

Healthcare Science Innovation Fellowships

Programme Information for Applicants

CSO/D4D Healthcare Science Innovation Fellowships: changing cancer care through medical devices, apps and other healthcare technologies to benefit people living with cancer in primary and secondary care

Background

Technological solutions are a key component to meeting the challenges of the NHS and the changing society we live in. Safe and effective technologies together with the adoption of innovative solutions at pace and scale are essential for patient benefit and to keep healthcare at the limits of science.

HCS staff need to be given the “tools to do the job” in terms of healthcare technology management techniques, to help in adopting evolving technologies and innovative solutions. The current project proposes to practically build system capacity to enable medical device regulatory and standards expertise, coupled with innovation solutions to enable the introduction of appropriate technologies to benefit cancer patients in primary and secondary care. Partnering the proven innovation capabilities of Devices for Dignity with candidates keen to develop their innovation skillset the Fellowship programme offers an experiential framework where skills are built and real world examples are tested.

Objective

Those who would benefit from this programme would be existing NHS Healthcare Scientists who would learn to build on technologies they or others had already developed, or identify unmet needs by exposing and training these scientists through the innovation process to identify, evaluate and implement new technologies.



This work will be undertaken in collaboration with the Office of the Chief Scientific Officer, National School of Healthcare Science and be led by “NIHR Devices for Dignity MedTech & In vitro Diagnostic Cooperative”, (D4D),

Fellows would be encouraged to look at projects through the prism of the NHS Long Term Plan, seeing the patient as a partner, understand their journey addressing living with and beyond cancer initiatives and considering digital future possibilities. Regulation and standards will be introduced as enablers to safe and effective introduction of new and emerging technologies and D4D’s methods for identifying and managing unmet needs will be introduced as a central methodology.

It is envisaged that there would be an emphasis on extending the reach of the Healthcare Scientist community to ensure coverage of evolving integrated care system footprints, improving access to specialist technologies and advice for cancer patients.

The fellowship programme would envisage developing a sustainable approach to innovation that Fellows could cascade within their healthcare setting.

Delivery Detail

D4D work across the age spectrum from very young children to older adults with long term conditions, bringing together appropriate teams to catalyse technology development in response to unmet needs and that deliver most impact for both patients, carers and the Health & Social Care. D4D start with a holistic assessment the functional limitations and challenges that arise from living with Long Term Conditions. Often health conditions are managed in isolation, which is not always effective for patients or identifying the most suitable technology to help them. Our patient focus is: ‘Living my life well for longer’ recognizing the challenges of overlapping complications of illnesses on quality of life and the ability to live, work and function independently.

The Programme will be delivered by the NIHR Devices for Dignity (D4D) MedTech Co-operative www.devicesfordignity.org.uk/, embedded with the NHS, which has been catalysing medical technology innovation successfully since 2008.



Requirements for the Fellows

This Healthcare Science 'Innovation Fellowship' is open to qualified Healthcare Scientists working within the NHS in England, with at least 1 year of post-qualification experience. It is intended to develop knowledge and skills in healthcare technology innovation, enabling healthcare scientists to initiate and lead their own technology innovations in the future. The full Programme will last up to 12 months, with departments of Fellows committing to provide 20 days of protected time to aid study time and project completion. In return, the departments of Fellows will be awarded a £15K Innovation Fellows bursary, which is to cover direct auditable costs associated with the Fellowship e.g. purchase of project materials, necessary travel *etc.*, and be mentored to undertake a technology innovation project relevant to their department.

Places are limited, with only 4 applicants supported through a technology innovation project. Applicants who are short-listed for interview and not selected for the full Programme, will be offering the option of completing the online '*introduction to innovation*' module without the follow-on project. The module comprises 10 inter-related elements. It will introduce the knowledge and methods required to develop a technology from an initial unmet need through the path to commercialisation and wide-scale adoption into the NHS or wider health and social care system. CPD points will be awarded for each element completed successfully. Each selected Fellow will be required to complete the module successfully before progression onto their innovation project. It is not expected that a Fellow will complete a full technology development project as such projects may take many years from initiation. Fellows will be exposed to a facet of the development pathway to provide an introduction to the range of skills and attributes necessary for successful evolution of an initial idea to a technology that brings patient and system benefits. Fellows will be partnered with appropriate mentors who will be experts in their fields.

Within the application form, applicants will be asked to provide a short 'expression of interest' for a technology innovation project that they would wish to undertake. Its focus must include an aspect that is relevant to people living with and beyond cancer and ideally a link to one of D4D's clinical themes (Diabetes, Renal Technology and Long-Term Neurological Conditions). Applicants, and their departments, will be asked whether they would be open to adaptation or substitution of their submitted project in the event that it is not assessed as being suitable. Applicants are not required to have



developed technologies previously, but successful applicants will be expected to have demonstrated passion and aspiration for improving healthcare technology for patient and system benefit.

Expected Outputs for the Fellows at the end of the Fellowship

- Appreciation of the governance frameworks for medical technologies
- Listening skills to interpret and understand patients “lived experiences” with cancer
- Working knowledge of risk management technologies
- Experience of redesigning / optimising a clinical pathway
- Healthcare Technology adoption techniques
- Better understanding of the innovation skillsets required for the future HCS workforce
- Opportunity to partner with NHS Digital regarding mobile apps and digital technologies as NHS Digital seek ambassadors to evaluate new technologies.

Programme Timeline

The programme would run in 2020/21 with 4 trainees with the programme commencing following the introduction at the CSO Webinar on 21st September 2020. The fellowship would run from the 1st February 2021 until 31st January 2022.

How to apply

The application form will be available to access from 25th September 2020. This will be available from the CSO Website, NHS Futures platform, CSO workspace, National School of Healthcare Science and Health Education website. Further areas of accessibility will be informed via social media updates.

For more information:

Attend the 1-hour online webinar on Monday, 21st September, 11.00

Questions to england.cso@nhs.net

Checkout the weekly social media updates



