



Engineering and Physical Sciences
Research Council

Healthcare Impact Partnerships 2015/2016

Call type: Invitation for proposals

Call Announcement: 07 July 2015

[Je-S open for applications from: 05 August onwards]

Intent to submit required by: 16:00, 27 August 2015

Closing date: 16:00, 24 September 2015

Related themes: Healthcare technologies

Summary

Following a pilot call in 2013, EPSRC invites proposals for Healthcare Impact Partnerships. A budget of £5 million is available to support projects that must progress previous EPSRC funded research towards impact within a healthcare application. This call is only open to proposals which are within remit of the cross-cutting capability areas “Disruptive Sensing and Analysis” and “Medical Device Design and Innovation” as defined in our strategy document (<https://www.epsrc.ac.uk/research/ourportfolio/themes/healthcaretechnologies/strategy/capabilities/>). Proposals should build upon existing strengths and expertise and demonstrate potential to address an unmet healthcare need and/or offer significant added value over current or alternative healthcare solutions.

This call is closely aligned to the EPSRC Healthcare Technologies strategy; a new way to think about how Engineering and Physical Sciences researchers can tackle current and emerging health challenges facing society. Applications to this call should bring a creative and multidisciplinary approach to the cross cutting capabilities identified and underpin at least one of the four grand challenge areas.

This call is open to eligible UK academics who have held an EPSRC grant or portfolio of grants relevant to the capabilities of Disruptive Sensing and Analysis or Medical Device Design and Innovation (see “Eligibility” section). Applicants will be required to work in partnership with at least one business partner to progress their previous research outputs towards impact. Partner(s) will be expected to have played an active role in the design of the project as well as demonstrating significant direct or in kind contributions towards the project. All proposals should also demonstrate clinical engagement in order to ensure the research will address an unmet clinical need.

Proposals will be assessed on the impact generated from their previous EPSRC funded grant, the suitability of the proposed research team, the engagement of the business partner, the quality of the proposed research and the extent to which further support will progress the previously funded research towards impact in healthcare.

Anyone intending to submit a proposal to this call must register their intent to submit by 16:00, 27 August 2015 (see “How To Apply” section for detail). Applicants that do not register their intent to submit before the deadline will be ineligible for the call.

Background

This call is being supported by EPSRC’s Healthcare Technologies theme. One key aim of the Healthcare Technologies theme is to accelerate the impact of EPSRC-funded research into the healthcare sector by increasing the engagement of business with the research we fund. This call looks to support this aim by building on our previous investments in Disruptive Sensing and Analysis and Medical Device Design and Innovation, taking them further along the pathway to impact in healthcare through collaboration with business.

As part of the Healthcare Technologies theme strategy, an Impact and Translation Toolkit has been produced which highlights a number of topics for researchers to consider to make it as likely as possible that the research we fund will find its desired impact in health. Individual research projects will differ in what options and issues will be relevant to the particular programme of research; however we expect all applicants to this call to clearly describe which of the topics in the toolkit are relevant to their research and how they will be addressed during the project. Requests for funding for resources to support these elements of the proposal can be sought through the Pathways to Impact section.

<https://www.epsrc.ac.uk/research/ourportfolio/themes/healthcaretechnologies/strategy/toolkit/>

Applicants will be expected to propose a research project which progresses outputs from previously supported EPSRC research in Disruptive Sensing and Analysis or Medical Device Design and Innovation towards impact within a healthcare application, securing support from business and clinical partners. The projects supported through this call will be high quality, preclinical and precompetitive research projects, with results placed in the public domain. Projects can address basic research in the Engineering and Physical Sciences through to early proof of concept, scale up research. Projects must focus on research, but may also incorporate secondments, project-specific marketing assessments and early stage commercial exploration, as part of the pathway to impact, (note that these should not be the focus of the project) Further details are available as highlighted in EPSRC Guidance on resources for Pathways to Impact):

<https://www.epsrc.ac.uk/funding/howtoapply/preparing/impactguidance/>

This call excludes projects aimed at product development and clinical trials. EPSRC reserves the right to reject proposals outside the remit of this call without reference to peer review.

The applicant team must clearly demonstrate the appropriate multidisciplinary skills and expertise, including involvement of potential end users and clinical expertise, and demonstrate how all partners involved will enhance the project.

For more information about EPSRC’s portfolio and strategies, see our website: <http://www.epsrc.ac.uk/research/ourportfolio/>

Scope of the Call

Alignment to Healthcare Technologies Grand Challenge Strategy

Applicants must state how their proposed research and programme of activity will advance at least one of the cross-cutting research capabilities identified for this call which are:

- **Disruptive Technologies for Sensing and Analysis** - Research focussed on innovative sensing systems or analytical technologies that could have a transformative impact on prediction, diagnosis and monitoring in healthcare.
- **Medical Device Design and Innovation** - Research focussed on the design, development, evaluation and production of cost-effective, reliable and effective medical devices.

Applicants are also asked to demonstrate their alignment to at least one of the recently released Healthcare Technologies Grand Challenges. Through these challenges we aim to support the novel engineering, ICT, mathematical and physical sciences research required to develop each challenge. The four Grand Challenges are:

- **Developing Future Therapies** - Supporting the development of novel therapies with technologies to enhance efficacy, minimise costs and reduce risk to patients.
- **Frontiers of Physical Intervention** - Restoring function, and optimising surgery and other physical interventions to achieve high precision with minimal invasiveness.
- **Optimising Treatment** - Optimising care through effective diagnosis, patient-specific prediction and evidence-based intervention.
- **Transforming Community Health and Care** - Using real-time information to support self-management of health and wellbeing, and to facilitate timely interventions.

Applicants to this call must clearly describe in the case for support which of the topics in the Impact and Translation toolkit are relevant to their research and how they will be addressed during the project. Request for funding for resources to support these elements of the proposal can be sought through the Pathways to Impact section.

For more information on the challenges, cross cutting themes and the impact and translation toolkit please see:

<https://www.epsrc.ac.uk/research/ourportfolio/themes/healthcaretechnologies/strategy/>

Equipment

Where possible, researchers are asked to make use of existing facilities and equipment, including those hosted at other universities. If equipment is needed as part of the research proposal, applicants must follow EPSRC's rules for requesting equipment over £10,000 in value. Individual items of equipment up to

the current OJEC (Official Journal of the European Communities) procurement threshold can be included on research proposals submitted through this call, but research organisations will be expected to make a contribution to the cost. All requests for single items of equipment above the current OJEC threshold will need to go through a separate process which will assess the strategic need for the equipment and how to ensure maximum usage. These proposals will be assessed through the separate Strategic Equipment peer review process.

For more information on equipment funding, please see:

<http://www.epsrc.ac.uk/research/ourportfolio/themes/researchinfrastructure/subthemes/equipment/>.

The current OJEC threshold can be found at:

<http://www.epsrc.ac.uk/research/facilities/equipment/>

Eligibility

This call is open to academics, from eligible UK research organisations, that have been a principal investigator or co-investigator on at least one EPSRC grant that completed on or after 01 April 2010 (inclusive) or is due to finish by April 2016. This grant must be clearly relatable to the cross cutting capabilities of Disruptive Sensing and analysis and/or Medical device design and innovation.

Collaboration with at least one business partner is mandatory. All applications must have a route to obtain clinical engagement and advice. Collaboration with other user organisations (not for profit etc.) is also strongly encouraged.

For information on the eligibility of organisations and individuals to receive EPSRC funding, see the EPSRC Funding Guide:

<http://www.epsrc.ac.uk/funding/howtoapply/fundingguide/>

As this call is a targeted funding opportunity provided by EPSRC, higher education institutions, and some research council institutes and independent research organisations are eligible to apply. A list of eligible organisations to apply to EPSRC is provided at: <http://www.rcuk.ac.uk/funding/eligibilityforrcs/>

How to apply

Notify EPSRC of your intent to apply

Applicants must submit an **Intention to Submit by 16:00, 27 August 2015**; applicants who have not submitted an Intention to Submit will be ineligible for this call. Please see appendix 1 for a copy of the questions asked as part of this intention to submit.

To complete the Intention to Submit form, please access the form via the call Web page (<https://www.epsrc.ac.uk/funding/calls/hip201516/>) and complete the short survey form with the information contained within the appendix. EPSRC will acknowledge receipt of the Intention to Submit.

In the final submission deviation from the detail provided on the survey will be allowed. Survey responses will simply be used to give us an indication of the level of interest and enable us to identify peer reviewers and panel members more quickly. **Applicants that do not register their intent to submit will have their applications rejected.**

Submitting application

You should prepare and submit your proposal using the Research Councils' Joint electronic Submission (Je-S) System (<https://je-s.rcuk.ac.uk/>).

When adding a new proposal, you should select:

- Council 'EPSRC'
- Document type 'Standard Proposal'
- Scheme 'Standard'
- On the Project Details page you should select the 'Healthcare Impact Partnerships 2015' call.

Note that clicking 'submit document' on your proposal form in Je-S initially submits the proposal to your host organisation's administration, not to EPSRC. Please allow sufficient time for your organisation's submission process between submitting your proposal to them and the call closing date. EPSRC must receive your application by 16:00 on 24 September 2015.

Proposals must be submitted on one single Je-S form with a single lead university even where they are multi-institutional bids.

Guidance on the types of support that may be sought and advice on the completion of the research proposal forms are given on the EPSRC website (<http://www.epsrc.ac.uk/funding/howtoapply/routes/>) which should be consulted when preparing all proposals.

Guidance on writing an application

Full proposal

Your submission should include the following documentation: of the Je-S form, a eight-page case for support, Pathways to impact, work plan, justification of resources requested and project partner statement(s) of support. Specific requirements for this call are set out below. General guidance on preparing a proposal can be found below:

<https://www.epsrc.ac.uk/funding/howtoapply/preparing/>

1. A standard Je-S form

2. Case for Support

The eight-page case for support should include the following information using the headings below:

- **Track record of the research team (up to two pages)**
- **Review of previous grant and forward vision (up to four pages)**
 - Provide the title and grant reference number of the previous grant(s) this proposal is developed from. One of which must be the

qualifying grant used to apply to this award (see 'Eligibility'). Demonstrate the alignment of the project to the cross cutting capability as well as at least one of the grand challenges.

- Identify the key scientific findings from your previous grant(s) that will be developed further in this proposal.
 - Describe clearly the objectives for this programme of work and the research methodology.
 - Identify and describe how your proposed programme of activities will work towards addressing an unmet clinical need. A route to secure clinical advice must also be clearly identified
- **Engagement plan for project partner(s) involvement (up to two pages)**
 - Identify the project partner(s) involved in your proposal and outline their involvement in the project and describe how you will work collaboratively to deliver the research vision and how the programme of activities will accelerate the research towards impact within healthcare.
 - Describe the contributions the project partners will make to the research programme, direct or indirect and how these contributions add value to the resource request from EPSRC.
 - Applicants should demonstrate their knowledge of the relevant regulatory pathway and the steps that should be taken during the project to progress along that pathway.
 - Describe the current best practice employed in tackling the clinical need and how this solution could address the unmet aspects of that clinical need.
 - Applicants should also describe the success metrics from the perspective of their collaborating business partner. Describe how the business partner will help take the research the next step along the pathway to impact in healthcare if the research is successful. If possible, provide some context for the interest of the business partner by indicating the scale of the potential market opportunity.

3. Project Partner Statements of Support

Statements of support should be supplied for all project partners and include the following:

- Why they see value in partnering on this project.
- What their involvement will be during the Healthcare Impact Partnership and indicate their role in the preparation of the research proposal.
- Confirmation of any direct or in kind support they are contributing.

4. A diagrammatic Work plan/Timeline – this should show a timetable of planned activities associated with the Partnership. (1 page)

5. A Justification of Resources - this should provide a full justification for all the resources you have requested. (2 pages)

6. A Pathways to impact plan – This should detail plans for ensuring the partnership has an impact both in the relevant research and user communities and how the project will be taken forward by the partners after the award. Applicants should demonstrate how they will approach issues identified within the Impact and Translation Toolkit, where appropriate.

<https://www.epsrc.ac.uk/research/ourportfolio/themes/healthcaretechnologies/strategy/toolkit/> (2 pages).

Applicants should use the Ethical Information section on the Je-S form to demonstrate to peer reviewers that they have fully considered any ethical issues concerning the material they intend to use, the nature and choice, current public perceptions and attitudes towards the subject matter or research area. EPSRC will not fund a project if it believes that there are ethical concerns that have been overlooked or not appropriately accounted for. All relevant parts of the ethical information section must be completed. If the research will involve human participation or the use of animals covered by the Animals (Scientific Procedures) Act 1986 it is recommended that applicants pay particular attention to the guidance highlighted below. **EPSRC reserves the right to reject applications prior to peer review if the Ethical Information sections are not completed correctly.**

Further guidance on completing the J-eS form can be found at <https://je-s.rcuk.ac.uk/Handbook/pages/GuidanceonCompletingaStandardG/EthicalInformation.htm> . Other relevant guidance includes: EPSRC's policy on animal use in research (<https://www.epsrc.ac.uk/about/standards/animalresearchpolicy/>) and the Responsible Innovation Framework (<https://www.epsrc.ac.uk/research/framework/>).

If the attachments are uploaded as Word documents, please be aware that once the application has been submitted to the Council/Funder, all the attachments will be converted and held as an Adobe Acrobat file (PDF). Also please note, that whilst we support a wide range, **we do not support all MS Word font types**. Therefore if an unsupported font type is used a different font type may be substituted which may result in changes to the layout of the document. For this reason we recommend that the documents are converted to PDF files before uploading.

Also, please note that on submission to council **all** non-PDF documents are converted to PDF, the use of non-standard fonts may result in errors or font conversion, which could affect the overall length of the document.

In addition, where non-standard fonts are present, and even though the converted PDF document may look unaffected in the Je-S System, when it is imported into the Research Councils Grants System some information may be removed. We therefore recommend that where a document contains any non-standard fonts (scientific notation, diagrams etc), the document is converted to PDF prior to attaching it to the proposal

For advice on writing proposals see:

<http://www.epsrc.ac.uk/funding/howtoapply/preparing/>

Assessment

Assessment process

Full proposals will be sent to independent peer reviewers, including at least one nominated by the applicant. The reviewers' role will be to comment on the scientific quality of the proposed research and the appropriateness of the engagement plan with the project partner(s) based on the criteria below, if sufficiently positive comments are received applicants will be invited to respond to these comments. Proposals will be ranked by a prioritisation panel using the reviewers' comments and the PI response.

Assessment criteria

Full proposals will be sent to reviewers chosen for their expertise and will be assessed on the following criteria:

- Research quality
 - The quality of the programme of research required to move the scientific findings from the previously funded research grant the next step along the pathway to impact in healthcare.
- National importance
 - This will include considering alignment to healthcare technologies strategy and an assessment to the extent to which an unmet clinical need has been understood by the team and their plan to address it.
- Pathways to impact
 - The extent to which the plans for ensuring the partnership has an impact both in the relevant research and user communities and how the project will be taken forward by the partners after the award.
 - The extent to which topics in Impact and Translation toolkit have been considered and addressed as appropriate.
- Applicants
 - The suitability of the proposed research team, including their balance of skills and track record, and their ability to deliver the proposed project.
- Resources and management
 - The appropriateness of the requested resources and the effectiveness of the proposed management structure and plans.
- Engagement with Project Partner(s)
 - The extent to which the applicant team have demonstrated close engagement and collaboration with project partners including how the partner is critical for the success of the project. Please also demonstrate how the partner will add value to the EPSRC's investment and how if successful, it will go beyond the duration of the project to make impact in healthcare more likely in the future.

EPSRC reserves the right to reject proposals that are deemed to be outside of EPSRC remit, the remit of the call, or are not complete or in the correct format, without reference to peer review.

Guidance

Guidance for reviewers

Reviewers will be directed to this call for proposals when contacted to review the proposals. In addition, specific guidance will also be available to them based on the information in this call.

Panel members will also be given specific guidance based on the information in this call.

Information about the EPSRC peer review process and guidance for reviewers can be found at: <http://www.epsrc.ac.uk/funding/assessmentprocess/review/>

Key dates

Activity	Date
Call launched	07 July 2015
Call open in J-eS	05 August 2015
Intention to submit deadline	27 August 2015
Closing date for full proposals	24 September 2015
Expert Peer Review	Nov-Jan 2016
Prioritisation panel	Mid February 2016
Funding decisions announced	Q4 2015/16

Contacts

For further information relating to this call please contact:

Martin Champion
martin.champion@epsrc.ac.uk
01793 444380

Or

Nick Cook
nick.cook@epsrc.ac.uk
01793 444282

For any queries regarding the Je-S system please contact the Je-S helpdesk on Je-SHelp@rcuk.ac.uk or 01793 444164

Change log

Name	Date	Version	Change
Martin Champion	07/07/15	1	Ready for Publication

Appendices

Annex 1

Intent to Submit survey questions:

- 1) What is the title (tentative) of the proposed partnership?
- 2) Please name the Principal Investigator and their institution of the research proposal.
- 3) Please name any Co-Investigators and their institutions on this proposal.
- 4) To which Grand Challenge does your new Healthcare Impact Partnership proposal align?
- 5) To which of the cross-cutting research capabilities identified for this call does your new Healthcare Impact Partnership proposal align?
- 6) Please name all the project partners that are involved with this partnership
- 7) Approximate value of the funds (£s) to be requested from EPSRC (at 80% fEC)
- 8) Please provide the grant reference number of the previously funded EPSRC research grant upon which this proposal builds.
- 9) Please briefly describe the research focus of the proposal. (max. 2000 characters.)