



Humanitarian Surgery Initiative RCS England/ UKHIH Innovation Fellowships



An estimated 168 million people required humanitarian assistance and protection last year¹. The UN Office for the Coordination of Humanitarian Affairs (UNOCHA) has estimated that this figure will rise to 235 million people this year. 1 in 33 people worldwide will need help — a significant increase from the 1 in 45 people a year ago. The UN and its partner organisations have stated that their aim will be to help 160 million people (70%) most in need across 56 countries. This will leave 75 million people with little or no access to humanitarian assistance.

¹ Global Humanitarian Overview (2020), UNOCHA





Introduction

The Royal College of Surgeons of England (RCS England) is leading an international collaboration to examine the potential role and contribution of data-driven evidence and technology in building humanitarian surgical capacity and preparedness in low-resource settings through the development of a sustainable model for delivering training, knowledge exchange, data management and evidence-based policy research. The collaboration is funded by the UK Humanitarian Innovation Hub (UKHIH), which is supported by the Foreign & Commonwealth Development Office (FCDO) and the collaboration partners include Médecins Sans Frontiers (MSF), the Centre for Innovation in Global Health (CIGH) at Stanford University, [WHO Regional Trauma Group]

The collaboration aims to:

- (a) Increase our understanding of the training and capacity development needs of the humanitarian surgery sector.
- (b) Scope the current use of existing digital platforms and technology in delivering surgical training and online learning in LMICs.
- (c) Assess the opportunities and challenges of introducing technology-enabled training as a sustainable solution for strengthening the humanitarian surgical capacity and preparedness of local and national staff in LMICs.
- (d) Identify, support, pilot and/or develop novel ways to deliver high standards of training and capacity strengthening, with an emphasis on approaches already being utilised in low-resource humanitarian settings for national and local health personnel.
- (e) Identify and/or design innovative solutions for the systematic collection of data and the implementation of research evidence in humanitarian surgery to inform learning and contribute to the collection of global surgery indicators.
- (f) Make recommendations and develop an action plan based on the findings of these scoping activities.
- (g) Begin to establish a broad-based network/coalition focused on training, standards and capacity building in humanitarian surgery.

Context

Approximately 60 million people each year are displaced by conflict with an unmet need of 3 million surgical procedures annually.

A significant proportion of the health needs faced by vulnerable communities in low-resource humanitarian settings require emergency surgical (limb and life-saving) intervention. For example, UNOCHA has reported that in 2020, over 10 million women and young people received life-saving sexual and reproductive health care and services to address gender-based violence (GBV) and 2,412 health facilities in 52 countries provided emergency obstetric care.

To date, the delivery of the 'humanitarian surgical response' has been through the recruitment and deployment of surgeons from high-income countries, mainly as volunteers. This is not without its own challenges. The experience of key humanitarian medical organisations (HMOs) such as Médecins Sans Frontières (MSF) and the International Committee of the Red Cross (ICRC) is that surgeons trained and



working in high-income countries are becoming more specialised and technology heavy. This has resulted in skills and knowledge gaps between their training, experience and the burden of injuries that they must face in complex humanitarian environments. Dedicated training courses have been developed to upgrade the skills of surgeons willing to help in humanitarian relief operations, but they are few, heavily dependent on face-to-face training and in most cases, very expensive.

There are questions about access to on-going learning and the continuing professional development of the surgical humanitarian workforce after their initial training and in-between deployments/ missions.

As the unmet surgical need continues to grow, the capacity to meet those needs has become constrained and exacerbated not only by the recent challenges presented by Covid-19 on international mobility, but also by the lack of in-country surgical capacity at local and national levels. The biggest challenge exists in those low-income countries that are in a constant state of conflict and where the quality and accessibility of humanitarian surgical intervention never seems to change. Training in these settings does not appear to have had a sustainable impact on building local capacity. There is a pressing need to incorporate the use of technology (digital platforms, telemedicine, virtual reality and augmented reality etc) to deliver a sustainable and cost-effective training model. The challenge of introducing technology and the criteria against which new and existing technological ideas should be assessed will be a key outcome of this international collaboration.

Our knowledge and understanding of the global burden of surgical disease during humanitarian crises is hampered by a lack of systematic data collection and research in humanitarian surgery. A preliminary review of the published literature in this area not only reveals a degree of ‘silo working’ and a limited sharing of best practice, but also evidence of potentially scalable pilots and innovative ideas that could potentially be taken forward. Non-governmental organisations (NGOs) play a substantial role in the delivery of surgical care in LMICs and workforce development. The true size of the ‘humanitarian surgery sector’ remains unknown although there have been attempts to establish a register of surgical NGOs with the aim of quantifying their contribution and improving collaboration across the sector.

Collaboration Workstreams

There are six workstreams:

| 1 Set-up, Communications, Stakeholder Identification & Engagement | 2 Training Needs Analysis & Evaluation | 3 Digital Platforms & Technology |
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| <i>This workstream will involve establishing the core foundations of the programme and will involve the following activities:</i> | <i>This workstream will involve scoping existing humanitarian surgery training courses and evaluating delivery.</i> | <i>This workstream will involve identifying and evaluating the use of existing digital platform and technology in delivering surgical training, data collection and capacity development in low-resource settings.</i> |



| 4 Data Management & Surveillance | 5 Innovation I: Pathfinder Pilots | 6 Innovation II: UKHIH Innovation Research Fellows |
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| <i>This workstream will involve identifying and/ or designing innovative solutions for the systematic collection of data to strengthen the evidence base and contribute to the development of global surgery indicators for humanitarian surgery in resource-limited settings.</i> | <i>This workstream will provide the ‘test bed’ to establish several small pilots to implement and evaluate the most promising innovative ideas and solutions identified via workstreams 1-4.</i> | <i>This workstream will establish Glo Innovation Networks and implement project specific/ relevant policy research to strengthen the evidence base.</i> |

RCS England/ UKHIH Innovation Fellowships

The College is seeking to appoint four UKHIH Innovation Fellows – two based in the UK and two based in LMICs. These Fellows will play an integral role in the collaboration, working with stakeholders, supporting and contributing to the substantive development and implementation of the project as well as (in the case of the LMIC Fellows), carrying out their own research and sharing their findings as part of the project’s outputs, policy and communications efforts.

All Fellows will be expected to participate in a range of virtual (and potentially in-person) stakeholder events designed to gather feedback and input from the wider humanitarian and surgical care communities.

The fellowships are to start as soon as possible, are for one year and may cover salary, on-costs and some running expenses.

The main criteria for those interested in applying for these positions are as follows:

LMIC Innovation Fellows

LMIC Fellows will be expected to spend at least 70% of their time contributing to the delivery of policy research and analysis of the current landscape, implementing pilots, testing ideas and generating recommendations and policy insights. This work will involve close collaboration with the project team, partners, work stream leads and advisory board. They will spend their remaining 30% of their time pursuing their own project and policy research interests within the broad problem space set out in the Context section of this briefing.

Those interested in applying for this fellowship must demonstrate the following:

- A degree and postgraduate qualification in a relevant discipline.
- Experience of conducting policy research in one or more of the subject matters relevant to this collaboration.
- A clearly defined and mutually beneficial set of proposals, to be agreed with the collaboration.





- Excellent interpersonal skills, including the ability to communicate effectively both orally and in writing.
- Be located in any of the following regions: sub-Saharan Africa, Middle East & North Africa (MENA), the Americas (specifically the Caribbean and/or South America).
- Ability to establish and maintain effective working relationships in a multicultural and multidisciplinary environment.
- Experience of working with humanitarian organisations including in roles related to humanitarian planning, surgical and anaesthesia care, response or recovery.
- An understanding of humanitarian decision making, trauma systems and specifically the barriers and obstacles to delivering high-quality essential emergency surgical and anaesthesia care, sustainable training and local capacity development in LMICs.
- Knowledge and technical experience working with data, low-cost technologies and systems.
- A passion and commitment to supporting the ongoing development and implementation of high-quality surgical care in resource-limited settings, of building policy research and practice capability using technologies for humanitarian purposes.
- Evidence of innovation or creativity in research, policy and advocacy.
- Experience of working in or on conflict or crisis contexts.
- Demonstrable commitment to equality, diversity and inclusion with an understanding of diverse cultures and how this applies to own role and responsibilities.
- Must not hold UK citizenship.

UK Innovation Fellows

UK Fellows will work full-time on this collaboration, working with the project team and stakeholders to deliver all aspects of the work streams and outputs. In addition, each UK Fellow will support and mentor an LMIC Fellow. This may include reviewing and providing feedback on research proposals and methodologies, providing advice and guidance, and supporting the establishment of innovation networks as appropriate.

Those interested in applying for this fellowship must demonstrate the following:

- A degree and postgraduate qualification in a relevant discipline.
- Experience of conducting and/or managing research in one or more of the subject matters relevant to this collaboration.
- Experience in policy-oriented research, demonstrated by a track record of publications and reports.
- A clearly defined and mutually beneficial approach to this collaboration.
- Excellent interpersonal skills, including the ability to communicate effectively both orally and in writing.
- Experience of supervising, coaching or mentoring others (peers, trainees and students etc).
- Experience of working in and/ or with partners and stakeholders in any of the following regions: sub-Saharan Africa, Middle East & North Africa (MENA), the Americas (specifically the Caribbean and/or South America).
- Ability to establish and maintain effective working relationships in a multicultural and multidisciplinary environment.





- Experience of working with humanitarian organisations including in roles related to humanitarian planning, essential emergency surgical and anaesthesia care, response or recovery.
- An understanding of humanitarian decision-making, trauma systems and specifically the barriers and obstacles to delivering high-quality essential emergency surgical care, sustainable training models and local capacity development in LMICs.
- Knowledge and technical experience working with data, low-cost technologies and systems.
- A passion and commitment to supporting the ongoing development and implementation of high-quality surgical care in resource-limited settings, of building research and practice capability using technologies for humanitarian purposes.
- Evidence of innovation or creativity in research, policy and advocacy.
- Experience of working in or on conflict or crisis contexts.
- Demonstrable commitment to equality, diversity and inclusion with an understanding of diverse cultures and how this applies to own role and responsibilities.
- Must be living and working in the UK.

Application Process

To apply for any of these fellowship opportunities, please submit the following documents to global@rcseng.ac.uk by **17:00 (GMT)** on **Friday 20 August 2021**:

- **Application Form**
- **Equality & Diversity Monitoring Form** (*Optional*)
- **Updated CV** (*Your CV should be no more than 8 sides of A4 and should include a list of your research and/or publications*)

Any queries should be directed to: global@rcseng.ac.uk.

Incomplete applications or those received after the closing date will not be accepted.

