Terms of Reference

Research Consultant: Measuring and attributing digitally enabled behaviour change at the climate-health nexus

About GSMA

The GSMA is a global organisation unifying the mobile ecosystem to discover, develop and deliver innovation foundational to positive business environments and societal change. Our vision is to unlock the full power of connectivity so that people, industry and society thrive. Representing mobile operators and organisations across the mobile ecosystem and adjacent industries, the GSMA delivers for its members across three broad pillars: Connectivity for Good, Industry Solutions and Events.

The GSMA Mobile for Development Foundation, Inc. ("GSMA") is a U.S. 501(c)(3) charitable organisation. The Mobile for Development team (M4D) operates at the intersection of the mobile ecosystem and the development sector. Our aim is to stimulate digital innovation and deliver both sustainable business and large-scale socio-economic impact. Our research and insights platform, in-market expertise and community of partners push forward digital innovations and implementations that empower underserved populations. To date, we have impacted the lives of over 220 million people.

Background

Climate change increasingly affects human health by changing the transmission, geographic distribution and seasonality of infectious diseases; increasing heat-related illness; and disrupting healthcare services during extreme weather. These impacts are particularly significant in low- and middle-income countries (LMICs), where climate vulnerability intersects with infectious disease burdens, constrained health systems and inequalities in healthcare access.

In response, mobile and digital technologies are increasingly being deployed to support disease prevention, improve access to healthcare and strengthen the continuity of health services. These range from patient-facing services such as digital health advice and telemedicine to technologies supporting frontline healthcare delivery and the management of essential medical supplies.

However, despite growing investment in these technologies, important questions remain about the evidence underpinning claims of behaviour change. More broadly, evaluators often assess digital interventions through indicators such as messages delivered, users registered, platform engagement, or service utilisation, rather than independently verified behavioural outcomes. Even when behaviour change is observed, it can be difficult to separate digital technology's contribution from broader programme activities and health system conditions. Importantly, behaviour change does not necessarily translate into better health outcomes. Digital advice or referrals may offer limited benefits, or even create unintended risks, when appropriate healthcare is unavailable or inaccessible because of climate-related disruptions, cost, distance, or social and gender norms.

To identify opportunities to improve the evidence base and evaluation practice, GSMA Mobile for Development is undertaking evaluative research to examine how behaviour change is defined, measured, and attributed in mobile and digital service delivery models that address climate-related health risks and strengthen healthcare systems in a changing climate. sensitive infectious diseases and identify opportunities to strengthen the evidence base and evaluation practice.

Project overview

GSMA is seeking an experienced individual research consultant or research partner with expertise in public health, climate and health, digital health, behavioural research and/or evaluation to collaborate on a policy-facing research study.

The assignment will be undertaken as a collaborative research partnership with GSMA, involving joint methodological development, evidence gathering, analysis and co-writing of the final publication.

The research will combine a review of academic and grey literature with expert interviews. Where feasible and valuable, it may also include focused examinations of specific digital interventions to explore measurement and attribution approaches in practice.

The main output will be a GSMA research report of approximately 20–25 pages, excluding annexes, providing a critical assessment of existing evidence and practical recommendations for funders, implementers, mobile network operators (MNOs) and evaluators.

Research objectives and questions

The overarching objective is to critically assess how changes in patient behaviour and healthcare provider practices are defined, measured, and attributed to mobile and digital service delivery models that address climate-related health risks in LMICs, and to assess the credibility of the evidence supporting these claims.

The research will address five questions:

1. How is behaviour change defined across digitally enabled services addressing climate-related health risks, including changes in patient behaviour and healthcare provider practices, and how are knowledge, intentions, engagement, service utilisation, behavioural practices and health outcomes distinguished?
2. What indicators, frameworks, tools and data sources are used to measure behaviour change? How well do these approaches capture actual and sustained behaviour change, and its relationship to health outcomes?
3. How are data generated through mobile and digital services used to monitor behaviour, adapt climate-health interventions and inform service delivery decisions? What are the opportunities and limitations of these data?
4. How do organisations establish whether observed behavioural outcomes can be attributed to digital technology? What evaluation methods are used, how credible are the resulting claims, and how sophisticated are the contextual healthcare systems to analyse these claims?

5. How are climate-related, health system and socio-economic factors accounted for when measuring and attributing behaviour change outcomes, including potential unintended harms?

The study will not seek to independently prove whether technologies cause behaviour change. Instead, it will critically examine the methods and evidence supporting existing claims and identify ways to strengthen them.

Scope and methodology

The research will examine and critically assess existing methods and tools for measuring and attributing behaviour change outcomes in mobile and digital interventions at the climate-health nexus in LMICs. Rather than conducting a new impact evaluation, the study will assess the strengths and limitations of existing measurement approaches, including their ability to distinguish the contribution of digital technology from wider programme activities and contextual factors.

The study will focus on digitally enabled health service delivery models, including digital advisory services, telemedicine, community health worker applications, digital diagnostics and health service operations such as cold-chain management. The study will examine these in the context of climate-related health risks and adaptation needs, including climate-sensitive infectious diseases, heat-related illness, and continuity of healthcare during climate-related disruptions. Only interventions with a clear climate-health connection will be considered, with attention to behaviour change among both patients and healthcare providers

Although the study considers LMIC evidence globally, it will prioritise East Africa, South Asia, and South-East Asia. Urban and peri-urban contexts will be considered where relevant, but the research will not be restricted to cities.

The methodology will be developed jointly by GSMA and the consultant and is expected to include the following activities.

Structured desk research and evidence review

Undertake a rapid, structured review of relevant academic literature, programme evaluations, donor publications, implementation documentation and GSMA research.

The review will examine:

- Types of digital health service delivery models, target behaviours amongst patients and healthcare providers, and behaviour-change mechanisms.
- Definitions, indicators, tools and methods used to measure behavioural change and its relationship to health outcomes.
- Use of mobile-generated and digital service data.
- Evaluation approaches, causal attribution or contribution, and strength of evidence supporting digital technology claims.
- Climate-related and system-level factors affecting behavioural outcomes and the credibility of evidence, including health service readiness, access to care and unintended risks.

The consultant will collaborate with GSMA to develop an analytical framework and evidence matrix that distinguishes between intervention reach, engagement, self-reported behaviour, independently verified behavioural outcomes, and stronger attribution evidence.

The review should also distinguish between interventions that address climate-sensitive diseases and those that explicitly incorporate climate or environmental information.

Expert interviews

Conduct approximately 20-25 semi-structured interviews across the research team, with responsibilities shared between GSMA and the consultant.

Interviewees may include academic researchers, implementers of climate-responsive digital health services, GSMA grantees, MNOs, public health authorities, funders and independent evaluators. Selection will seek a purposive spread across relevant service delivery models and stakeholder types.

Interviews will explore how organisations define and measure behaviour change among patients and healthcare providers, use digital data, assess links to health outcomes, evaluate attribution, and account for health-system constraints and unintended risks when substantiating technology's contribution.

The consultant will draw on their professional networks to identify, approach, and secure interviews with relevant experts, supplemented by additional stakeholder mapping and targeted outreach. GSMA will contribute to interviewee selection and facilitate introductions where existing relationships are available.

Optional intervention-level deep dives

Subject to the evidence review, stakeholder access and available resources, the study may include one or two focused examinations of specific digital service delivery interventions with clear climate-health pathways.

These could involve reviewing underlying monitoring and evaluation data, interviewing implementation teams or observing programme activities where feasible.

The purpose is to show how behaviour change is measured and attributed in practice, including the distinction between changes in patient or provider practices and wider clinical or operational outcomes.

Deep dives and fieldwork are optional components, not mandatory deliverables. Their scope, feasibility and costs will be agreed with GSMA and specified at contracting, rather than determined during delivery. Any commissioned fieldwork would take place in February 2027.

Joint analysis and report development

The consultant will work closely with GSMA to synthesise evidence, interpret findings, identify methodological gaps and develop practical recommendations.

This will include co-writing the final research report, drafting agreed sections, reviewing GSMA-authored content, and ensuring analytical consistency and methodological rigour.

The report should provide a practical framework for assessing the credibility of behaviour-change claims and recommendations for improving measurement and attribution in digitally enabled services addressing climate-related health risks, including how reported behavioural changes relate to health outcomes.

Deliverables and timelines

The consultant will work collaboratively with GSMA to undertake the activities below and deliver the following outputs. Responsibilities for research, analysis and report writing will be agreed during inception.

Deliverable	Key Activities	Timeline
1. Desk research and evidence review	• Collaborate with GSMA to refine the research approach and analytical framework. • Conduct a review of academic and grey literature, developing an evidence matrix covering climate-health pathways, service delivery models, behaviour-change definitions, measurement approaches, digital data use and attribution.	December 2026 – February 2027
2. Expert interviews and qualitative analysis	• Identify relevant experts through professional networks • Jointly develop interview guides with GSMA • Conduct approximately 20–25 interviews across the research team and synthesise findings. • Undertake optional intervention-level deep dives or fieldwork where agreed and included in the contract.	January–February 2027
3. Draft research report	• Collaborate with GSMA to analyse and synthesise findings, develop practical recommendations and co-write a draft research report of approximately 20–25 pages, excluding annexes.	Late February 2027
4. Final research deliverables	• Incorporate GSMA feedback and finalise agreed report sections, references, evidence matrix, methodological notes and supporting research materials.	Early March 2027

Experience and capabilities

Required

- Experienced individual consultant with demonstrated research experience in public health, digital health, behavioural science, health systems or a closely related field, preferably in low- and middle-income countries (LMICs).

- Established professional network of relevant experts and organisations working across digital health service delivery, climate and health, behavioural research and/or impact evaluation, with the ability to identify, approach and secure interviews with relevant stakeholders.
- Strong understanding of behaviour-change theories, measurement approaches and evaluation methodologies, including causal attribution and contribution analysis.
- Experience conducting structured literature reviews, evidence synthesis and critical appraisal of quantitative and qualitative research.
- Experience designing and conducting qualitative research, including semi-structured expert interviews and thematic analysis.
- Strong analytical skills, with the ability to critically assess the quality of evidence and identify methodological limitations, gaps and implications for policy and practice.
- Excellent writing skills, with demonstrated experience producing accessible, evidence-based research reports for policy, development or practitioner audiences.
- Proven ability to collaborate on research design, analysis and co-writing publications, working iteratively with internal research teams.
- Ability to work independently, manage agreed deliverables and meet deadlines within the proposed timeframe.

Desirable

- Experience researching climate-sensitive health risks, including infectious diseases, heat-related illness or disruption of healthcare during climate-related events.
- Knowledge of the climate-health nexus, including climate variability, extreme weather and the resilience of health services in LMICs.
- Experience evaluating mobile and digital health interventions, particularly those seeking to influence individual, community or health-worker behaviour.
- Familiarity with mobile-generated data, digital health monitoring systems and their use in measuring outcomes or informing programme decisions.
- Experience applying mixed-methods research, implementation research or impact evaluation approaches in LMIC contexts.

Use of generative AI

Generative AI presents opportunities for improving the research process and research products. However, AI-generated text that forms large parts of the report adds little to no value to this project. While these tools are improving rapidly, they are also prone to making factual errors and fabrication. The supplier will be required to include a disclosure statement regarding the use of AI in the production of the work. This disclosure statement should identify if generative AI tools were used, and if so, how. The GSMA's standard terms and conditions include clauses requiring that suppliers warrant that the deliverables are the original work of this supplier; breach of this, including through the direct use of AI-generated outputs, is considered grounds for termination.

Proposal requirements

Interested individuals are invited to submit:

I. A brief technical proposal (maximum three pages, excluding CV and publication links) outlining their experience, expertise and interest in collaborating with GSMA on this study.
II. A brief financial proposal (maximum two pages)

The technical proposal should include a brief overview of the individual consultant, examples of relevant research and publications, experience in climate-health, digital health, behavioural research and/or evaluation, and availability during the proposed research period. Applicants should also highlight relevant professional networks and their ability to identify and engage experts for interviews, as well as their experience collaborating on and co-writing research publications.

The financial proposal should provide a fully itemised quote in UK Pounds Sterling (GBP), including daily rates, estimated days and total costs for delivering the research activities outlined in these Terms of Reference. The quote should cover desk research, expert interviews, analysis and collaborative report writing. Applicants should use the indicative scope and interview numbers provided for costing purposes, clearly stating any assumptions.

To support GSMA's assessment of the feasibility of optional intervention-level deep dives, applicants should provide a separate, fully itemised quotation for this component, including any associated travel, fieldwork and transcription costs. Other proposed additional costs should also be itemised separately. Where alternative methodological approaches would significantly affect the budget, applicants should indicate the associated costs and implications for delivery.

Due to GSMA compliance requirements, exact project budgets cannot be provided at this stage. You are, however, able to provide a few implementation/budget options that can help us assess value for money and we can align our project scope to the relevant budget after a consultant has been selected.

Shortlisted applicants will be invited to discuss their experience and proposed approach in an interview. The selected individual consultant or organisation will be contracted to undertake the research between December 2026 and early March 2027, with the scope, deliverables and working arrangements agreed during contracting.

Proposals, clarifications or questions can be sent to**:**

- Samir Hafiz – Climate, Monitoring, Evaluation and Learning Manager (shafiz@gsma.com)
- Daisy Macaskie – Operations Manager (dmacaskie@gsma.com)

Please send clarification questions by Thursday 5th November. Responses to clarification questions will be shared on Friday 6th November. If you would like to be included on this mailing list, please confirm your interest before this date.

Deadline for proposals is Friday 20th November at 23:59 GMT. Interviews will be conducted on Thursday 26th and Friday 27th November.