide additional information or supplemental reports on the progress. |
| 3.04 | 3. Integration | You selected “*Develop data warehouse*”. In [COUNTRY NAME]. What progress did you make for this activity during the reporting period? |  | **ONLY ASK** if IP selects option 1 in 3.03.Select all that apply  | 1) At conceptualization and design stage.2) Moved from conceptualization to pilot.3) Moved from pilot to production.4) Have set up the required infrastructure.5) Have gotten data out of the source system.6) Other. [Specify in follow up narrative question.] | If you **selected 6**, provide additional information or supplemental reports on the progress. |
| 3.05 | 3. Integration | You indicated your organization helped “*maintain an existing data warehouse*”. In [COUNTRY NAME]. What progress did you make for this activity during the reporting period? Choose all that apply. |  | **ONLY ASK** if IP selects option 2 in 3.03.Select all that apply | 1) Perform regular backups, restores, and archiving of the data warehouse data.2) Monitor and optimize the data warehouse performance and security.3) Apply patches, upgrades, and fixes as needed.4) Keep track of the data warehouse usage and feedback.5) Other. [Specify in follow up narrative question.] | If you **selected 5**, provide additional information or supplemental reports on the progress. |
| 3.06 | 3. Integration | You indicated your organization helped “*maintain an existing data warehouse*”. In [COUNTRY NAME]. What was the frequency of data integration into the data warehouse during the reporting period? |  | **ONLY ASK** if IP selects option 1 and/or option 2 in 3.03.Select all that apply | 1) Real-time or near real-time2) Hourly3) Daily4) Weekly5) Monthly 6) Biannually7) Other: specify here |   |
| 3.07 | 3. Integration | ou indicated your organization helped “*maintain an existing data warehouse*” in COUNTRY NAME]. What progress did you make for this activity during the reporting period? |  | **NLY ASK** if IP selects option 3 in 3.03.Select all that apply  | 1) At conceptualization and design stage.2) Moved from conceptualization to pilot.3) Moved from pilot to production.4) Have set up the required infrastructure.5) Have gotten data out of the source system.6) Other. [Specify in follow up narrative question.] | If you **selected 6**, provide additional information or supplemental reports on the progress. |
| 3.08 | 3. Integration | You indicated your organization helped “develop and implement SOPs for improved practice of integration” in [COUNTRY NAME]. What progress did you make for this activity during the reporting period? |  | **ONLY ASK** if IP selects option 4 in 3.03.Select all that apply | 1) At conceptualization and design stage.2) Moved from conceptualization to pilot.3) Moved from pilot to production.4) Have set up the required infrastructure.5) Have gotten data out of the source system.6) Other. [Specify in follow up narrative question.] | If you **selected 6**, provide additional information or supplemental reports on the progress. |
| 3.09 | 3. Integration | You indicated your organization performed *“standards work to support data integration*”. in [COUNTRY NAME]. What progress did you make for this activity during the reporting period? |  | **ONLY ASK** if IP selects option 5 in 3.03.Select one | 1) At conceptualization and design stage.2) Moved from conceptualization to pilot.3) Moved from pilot to production.4) Have set up the required infrastructure.5) Have gotten data out of the source system.6) Other. [Specify in follow up narrative question.] | If you **selected 6**, provide additional information or supplemental reports on the progress. |
| 3.010 | 3. Integration | You indicated your organization helped “*develop patient identity management solution including MPI to support integration” i*n [COUNTRY NAME]. What progress did you make for this activity during the reporting period? |  | **ONLY ASK** if IP selects option 6 in 3.03.Select one | 1) At conceptualization and design stage.2) Moved from conceptualization to pilot.3) Moved from pilot to production.4) Have set up the required infrastructure.5) Have gotten data out of the source system.6) Other. [Specify in follow up narrative question.] | If you **selected 6**, provide additional information or supplemental reports on the progress. |
| 3.11 | 3. Integration | You indicated your organization helped “perform patient matching and deduplication process for linking and managing individual-level data” in [COUNTRY NAME]. What progress did you make for this activity during the reporting period? | **\** | **ONLY ASK** if IP selects option 7 in 3.03.Select one | 1) Matching and deduplication at conceptualization phase.2) Algorithms developed but not tested. 3) Algorithms developed and tested with real data. 4) Algorithm deployed. 5) Algorithm is currently beign implemented.6) Other. [Specify in follow up narrative question.] | If you **selected 6**, provide additional information or supplemental reports on the progress. |
| 3.12 | 3. Integration | Is there a process at your organization that assesses data quality in the integration activities in [COUNTRY NAME]? | **Data quality** measures include data timeliness, completeness, validity, accuracy, and reliability.If you **selected Other,** provide additional information or supplemental reports on the progress. | **ONLY ASK 3.12-3.15** if IP selects option 1, 2, 3, 4, or 6 in 3.03.If Yes [go to 3.12]If No [go to 4.00]Other: please explain in the follow up narrative question [then go to 4.00] | YesNo | If you **selected Other,** provide additional information or supplemental reports on the progress. |
| 3.13 | 3. Integration | Please provide the data quality measures (e.g., timeliness, accuracy, completeness) that your organization monitors for data integration activities in [COUNTRY NAME]. Also provide any supporting assessment reports or materials that include the results. | **Data quality** measures include data timeliness, completeness, validity, accuracy, and reliability. |  open ended | Open-ended narrative response |  |
| 3.14 | 3. Integration | For **each** of the data quality measures you listed for [COUNTRY NAME], please provide the following:- Definition- Data elements or indicators that this measure pertains to- Frequency of measurement- Specific results during the reporting period.Also provide any supporting assessment reports or materials that include the results. | Data elements or indicators being measured could be dates, locations, and diagnostic test results of cases important for disease surveillance.  |  Open-endedOpen ended | Open-ended narrative response | . |
| 3.15 | 3. Integration | In your opinion, what has been the most important activity or initiative contributing to progress in the data integration area for [COUNTRY NAME]? |  | Only ask IPs working on this component | Open-ended narrative response |   |
| 3.16 | 3. Integration | To what extent have GPHDI’s activities facilitated secure cross-border data exchange and storage in [COUNTRY NAME]? | Examples of activities may include developing protocols, policies, or frameworks moving for health-related data into and out of the country and utilizing data involving individuals from other countries. | Only ask IPs working on this component | Open-ended narrative response |  |
| 4.00 | 4. Standards  | Did your organization implement any activity to support the adoption of data standards for national disease surveillance during the reporting period?  | Examples of data standards include FHIR, HL7, LOINC, ICD-10, and any international or country-specific standards.Data standards do not include standards, guidelines, best practices, or policies for areas that are not directly related to data exchange, e.g., data analytics, data privacy, confidentiality, and security.  |  If Yes [Go to 4.01]If No [Go to 5.00] |  |   |
| 4.01 | 2. Standards | Which jurisdiction(s) did your organization perform this work in? |  |  Select all that apply | 1)Global (not country specific)2) Kenya3)Uganda4) Zambia5)Sierra Leone6) Colombia7) Honduras8)Paraguay9) Thailand10) Georgia11) Ukraine12) Other ECCA countries |  |
| 4.02 | 4. Standards  | Please indicate the standards selected for use in [COUNTRY NAME]. |  | Select all that apply | 1) FHIR2) HL7 version 23) HL7 version 34) LOINC 5) ICD-10 6) Other international standards [Specify in follow up narrative question.]7) Country-specific standards [Specify in follow up narrative question.] | If you selected **Option 6 or 7** : 1) What standards did you support? 2) Provide the name and a brief description of each standard.For each standard you listed: 1) What kind of support did you provide? 2) What progress did you make? |
| 4.03 | 4. Standards  | You indicated **FHIR** has been selected for use in [COUNTRY NAME].Please indicate how this standard is being used. Choose all that apply, and describe your progress for the support provided.  | . | k only if selected Option 1 in question 4.02Select all that apply  | 1) Development of the standards.2) Piloting of the standards. 3) Validation of the standards. 4) Initial implementation of the standards.5) Adaptation of the standards to the local context. 6) Full implementation and scale-up of the standards.7) Development of guidelines, frameworks, SOPs related to standards.8) Other, including **cross-cutting** activities that are not specific to certain countries. [Specify in follow up narrative question.] | If you selected **Option 8 - Other**: Provide additional information or supplemental reports on the progress. |
| 4.04 | 4. Standards  | You indicated**HL7 version 2** has been selected for use in **[COUNTRY NAME]**. Please indicate how this standard is being used? Choose all that apply, and describe your progress for the support provided. |  | Ask only if selected Option 2 in question 4.02Select all that apply  | 1) Development of the standards.2) Piloting of the standards. 3) Validation of the standards. 4) Initial implementation of the standards.5) Adaptation of the standards to the local context.6) Full implementation and scale-up of the sstandards.7) Development of guidelines, frameworks, SOPs related to standards.8) Other, including **cross-cutting** activities that are not specific to certain countries. [Specify in follow up narrative question.] | If you selected **Option 8 - Other**: Provide additional information or supplemental reports on the progress.. |
| 4.05 | 4. Standards  | You indicated**HL7 version 3** has been selected for use in [COUNTRY NAME]Please indicate how this standard is being used? Choose all that apply, and describe your progress for the support provided.. |  | Ask only if selected Option 3 in question 4.02Select all that apply | 1) Development of the standards.2) Piloting of the standards.3) Validation of the standards. 4) Initial implementation of the standards.5) Adaptation of the standards to the local context. 6) Full implementation and scale-up of the standards.7) Development of guidelines, frameworks, SOPs related to standards.8) Other, including **cross-cutting** activities that are not specific to certain countries. [Specify in follow up narrative question.] | If you selected **Option 8 - Other**: Provide additional information or supplemental reports on the progress.. |
| 4.06 | 4. Standards  | You **i**ndicated**LOINC** has been selected for use in [COUNTRY NAME].. Please indicate how this standard is being used? Choose all that apply and describe your progress for the support provided. | .  | Ask only if selected Option 4 in question 4.02Select all that apply  | 1) Development of the standards.2) Piloting of the standards.3) Validation of the standards. 4) Initial implementation of the standards.5) Adaptation of the standards to the local context. 6) Full implementation and scale-up of the standards.7) Development of guidelines, frameworks, SOPs related to standards.8) Other, including including **cross-cutting** activities that are not specific to certain countries. [Specify in follow up narrative question.] | If you selected **Option 8 - Other**: Provide additional information or supplemental reports on the progress. |
| 4.07 | 4. Standards  | You indicated that **ICD10** has been selected for use in [COUNTRY NAME] Please indicate how this standard is being used? Choose all that apply and describe your progress for the support provided. | .  |  | 1) Development of the standards.2) Piloting of the standards.3) Validation of the standards. 4) Initial implementation of the standards.5) Adaptation of the standards to the local context. 6) Full implementation and scale-up of the standards.7) Development of guidelines, frameworks, SOPs related to standards.8) Other, including including **cross-cutting** activities that are not specific to certain countries. [Specify in follow up narrative question.] | If you selected **Option 8 - Other**: Provide additional information or supplemental reports on the progress.. |
| 4.08 | 4. Standards  | In your opinion, what has been the most important activity or initiative contributing to progress in the data standards area for [COUNTRY NAME]?  |  | Only ask IPs working on this component | Open-ended narrative response |   |
| 4.09 | 4. Standards  | How have GPHDI-supported activities on data standards enabled effective and interoperable data exchange across the health system in [COUNTRY NAME]? |  | Only ask IPs working on this component | Open-ended narrative response |   |
| 5.00 | 5. Cloud | Did your organization support any cloud infrastructure/modernized infrastructure activities during the reporting period? These activities include policy development for cloud infrastructure, analysis of options for cloud hosting, migration of information. | Cloud or modernized infrastructure is the hardware and software resources that make up cloud computing.  |  If Yes [Go to 5.01]If No [Go to 6.00] | Yes No  |   |
| 5.01 | 5. Cloud | Which jurisdiction(s) did your organization perform this work in? |  |  Select all that apply | 1)Global (not country specific)2) Kenya3)Uganda4) Zambia5)Sierra Leone6) Colombia7) Honduras8)Paraguay9) Thailand10) Georgia11) Ukraine12) Other ECCA countries |  |
| 5.02 | 5. Cloud | In [COUNTRY NAME], hich cloud activities did your organization provide or support during this reporting period? Choose all that apply. |  | Select all that apply | 1) Supported the development of policies on cloud infrastructure. 2) Conducted an alternative analysis (alternative options for hosting), including adoption of cloud hosting. 3) Supported moving from Ministry of Health (MOH) self-managed to third-party managed service.4) Supported the migration of public health information systems from on-prem or third-party managed infrastructure to the cloud. 5) Others, including **cross-cutting** activities that are not specific to certain countries. [Specify in the follow-up narrative question; go to 6.00.] | **If you selected Option 5**: 1) Briefly describe for the entire period of GPHDI funding: 2) Activities you supported3) The kind of support/advice/assistance you provided for each activity4) The progress you made for each activity |
| 5.03 | 5. Cloud | You indicated that your organization *“Supported the development of policies on cloud infrastructure” i*n [COUNTRY NAME]. What progress was made for this activity during the reporting period?  | . | **ONLY ASK** if IP selects option 1 in 5.02Select all that apply | 1) Developed but has not completed draft policy document.2) Completed draft policy document for review. 3) Shared draft policy document with the MOH and technical working group (TWG) for approval.4) MOH approved draft policy document and is awaiting launch.5) MOH launched policy document.6) Disseminated policy document.7) Others. [Specify in the follow up narrative question.] | If you selected **Option 7**: Provide additional information or supplemental reports on the progress. |
| 5.04 | 5. Cloud | You indicated that your organization “*conducted an alternative analysis, including cloud adoption*” in [COUNTRY NAME]. What progress was made for this activity during the reporting period?  |  | **ONLY ASK** if IP selects option 2 in 5.02.Select all that apply | 1) Completed a needs assessment for hosting, including considerations for cloud hosting.2) Completed the evaluation of the IT infrastructure, data applications, and workflows.3) Identified gaps and opportunities for improvement. 4) Defined the budget and timeline for hosting, including - cloud adoption. 5) Others. [Please specify in the follow up narrative question.] | If you selected **Option 5**: Provide additional information or supplemental reports on the progress. |
| 5.05 | 5. Cloud | You indicated that your organization *“supported moving from MOH self-managed to third party managed services” i*n [COUNTRY NAME]. What progress was made for this activity during the reporting period?  |  | **ONLY ASK** if IP selects option 3 in 5.02.Select all that apply | 1) Completed consultations with the MoH and other stakeholders. 2) Began the movement to third party managed services. 3) Completed the movement to third party managed services. 4) Others. [Please specify in the follow up narrative question.] | If you selected **Option 4**: Provide additional information or supplemental reports on the progress. |
| 5.06 | 5. Cloud | You indicated that your organization *“supported migration of public health information systems from on-prem or third-party managed infrastructure to cloud” i*n [COUNTRY NAME]. What progress was made for this activity during the reporting period?  |  | **ONLY ASK** if IP selects option 4 in 5.02.Select all that apply | 1) Completed a landscape analysis. 2) Began the procurement process. 3) Completed the infrastructure setup. 4) Completed the migration process. 5) Others. [Please specify in the follow up narrative question.] | If you selected **Option 5**: Provide additional information or supplemental reports on the progress. |
| 5.07 | 5. Cloud | In your opinion, what has been the most important activity or initiative contributing to progress in cloud infrastructure in [COUNTRY NAME]? |  | Only ask IPs working on this component | Open-ended narrative response |   |
| 5.08 | 5. Cloud | To what extent has GPHDI supported cloud infrastructure activities facilitating movements or advancements toward cloud adoption in [COUNTRY NAME]? |  | Only ask IPs working on this component | Open-ended narrative response |   |
| 6.00 | 6. Analytic Platforms | Did your organization support any activities related to data analytic platforms during the reporting period? |   A **common data analytics platform** is a platform that integrates, analyzes, summarizes, and visualizes data across different sources while also being accessible to multiple stakeholders |  If Yes [Go to 6.01]If No [Go to 7.00] | Yes No  |   |
| 6.01 | 6. Analytic Platforms | Which jurisdiction(s) did your organization perform this work in? |  |  Select all that apply | 1)Global (not country specific)2) Kenya3)Uganda4) Zambia5)Sierra Leone6) Colombia7) Honduras8)Paraguay9) Thailand10) Georgia11) Ukraine12) Other ECCA countries |  |
| 6.02 | 6. Analytic Platforms | In [COUNTRY NAME], which activities did your organization support during the reporting period? Choose all that apply. | A **common data analytics platform** is a platform that integrates, analyzes, summarizes, and visualizes data across different sources while also being accessible to multiple stakeholders.  | Select all that apply | 1) Build a common data analytics platform.2) Implement or operate a common data analytics platform. 3) Support or maintain a common data analytics platform. 4) Other, including **cross-cutting** activities that are not specific to certain countries. [Specify in follow up narrative question; go to 7.00.] | .If you **selected 4**, briefly describe for the entire period of GPHDI funding: - Activities you supported- Kind of support/advice/assistance you provided for each activity- Progress you made for each activity |
| 6.03 | 6. Analytic Platforms | You indicated that your organization helped *“build a common data analytics platform” in* [COUNTRY NAME]. What progress did you make for this activity during the reporting period? Choose all that apply.  | . | **ONLY ASK** if IP selects option 1 in 6.02. Select all that apply | 1) At conceptualization and design stage.2) Moved from conceptualization to pilot.3) Moved from pilot to production.4) Have set up the required infrastructure.5) Have gotten data out of the source system and into the platform.6) Other. [Specify in follow-up narrative question.] | If you **selected 6**, provide additional information or supplemental reports on the progress. |
| 6.04 | 6. Analytic Platforms | You indicated that your organization helped *“Implement or operate a common data analytics platform”*  in [COUNTRY NAME]. What progress did you make for this activity during the reporting period? Choose all that apply. |  | **ONLY ASK** if IP selects option 2 in 6.02.Select all that apply | 1) Define objectives and goals.2) Data collection and ingestion.3) Data storage: Store the collected data in a central repository.4) Data cleaning and preprocessing.5) Data transformation and integration: Transform and integrate data to create a unified view of the data.6) Data analysis and modeling.7) Data visualization.8) Data reporting and dashboards.9) Other. [Specify in follow-up narrative question.] | If you **selected 9**, provide additional information or supplemental reports on the progress. |
| 6.05 | 6. Analytic Platforms | You indicated that your organization helped *“Support or maintain a common data analytics platform” in* [COUNTRY NAME].What progress did you make for this activity during the reporting period? Choose all that apply. |  | **ONLY ASK** if IP selects option 3 in 6.02.Select all that apply | 1) Performance monitoring and optimization: Continuously monitor the performance of your data analytics platform. Identify bottlenecks, optimize queries, and scale resources as needed to ensure efficiency.2) Documentation: Maintain comprehensive documentation for the data analytics platform, including data dictionaries, data lineage, and documentation of models and processes.3) Data maintenance and archiving: Regularly update and maintain data sources, keeping them up to date. Develop archiving strategies for historical data.4) Data quality assessments.5) Security and compliance audits6) Software updates and patch management: Stay current with software updates, security patches, and bug fixes for all components of the platform, including the operating system, databases, and analytics tools.7) Data governance and security: Implement data governance policies and security measures to protect sensitive data, ensure compliance with regulations, and manage data access.8) User training and support.9) Other. [Specify in follow up narrative question.] | If you **selected 9,** provide additional information or supplemental reports on the progress. |
| 6.06 | 6. Analytic Platforms | Can authorized users in [COUNTRY NAME] access information in the analytic and reporting platform? |  | **ONLY ASK** if IP selects option 2 or 3 in 6.02.If Yes [Go to 6.07]If No [Go to 6.08] | Yes No |   |
| 6.07 | 6. Analytic Platforms | What types of users and how many in each type accessed the [COUNTRY NAME] data reporting platforms in the reporting period? | . | **ONLY ASK** if IP selects option 2 or 3 in 6.02. | Open-ended narrative response |   |
| 6.08 | 6. Analytic Platforms | Is there a process at your organization that assesses data quality in the [COUNTRY NAME] common data analytics platform? | **Data quality** measures include data timeliness, completeness, validity, accuracy, and reliability.. | **ONLY ASK** 6.07-6.09 if IP selects option 2 or 3 in 6.02 OR option 5 in 6.032. | Yes [go to 6.08]No [go to 6.11]Other: please explain in the follow-up narrative question [then go to 6.11]. | .If you **selected Other**, provide additional information or supplemental reports on the progress. |
| 6.09 | 6. Analytic Platforms | Please provide the data quality measures (e.g., timeliness, accuracy, completeness) that your organization monitors for the common data analytics platform in [COUNTRY NAME]. Also provide any supporting assessment reports or materials that include the results. | **Data quality** measures include data timeliness, completeness, validity, accuracy, and reliability.  |  Open-ended | Open-ended narrative response |  |
| 6.10 | 6. Analytic Platforms | For **each** of the data quality measures you listed for [COUNTRY NAME], please provide the following:- Definition- Data elements or indicators that this measure pertains to- Frequency of measurement- Specific results during the reporting periodAlso provide any supporting assessment reports or materials that include the results. | Data elements or indicators being measured could be dates, locations, and diagnostic test results of cases important for disease surveillance. | Open-ended | Open-ended narrative response | . |
| 6.11 | 6. Analytic Platforms | In your opinion, what has been the most important activity or initiative contributing to progress in the data analytics area in [COUNTRY NAME]? |  | Only ask IPs working on this componentOpen-ended | Open-ended narrative response |   |
| 6.12 | 6. Analytic Platforms | How has [COUNTRY NAME]’s capability to acquire data and use it to execute efficient outbreak response been improved through GPHDI-funded activities? |  | Only ask IPs working on this componentOpen-ended | Open-ended narrative response |   |
| 6.13 | 6. Analytic Platforms | What processes or activities under GPHDI have been most effective in enhancing Public Health's decision-making in [COUNTRY NAME]? |  | Only ask IPs working on this componentOpen-ended | Open-ended narrative response |   |
| 7.00 | 7. Automation & Reporting | Did your organization support the automation of data collection, reporting, and analysis processes to reduce manual efforts and improve efficiency? Example activities include electronic reporting of laboratory, case, EMR data; implementation of a laboratory information system or other electronic surveillance information systems. | Data automation, enabled by data processing systems, is the process of uploading, handling, and processing data via automated data processing tools instead of manually performing all these tasks.  |  If Yes [Go to 7.01]If No [**END**] | Yes No  |   |
| 7.01 | 7. Automation & Reporting | Which jurisdiction(s) did your organization perform this work in? |  |  Select all that apply | 1)Global (not country specific)2) Kenya3)Uganda4) Zambia5)Sierra Leone6) Colombia7) Honduras8)Paraguay9) Thailand10) Georgia11) Ukraine12) Other ECCA countries |  |
| 7.02 | 7. Automation & Reporting | In [COUNTRY NAME], which activities did your organization support during the reporting period? Choose all that apply. | . **Electronic Laboratory Reporting** (ELR) for surveillance purposes is the transmission of digital laboratory reports, often from laboratories to state/provincial and local public health departments, healthcare systems, and CDC.- **Electronic case reporting** (eCR) is the automated exchange of case report information between electronic health records (EHRs) and public health agencies.- **Electronic medical records** (EMR) reporting is the transferring of digital patient charts from a clinician's office or a hospital to public health agencies. | Select all that apply | 1) Implementing electronic laboratory reporting for surveillance purposes.2) Implementing electronic case reporting for surveillance purposes (e.g., AIMS platform).3) Implementing electronic medical records (EMR) reporting for surveillance purposes.4) Implementing electronic laboratory information system (LIS).5) Implementing other electronic surveillance information systems (e.g., GoData [contact tracing], SORMAS, DHIS-2).6) Other, including **cross-cutting activities** that are not specific to certain countries. [Specify in follow up narrative question; **then go to 7.11.**] | If you **selected 6**, briefly describe for the entire period of GPHDI funding: - Activities you supported- Kind of support/advice/assistance you provided for each activity- Progress you made for each activity |
| 7.03 | 7. Automation & Reporting | You indicated that your organization supported “*implementing electronic laboratory reporting for surveillance purposes” i*n [COUNTRY NAME]. What progress did you make for this activity during the reporting period? Choose all that apply. |  | **ONLY ASK** if IP selects option 1 in 7.02.Select all that apply | 1) At conceptualization and design stage.2) Moved from conceptualization to pilot.3) Moved from pilot to production.4) Have set up the required infrastructure.5) Have gotten data out of the source system.6) Other. [Specify in follow-up narrative question.] | If you **selected 6**, provide additional information or supplemental reports on the progress. |
| 7.04 | 7. Automation & Reporting | You indicated that your organization supported “*Implementing electronic case reporting for surveillance purposes (e.g., AIMS platform)”* in [COUNTRY NAME]. What progress did you make for this activity during the reporting period? | . | **ONLY ASK** if IP selects option 2 in 7.02.Selected all that apply | 1) At the conceptualization and design stage.2) Moved from conceptualization to pilot.3) Moved from pilot to production.4) Have set up the required infrastructure.5) Have gotten data out of the source system.6) Other. [Specify in follow-up narrative question.] | If you **selected 6**, provide additional information or supplemental reports on the progress. |
| 7.05 | 7. Automation & Reporting | You  indicated that your organization supported “*Implementing electronic medical records (EMR) reporting for surveillance purposes” i*n [COUNTRY NAME]. What progress did you make for this activity during the reporting period? Choose all that apply. |  | **ONLY ASK** if IP selects option 3 in 7.02.Select all that apply | 1) At the conceptualization and design stage.2) Moved from conceptualization to pilot.3) Moved from pilot to production.4) Have set up the required infrastructure.5) Have gotten data out of the source system.6) Other. [Specify in follow up narrative question.] | If you **selected 6**, provide additional information or supplemental reports on the progress. |
| 7.06 | 7. Automation & Reporting | You indicated that your organization supported “*Implementing electronic laboratory information system (LIS)”* in [COUNTRY NAME]. What progress did you make for this activity during the reporting period? Choose all that apply. |  | **ONLY ASK** if IP selects option 4 in 7.02.Select all that apply | 1) At the conceptualization and design stage.2) Moved from conceptualization to pilot.3) Moved from pilot to production.4) Have set up the required infrastructure.5) Have gotten data out of the source system.6) Other. [Specify in follow-up narrative question.] | If you **selected 6**, provide additional information or supplemental reports on the progress. |
| 7.07 | 7. Automation & Reporting | You indicated that your organization supported “*Implementing other electronic surveillance information systems” i*n [COUNTRY NAME]. What progress did you make for the implementation of each system during the reporting period? Choose all that apply.  |  | **ONLY ASK** if IP selects option 5 in 7.02.Select all that apply | 1) At conceptualization and design stage.2) Moved from conceptualization to pilot.3) Moved from pilot to production.4) Have set up the required infrastructure.5) Have gotten data out of the source system.6) Other. [Specify in follow up narrative question.] | If you **selected 6**, provide additional information or supplemental reports on the progress. |
| 7.08 | 7. Automation & Reporting | Is there a process at your organization that assesses data quality [reporting mechanism or information system selected in 7.02] in [COUNTRY NAME]?  |  | **ONLY ASK** if IP selects any option from options 1-5 in 7.02. Ask 7.08-7.10 for each reporting mechanism and information system reported.If an IP's work on automation and reporting is for the same common analytics platform as what the IP reports works on in the previous component (data analytics platform), the IP does not need to report here and can go to 7.11. | Yes [Go to 7.09]No [Go to 7.11]Other: please explain in the follow-upfollow up narrative question [then go to 7.11]. | If you **selected Other**, provide additional information or supplemental reports on the progress. |
| 7.09 | 7. Automation & Reporting | Please provide the data quality measures (e.g., timeliness, accuracy, completeness) that your organization monitors in the [reporting mechanism or information system selected in 7.02].. Also provide any supporting assessment reports or materials that include the results. | **Data quality** measures include data timeliness, completeness, validity, accuracy, and reliability. |  Open-ended | Open-ended narrative response |  |
| 7.010 | 7. Automation & Reporting | For **each** of the data quality measures you listed for [COUNTRY NAME], please provide the following:- Definition- Data elements or indicators that this measure pertains to- Frequency of measurement- Specific results during the reporting periodAlso provide any supporting assessment reports or materials that include the results. |  **Data quality** measures include data timeliness, completeness, validity, accuracy, and reliability. |  Open-ended | Open-ended narrative response |  |
| 7.11 | 7. Automation & Reporting | In your opinion, what has been the most important activity or initiative contributing to progress in the area of Data Automation and Reporting in [COUNTRY NAME]? |  | Only ask IPs working on this componentOpen-ended | Open-ended narrative response |   |
| 7.12 | 7. Automation & Reporting | To what extent have GPHDI’s activities reduced the burden of managing and reporting data for pandemic preparedness and response at the subnational and national levels in [COUNTRY NAME]?At which level(s) have you noted changes? |  | Only ask IPs working on this componentOpen-ended  | Open-ended narrative response |   |

CDC estimates the average public reporting burden for this collection of information as 120 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to CDC/ATSDR Reports Clearance Officer; 1600 Clifton Road, MS H21-8 , Atlanta, GA 30333, ATTN: PRA (0920-XXXX).