

TERMS OF REFERENCE

HIV Data Analytics Consultant

CONTRACT MODALITY Individual Consultancy

DUTY STATION Home-based/Remote

DURATION OF CONTRACT 8 Months

Purpose of Assignment:

The Office of Strategy and Evidence (OSE) sets the corporate direction for evidence-informed analysis, strategic planning, program monitoring, and performance management. Within UNICEF it provides global leadership and oversight for evidence, including the generation, governance, quality, and strategic use of evidence. Within the Office, the Data and Analytics Section serves as the organization's primary source of global statistics on children. It leads the collection, validation, analysis, use and communication of the most statistically sound, internationally comparable data on the situation of children, adolescents and women around the world. It curates administrative records, household surveys, geospatial information, and other large datasets, maintains their quality and public availability through data.unicef.org, and drives investments that help national statistical systems measure what matters most for children.

The Integrated Health Analytics (IHA) seeks to advance UNICEF's role as a global leader in turning data into action, embedding analytics into decision-making processes at both policy and operational levels. The IHA is central to tracking progress toward the Sustainable Development Goals (SDGs), supporting data-driven programme improvements, and positioning UNICEF as a global leader in health analytics. It works with countries to strengthen and institutionalize capacities to generate robust, reliable, relevant and responsive population level data and analytics that are contextualized, operational, scalable, and aligned with national systems. It embodies UNICEF's commitment to evidence-based action—bridging the gap between data collection and impact, and transforming fragmented data into integrated, actionable insights. When analytics are timely, trusted, and locally owned, they become powerful tools for improving service delivery by highlighting gaps, informing prioritization of scarce resources, and saving lives

Against this backdrop, the primary function of this consultancy is to support countries to design, adapt, and implement cross-cutting analytics within AHEAD, with focus on HIV and its integration with other priority health areas. The consultant will work with UNICEF country teams and national counterparts to adapt and deploy automated, reproducible data pipelines, harmonize, quality-assure, and analyse data from HIV and other relevant health services, including immunization, nutrition, and MNCAH; and translate analytical findings into actionable insights for policy, programme planning, and implementation. This work will strengthen country capacity to generate, interpret, and use integrated data equity-focused, and systems-oriented analytics across UNICEF's health portfolio, supporting the institutionalization and sustainable use of AHEAD approaches within national systems.

Scope of Work

The consultant will support the design and implementation of an integrated analytics layer within AHEAD analytics,

building on HIV analytics and extending these approaches across related health services, enabling reproducible, scalable, and cross-cutting analysis across HIV and integrated services (e.g. immunization, nutrition, and MNCAH programmes). Working closely with the Data and Analytics Team and other technical specialists, the consultant will work with countries to adapt and deploy modular analytical tools that harmonize diverse data sources, assess and strengthen data quality, generate actionable insights, and leverage integrated analytics for planning, performance monitoring, and decision-making. The consultant will support the translation of analytical findings into programmatic action and strengthen country capacity to independently apply, maintain and institutionalize AHEAD analytical approaches within existing national processes and systems.

Key Deliverables

- Facilitate country consultations and engagements in at least 2 high burden HIV countries (e.g. Zambia, Zimbabwe, or other priority countries) to co-design and strengthen capacity to deploy AHEAD HIV integrated analytics within existing national planning and review processes.
- In consultation with countries, design and adapt cross-cutting analytic modules and templates for generating dashboards, visualizations, briefs, and geospatial analyses across HIV and other priority health areas.
- Working with at least 2 high burden HIV countries, deploy integrated data pipelines and scripts for automated ingestion, cleaning, quality assessment, validation, and harmonization of routine and survey data.
- Develop and apply standardized approaches to identify and investigate data-quality issues, including completeness, consistency and plausibility, and support countries to distinguish potential data-quality issues from programme and service-delivery gaps.
- Working with countries, produce subnational integrated and equity-focused analyses and country deliverables (e.g., slide decks, briefs, data packs) tailored to national priorities, data availability, and programmatic needs. Analyses will identify geographic and population-level inequalities, service coverage and performance gaps, and opportunities for improved integration across HIV and related health services.
- Support country teams and national counterparts to interpret analytical findings and translate them into priority actions for programme reviews, planning, supervision, resource prioritization and other relevant decision-making processes.
- Provide hands-on technical support, training and mentorship to UNICEF and national counterparts to strengthen capacity to maintain analytical pipelines, conduct analyses, interpret findings and independently apply AHEAD approaches.
- Develop a Version-controlled GitHub repository containing documented code, data dictionaries, reproducible workflows, and technical documentation to support quality assurance, knowledge transfer and adaptation across countries.
- Document lessons from country implementation and use these to refine analytical methods, modules, templates and implementation guidance for the broader AHEAD package and future country deployment.

Deliverables will be reviewed monthly, and timelines for each will be refined during the inception phase in alignment with UNICEF priorities and ongoing workstreams. To support continuity and scalability, the consultant will document all workflows, maintain version-controlled repositories, and contribute to internal knowledge products and knowledge transfer to UNICEF and country counterparts.

Work Assignment Overview	Deliverables/ Outputs	Delivery deadline		Planned Travel
		Exact date to complete the deliverable	Input days	
Country engagement, scoping and analytical design	Country AHEAD implementation in 2 priority countries, developed through consultation with UNICEF Country Offices, government counterparts and relevant technical teams. Plans will document priority analytical questions, datasets and indicators, integration opportunities across HIV and other health programmes, expected analytical outputs, country workflows, and capacity-strengthening needs.	March 31, 2027	20	2 trips (e.g. Zimbabwe, Zambia) of 6 days
Integrated analytical modules and automated data pipelines	Adapted and operational AHEAD analytical pipelines and cross-cutting analytical modules in 2 priority countries, including reproducible scripts for ingestion, cleaning, harmonization and analysis of routine and other relevant health data. Modules will support integrated analysis across HIV and relevant MNCAH, immunization, nutrition and other health indicators and generate standardized tables, visualizations, geospatial outputs and other analytical products.	April 30, 2027	30	
Data Quality Review and Analytical Tools	Data quality review Excel spreadsheets (including completeness, consistency, and outlier detection) prepared for country validation and feedback, accompanied by a short technical note on data quality checks and recommended improvements, for 2 priority countries	May 31, 2027	10	
Country-Focused Analytics, Visualizations, and Policy Products	Country- and subnational-level analytical slide decks, data briefs, and policy-oriented products generated using the integrated analytics pipeline. These products will synthesize key insights on service gaps, coverage, and equity patterns into actionable recommendations that can be used by governments and partners for planning, prioritization, and advocacy. Includes reproducible code scripts and a README describing the visualization and brief-generation process, for 2 priority countries	June 30, 2027	20	
Documentation	Technical README and documentation detailing automated pipelines that ingest, clean, and harmonize data across HIV, immunization, nutrition, MNCAH, and other sectors from routine and survey sources.	July 16, 2027	10	

Payment Schedule:

Payment will be made on submission and acceptance of deliverables. UNICEF reserves the right to withhold payment in case the deliverables submitted are not up to the required standard or in case of delays in submitting the deliverables on the part of the consultant.

Important Notes:

- Individuals engaged under a consultancy or individual contract will not be considered “staff members” under the Staff Regulations and Rules of the United Nations and UNICEF’s policies and procedures and will not be entitled to benefits provided therein (such as leave entitlements and medical insurance coverage). Their conditions of service will be governed by their contract and the General Conditions of Contracts for the Services of Consultants and Individual Contractors. Consultants and individual contractors are responsible for determining their tax liabilities and for the payment of any taxes and/or duties, in accordance with local or other applicable laws.
- The selected candidate is solely responsible for ensuring that the health insurance (and visa if applicable) required to perform the duties of the contract are valid for the entire period of the contract. Selected candidates are subject to confirmation of fully-vaccinated status against SARS-CoV-2 (Covid-19) with a World Health Organization (WHO)-endorsed vaccine, which must be met prior to taking up the assignment. It does not apply to consultants who will work remotely and are not expected to work on or visit UNICEF premises, programme delivery locations or directly interact with communities UNICEF works with, nor to travel to perform functions for UNICEF for the duration of their consultancy contracts.
- UNICEF offers reasonable accommodation for consultants with disabilities. This may include, for example, accessible software, travel assistance for missions or personal attendants. We encourage you to disclose your disability during your application in case you need reasonable accommodation during the selection process and afterwards in your assignment.

QUALIFICATIONS / SPECIALIZED KNOWLEDGE / EXPERIENCE/ COMPETENCIES (CORE/TECHNICAL/FUNCTIONAL) / LANGUAGE SKILLS REQUIRED FOR THE ASSIGNMENT

Minimum requirements:

Education: Master’s University degree in epidemiology, public health, Demography, Applied Statistics, Biostatistics, or a closely related health analytics field.

Work Experience:

- At least 4 years of experience in data analytics, preferably in the health sector.
- Documented proficiency in R, Python or STATA as well as data visualization tools (Shiny, Tableau, Infogram).
- Experience conducting statistical analysis of household surveys (MICS, DHS, PHIA) and administrative data (DHIS2/HMIS)

Language Requirements: Excellent written and oral communication of technical content in English. Proficiency in another UN language is highly desirable.

Knowledge/Expertise/Skills:

- Hands-on experience conducting statistical analysis of HIV/AIDS related data and the production of key reports and associated analytic products and dashboards
- Proven experience maintaining global databases on HIV/AIDS related indicators, including HIV estimates
- Experience working with Git/GitHub for version control
- Hands on experience with cloud services for data storage and processing
- Experience working in or with low- and middle-income countries is highly desirable.

Competencies:

- Technical knowledge of current quantitative and qualitative analytical approaches, tools, and practices.
- Excellent communication skills, with the ability to present complex data insights to non-technical stakeholders.
- Strong problem-solving skills and the ability to work independently.
- Ability to collaborate effectively with cross-functional teams and diverse stakeholders.