

JOB DESCRIPTION

Job title:	Senior Geospatial and Impact Modelling Specialist	Location:	London, UK
Department:	Technical	Length of contract:	Two years
Role type:	National	Grade:	11
Travel involved:	Up to 30%	Child safeguarding level:	4, low risk
Reporting to:	Head of Surveillance, Monitoring and Evaluation	Direct reports:	TBD

Organisational background

Established in 2003, Malaria Consortium is one of the world's leading non-profit organisations specialising in the comprehensive prevention, control and treatment of malaria and other communicable diseases among vulnerable and under privileged populations. We increasingly find our work on malaria can be effectively integrated with other similar public health interventions for greater impact and therefore expanded our remit to include child health and neglected tropical disease interventions.

We work in Africa and Asia with communities, governments, academic institutions, and local and international organisations, to ensure effective delivery of services, which are supported by strong evidence.

Our areas of expertise include:

- disease prevention, diagnosis and treatment
- disease control and elimination
- systems strengthening
- research, monitoring and evaluation leading to best practice
- behaviour change communication
- national and international advocacy and policy development

Job purpose

The key purpose of this role is to lead on the implementation of public health impact modelling and geospatial modelling analyses to support interpretation of findings generated by the implementation of projects in the organisation. In addition, this role will provide technical assistance to projects ensuring quality assurance and standardisation of statistical and geospatial modelling techniques across the organisation. The post holder will be responsible for leading the conceptualisation of health impact modelling of programmes at scale. The post holder will be the designer of analytical approaches on strategically relevant projects as well as conduct retrospective analyses from targeted projects.

Scope of work

The Senior Geospatial and Impact modelling specialist will report in to the Head of Surveillance and Monitoring and Evaluation (SME) and will be responsible for leading country and above country impact modelling analyses liaising with country level teams as well as other key departments. The post holder will contribute to the Data informed decision-making portfolio together with the Head of SME and the Digital Health Specialist. Results from these analyses will be used to generate the right information for future strategic direction around technical thematic areas such as impact of interventions in the context of COVID19 with a specific focus on exploring equitable access to services in time and space, geospatial approaches to impact modelling of intervention mixes, risk stratification, and geospatial analyses of programmes at scale. The post holder will liaise with Malaria Consortium country offices to ensure accurate, thorough, and useful geospatial analytical components of project activities and impacts. In addition, the position holder will be responsible for training technical staff on the use and interpretation of impact and geospatial modelling techniques to optimise project outcomes.

Key working relationships

Internal

- Technical Director
- Heads of Technical
- Head of Surveillance, Monitoring and Evaluation
- Members of the Global M&E Leaders team
- Members of the Research team
- Digital Health Specialist
- Country Technical Coordinators and country level project staff
- External Relations Publications Team

External

- Members of global and regional technical working groups, as relevant and required

Key accountabilities (percent of time spent on each area)

Impact and Geospatial Modelling (70%)

- Leading the development for this strategic approach for geospatial analysis and modelling
- Writing overall approach on modelling exercises building from lessons learned from large scale programmes such as SMC, iCCM and IPTi (and secondarily on other malaria-related campaigns).
- Define geographical/stratification priority areas for adapted malaria interventions (e.g. MDA or targeted SMC covering expanded age groups)
- Define relevant parameters to be modelled and develop key use cases and implications for all projected scenarios.
- Document uncertainty levels of different scenarios and identify additional or complementary data that would improve such projections that can be gathered Malaria Consortium-supported projects
- Lead geospatial analyses.
- Liaise with Digital Health Specialist to develop and tailor the data collection tools and enhance the geospatial implantation project capabilities
- Provide standardised approaches to prospectively collect and integrate geospatial data on upcoming projects and ensure technical development
- Document impact and geospatial modelling findings, for internal and external purposes

- Lead development of peer-reviewed publications based on modelling results.
- Lead technical coordination of modelling initiatives: liaise and contribute to technical modelling discussions with MC partners and work with MC team on agreed modelling components
- Gather necessary country-specific data to support modelling scenarios (with support from MC teams)
- Establish a database in appropriate software for analysing quantitative data, and conduct detailed modelling data analysis to generate result outputs
- Write and document case studies to guide country assessments of malaria priorities under the new MC technical strategy

Resource management and Capacity Development (10%)

- Line manage as agreed with the Head of Surveillance, Monitoring and Evaluation. performance management, managing workloads, coordinating priorities and coaching/mentoring for skills development
- Lead on recruitment when necessary for direct reports, working with the Head of Surveillance, Monitoring and Evaluation as appropriate
- Support Technical capacity development across the organisation regarding the use of impact modelling in programme evaluation and adaptive management, and provide guidance to relevant external stakeholders on impact modelling in programme evaluation and adaptive management

Strategic contributions and business development (10%)

- Establish and maintain strategic relationships with academic and other relevant modelling groups
- Support strategic initiatives and business development efforts
- Contribute to the formulation and implementation of the Malaria Consortium Strategy and represent MC on key modelling initiatives with external partners

Communication and advocacy (10%)

- Support documentation of experiences and lessons learnt from the organisation's work including production of advocacy, learning briefs, learning papers and general documentation
- Support Technical staff professional development and capacity building at country level (where applicable)

Person specification

Qualifications and experience:

Essential:

- Master's degree in modelling, epidemiology or a related field.
- Extensive experience in malaria and/or modelling of public health related areas
- Demonstrated in-depth understanding of modelling techniques, with extensive knowledge of malaria prevention and control interventions and other communicable diseases
- Significant experience applying GIS software and geospatial analysis
- Experience in predictive modelling
- Experience developing capacity among project team colleagues and, where relevant, external stakeholders

Desirable:

- Experience with digital tools tailored for geospatial analysis

Work-based skills:

Essential:

- Strong computer skills particularly in spreadsheets and statistical applications (QGIS, R, SPSS, STATA, Epi-Info)
- Demonstrable experience using data visualisation platforms
- Rigor and attention to details
- Excellent interpersonal and communication skills, including ability to work and interact with government and non-government colleagues and partners
- Demonstrated ability to lead a team effectively and work collaboratively in a challenging context
- Demonstrated skills in effective verbal and written communication, particularly for technical content
- Ability to manage large, complex pieces of work with multiple stakeholders and to produce key deliverables on time.
- Excellent skills in data analyses and data visualisation
- Comfortable producing analytical reports for a wide range of audiences.
- Excellent writing and presentation skills
- Track record of peer-reviewed publications
- Management and mentoring skills
- Ability to work effectively in a culturally diverse team
- Ability to work independently with little support
- Able to provide remote technical support to teams not based in the same location

Desirable:

- Able to manage high performance in team members

Core competencies:
Delivering results
<p>LEVEL D - Inspires wider teams to achieve outstanding results and to manage risks</p> <ul style="list-style-type: none"> ✓ Proactively improves effectiveness and performance of other senior staff to increase ability to meet objectives, acquiring new skills when appropriate ✓ Encourages mitigating risks amongst the teams/groups they work with/ manage. ✓ Ensures the quality of all internal/external work of own and others
Analysis and use of information
<p>LEVEL D - Analyses the external environment confidently</p> <ul style="list-style-type: none"> ✓ Generates a range of policy options and appraises them based on the internal and external evidence ✓ Develops ways of applying new knowledge and ensures lesson-learning with self and wider team ✓ Analyses the significance of external events and situations for Malaria Consortium
Interpersonal and communications
<p>LEVEL D - Communicates complex technical and/or sensitive/high risk information effectively</p> <ul style="list-style-type: none"> ✓ Communicates complex operational, technical and strategic issues clearly and credibly with widely varied audiences ✓ Uses varied communication to promote dialogue and shared understanding and consensus across a variety of audiences ✓ Influences internal and external audiences on specific issues ✓ Scans the internal and external environment for key information and messages to support communications strategies
Collaboration and partnering
<p>LEVEL C - Builds strong networks internally and participates actively in external networks and think tanks</p> <ul style="list-style-type: none"> ✓ Builds strong networks internally ✓ Participates actively in external networks and/or think tanks. ✓ Engages with relevant experts to gather and evaluate evidence ✓ Shares and implements good practice with internal and external peers
Leading and motivating people
<p>LEVEL C - Effectively leads and motivates others or direct reports.</p> <ul style="list-style-type: none"> ✓ Gives regular, timely and appropriate feedback, ✓ Acknowledges good performance and deals with issues concerning poor performance ✓ Carries out staff assessment and development activities conscientiously and effectively ✓ Develops the skills and competences of others through the development and application of skills ✓ Coaches and supports team members when they have difficulties
Flexibility/ adaptability
<p>LEVEL C - Supports others to cope with pressure</p> <ul style="list-style-type: none"> ✓ Responds positively to change, embracing and using new practices or values to accomplish goals and solve problems and supports others to do the same ✓ Adapts team approach, goals, and methods to achieve solutions and results in dynamic situations ✓ Sets realistic deadlines and goals for self or team
Living the values
<p>LEVEL C - Supports others to live Malaria Consortium's values</p> <ul style="list-style-type: none"> ✓ Demonstrates personal integrity by using position responsibly and fairly ✓ Cultivates an open culture within the wider team, promoting accountability, responsibility and respect for individual differences
Strategic planning and thinking and sector awareness
<p>LEVEL C - Keeps up to date with the internal and external environment</p> <ul style="list-style-type: none"> ✓ Takes into account economic, political and other business factors when drawing up medium and long-term plans, covering both public and private sectors ✓ Looks beyond the immediate operations to prospects for new business ✓ Engages with appropriate internal and external sources to establish major influences on future plans