

NIHR-BHF Cardiovascular Partnership UK Flagship Projects on COVID-19 and Cardiovascular Disease

The rapidly evolving COVID-19 pandemic raises challenges and opportunities for the cardiovascular research community. Heart and circulatory diseases are both risk factors for severe COVID-19 infection, and have major impacts on clinical outcomes, both in the immediate phase of the infection and potentially in the longer term.

There are many important questions to answer about COVID-19 and cardiovascular health, and an urgent need to highlight their relevance via the national prioritisation process. The BHF, with endorsement of the NIHR and BCS, has held a series of advisory meetings in the last couple of weeks with the aim to shape a strategy for a coordinated approach to:

- identify and prioritise research projects that could be supported as UK-wide initiatives that; respond to the Government's need, maximise impact and patient benefit, and avoid duplication of effort
- garner the full potential of the UK cardiovascular clinical and research community in a rapid, collaborative and transparent fashion
- align with other national and international initiatives.

This coordinated strategy is essential if projects are to get national approval through the [NIHR portal](#) and to receive support from Trusts who have been instructed to prioritise support for approved COVID-19 related research.

There is strong consensus that the combined BHF (Research Excellence and Accelerator Award Centres, BHF Data Science Centre, BHF Chairs) and NIHR (CV themes within BRCs) cardiovascular research infrastructure, which come together under the **NIHR-BHF Cardiovascular Partnership**, provides an ideal framework for galvanising joint efforts rapidly and delivering impactful research into COVID-19 across the UK.

Both the [BHF](#) and the [NIHR](#) have indicated that available resources available can be repurposed and deployed to nationally prioritised research on COVID-19. There may also be opportunity for sourcing additional resources/funding if the projects assessed through this coordinated approach are deemed to be high quality and of national priority.

Therefore, we outline below an **Operational Framework** to support the establishment and delivery of a number of UK-wide flagship projects addressing key questions, such as:

- 1) the nature and importance of cardiovascular complications in COVID-19 infection and how these may be prevented
- 2) understanding why patients with cardiovascular diseases are at higher risk of adverse outcomes
- 3) the short and longer-term impact of the COVID-19 pandemic for people with cardiovascular diseases
- 4) mechanistic insights into the host response to COVID-19 infection, in particular its effect on myocardial and vascular homeostasis and function

The Framework has the support of the NIHR, BHF, BCS, HDRUK, NICOR and the Directors and Leads of the cardiovascular infrastructure. It is the intention that the flagship projects selected through this framework will be put forward for national approval and we will look to the leadership of this infrastructure to support projects that are approved in their centres. This initiative is also aligned with SAGE approved plans to provide rapid access to linked healthcare datasets for bona fide research <https://www.hdruk.ac.uk/wp-content/uploads/2020/04/200416-COVID19-Research-Data-Final.pdf>.

The BHF Data Science Centre will play a key role in facilitating access for flagship projects.

This Framework has been created to benefit the research community. While it is not mandatory for cardiovascular projects to be advanced through this Framework, especially if they are located in an individual centre, designation of a project as a “UK Flagship Project on COVID-19 and Cardiovascular Disease” could have several advantages:

- higher likelihood of it being approved via the NIHR Covid-19 research approval process
- greater scale of effort by more rapid engagement of a larger number of centres
- higher likelihood of the project being adequately supported and resourced in each centre
- increased chances of additional financial support from medical research funders
- avoidance of duplication and greater opportunity to coalesce as a community around key questions
- greater likelihood to access national datasets via the BHF Data Science Centre / HDRUK process
- higher national and international visibility via BHF and NIHR official communication channels

However, it also needs to be recognised that a key objective is to avoid duplication. Therefore, colleagues are encouraged to make efforts to unite as a community around the key question they wish to address before applying.

OPERATIONAL FRAMEWORK

We welcome proposals from the UK cardiovascular research community for COVID-19 Cardiovascular Disease Flagship projects. Our aim is to ensure a joined up effort from set-up to delivery of each flagship project and maintain oversight of progress across all of these projects through the NIHR-BHF Cardiovascular Partnership. We will also respond to requests from the Government for data and analysis.

The exceptional circumstances of the COVID-19 pandemic requires rapid planning and leveraging of existing capabilities, expertise and programmes across the BHF and NIHR infrastructure, that can be ‘repurposed’ to focus on COVID-19. Strong leadership will be required for each flagship project.

Submitted proposals will be considered in line with the process outlined below.

1) FORMAT OF PROPOSALS

Proposals should be prepared in a structured proforma that must include each of the following:

Project Title

Research Team (1 page maximum)

- Name of the Principal investigator (PI)
- PI's affiliation with an NIHR BRC, NIHR CRF, BHF CRE or BHF Accelerator.
- Co-applicants who will be leading key workstreams
- List of research centres who have currently expressed interest to take part, with names of local leads for each centre. (Note that it is not mandatory to have a list of confirmed participants; support will be available to identify collaborators wherever necessary)

Workplan (3 pages maximum)

- Question(s) to be addressed
- Background, including existing literature and why this project is necessary
- Outline of the workplan, organised as appropriate into work packages

- Main deliverables / expected results and anticipated time frames for completion of each deliverable
- Impact of the results on healthcare pathways, outcomes, understanding of disease mechanisms
- Alignment with other national / international initiatives
- Plans for data sharing and access
- How contribution of individuals/centres will be recognised

Resources required (2 pages maximum)

- Breakdown and justification of main costs (staff, equipment, consumables, etc)
- Support and resources provided by the lead centre
- Resources required by each participating centre that can be repurposed from existing NIHR and/or BHF infrastructure
- Any additional funding required

2) SUBMISSION OF PROPOSALS

We would strongly recommend that proposals are first discussed with the Lead / Director of the PI's BHF CRE or BHF Accelerator or BRC CV Theme before submission.

Please send a PDF version of your proposal to cvpartnership@bhfcrc.org
This will be an ongoing process, so there are no deadlines for submission.

3) ASSESSMENT OF PROPOSALS

Proposals will be assessed via a two-step process, undertaken weekly to provide rapid decisions:

Step 1: All proposals will be sent to a panel comprising Leads from each of the BHF and NIHR centres who will be asked to indicate, with some comments, whether the proposal is

- (i) suitable for a Flagship Project
- (ii) requires further work, including the possibility of linking up with another project
- (iii) not deemed suitable or has a lower priority for a Flagship project.

The leadership of the NIHR-BHF Partnership and BHF Medical/Associate Medical Directors will consider the collated comments and decide whether the consensus is to progress a project further or to feedback to the applicants.



NIHR | National Institute
for Health Research



Step 2: Those projects that are progressed will be reviewed by the panel of Leads from each of the BHF and NIHR centres, at weekly meetings. In some instances, applicants may be invited to make a presentation and answer questions to the panel.

Decisions will be communicated by the NIHR-BHF Cardiovascular Partnership secretariat as soon as possible. A letter of support will be issued to each selected project, confirming its priority status.

4) SUPPORT FOR PROJECT SET-UP AND DELIVERY

Projects that are selected as flagship projects will be strongly supported for approval via the NIHR Portal. Support will also be provided to facilitate allocation of resources and delivery in each participating centre, with agreement from each centre's Leadership. Those projects that require additional funding will also be endorsed for funding applications to appropriate schemes as these emerge.

The [NIHR-BHF Cardiovascular Partnership](#) brings together experts from across NIHR and BHF to develop large scale collaborative initiatives. This infrastructure, together with the [BHF Data Science Centre](#) and [BHF Clinical Research Collaborative](#), will be available to support set up and delivery of all COVID-19 Cardiovascular Disease Flagship Projects working closely with all centres' leadership and management teams.

For queries please contact: cvpartnership@bhfrc.org