

Regional and National MDT Workflow Digitisation

Project lead and organisation - Jon Lambert, UCLH

Partner organisation(s) involved - Imperial (Human Factors Research Team)

Funding requested (£) - Y1: £90,000. Y2+: £110,000. Total: £200,000.

Proposed start and end dates - September 2026 – September 2028

Summary

This bid proposes digitising regional and national multidisciplinary team (MDT) workflows to improve coordination, efficiency, and safety in cancer care across North Central London (NCL) and beyond. As cancer pathways become more complex, patients are increasingly discussed at specialist MDTs based at tertiary centres, while receiving care locally. However, current processes rely heavily on manual tasks such as emailing referrals, re-entering patient data, and scanning documents into electronic records. These workflows are slow, labour-intensive, prone to errors, and often result in incomplete information, delays in decision-making, and poor communication of outcomes back to referring teams.

The project will develop a digitally enabled, end-to-end MDT referral and communication pathway. In Year 1, it will undertake a detailed diagnostic study of existing workflows and co-design a proof-of-concept digital solution with stakeholders, including a prototype user interface. This will demonstrate how automated, standardised referral and data transfer processes could function across organisations. In later phases, the model will be implemented in a real regional or national MDT, supported by appropriate technology and partnerships.

Expected benefits include faster pathways, improved data quality, better communication of MDT decisions, reduced administrative burden, and enhanced patient experience.

NCLCA Big Ideas Fund – Expression of Interest

Questions marked with an asterisk indicate additional guidance on page 2 of this document.

Section 1 – Project Details			
Proposal title	Regional and National MDT Workflow Digitisation	Project lead and organisation	Jon Lambert, UCLH
Partner organisation(s) involved	Imperial (Human Factors Research Team)	Funding requested (£)*	Y1: £90,000 Y2+: £110,000 Total: £200,000
Proposed start and end dates*	Sept 2026 – Sept 2028		
Section 2 – The Idea			
1. What is the challenge you are seeking to address?*	<p>As cancer care grows more complex, an increasing number of patients have their management planned through regional and national multidisciplinary teams (MDTs), often based at tertiary centres like UCLH and RFH, even though their care is primarily or exclusively delivered at district general hospitals (DGHs). This process allows patients to benefit from the super-specialist expertise available at tertiary centres whilst receiving their care close to home.</p> <p>Unfortunately, the workflows that underpin this rely heavily on repetitive manual administrative tasks, particularly at the tertiary centre. Referrals are frequently emailed to clinicians or sent by ITR, after which an MDT co-ordinator must register the patient and request transfer of relevant patient data, and clinicians then enter the clinical question and order the MDT review.</p> <p>Patient data is manually transferred from the DGH to the tertiary centre – either by retyping emails or scanning documents into the electronic health record (EHR). In addition to being slow and labour intensive, taking many hours of MDT lead and coordinator time/week, it is also prone to transcription errors and results in incomplete and unstructured data. This in turn results in delays to MDT discussions and decisions being made on flawed information, posing risks to care.</p> <p>Furthermore, once a recommendation is made at MDT, there is no straightforward way to communicate it back to the local hospital. MDT co-ordinators often need to email the referring centres, resulting in further delays and risks that the outcome may not be visible to all members of the referring team (for instance if the recipient is on leave).</p> <p>These issues above have become increasingly problematic with the growth of regional and national MDTs and there is no clear path to resolving it, particularly as it crosses provider and EHR boundaries. Addressing this problem will require regional & national coordination and investment. It will also require buy-in from clinical teams to engage with the transformation process and change the way they work.</p>		
2. What is your proposed project and – at a high level – how would it be delivered?	<p><u>Year 1:</u> To address this problem, we must first understand, evidence and articulate the scope of the challenge: MDT pathways, especially ones involving multiple organisations, are complex and no single person has full visibility of the process. Indeed, many MDT improvement plans struggle to ‘scale up’ due to inadequate understanding of the problem (e.g. all stakeholder roles) and not addressing change management – which involves people, process & technological aspects. In Year 1 we will make a compelling case for change - demonstrating to all stakeholders why the myriad low-tech workarounds that are currently in use are sub-optimal both for patient care and organisational efficiency, that we understand the problem and that we can</p>		

Submit by 25 June 2026. Only NCLCA colleagues may submit.

	<p>produce a modern, high-quality, digital solution. Specifically, we will deliver two things:</p> <ul style="list-style-type: none"> • A deep ‘diagnostic’ study of a large, complex national MDT workflow • A working proof-of-concept model of what an optimised, automated end-to-end DGH-tertiary centre-DGH MDT referral pathway would look like, built with deep user engagement at the forefront of the design process. <p>We will also survey the small number of existing systems (e.g. the National PBT Proton Portal) to leverage their experience. This material will be used to communicate with key stakeholder groups, including through a video that presents a compelling narrative to leadership and clinical teams, across multiple sites, on the case for change.</p> <p>By approaching this as a proof-of-concept, we can focus on understanding and optimising the usability of the workflow, without being constrained too early by technical factors such as EHR interoperability and the Federated Data Platform. We will however spend part of Y1, doing an options appraisal for relevant technology. This will include participating in the FDP MDT development.</p> <p><u>Year 2+:</u> Based on the findings of Y1 we would then look to implement one important region / national MDT, likely on a new platform, and do so in collaboration with another sites. For example, we might make a national lymphoma referral that a) could be used by multiple tertiary centers and b) has some integration into DGH systems (understanding the latter will take time to scale-out). A key element of the Y2 work will be agreeing the technical approach and associated partnerships necessary to implement this programme.</p>
Section 3 – Impact & Strategic Alignment	
<p>3. Which <u>NCL strategic objectives</u> and/or National Cancer Plan ambitions does your project align with?</p>	<p>SO2b: Consistently improve the quality of life for all cancer patients. SO3a: Deliver and sustain compliance with the 62 day standard by 2028, and maintain performance against the 28 day FDS at 80%. SO3b: Reduce variation in clinical practice across the whole pathway. SO5a: Deliver year on year improvement in our staff satisfaction survey and retention. SO6: Identify, support, and evaluate a suite of clinical innovations with the aim of contributing to improved outcomes</p>
<p>4. What impact do you expect the project to have on NCL cancer outcomes and/or patient experience?</p>	<ul style="list-style-type: none"> • Better decision making due to more complete data • Faster, more efficient pathways and less delays • Better communication of outcomes out from the MDT • Less safety incidents due to incorrect or incomplete data • Better patient experience – we have heard from patients that tertiary care data flows are problematic • Better collaboration between trusts and better staff experience • Better adherence to national datasets i.e. COSD, cancer audits
Section 4 – Resources	
<p>5. What do you see as the likelihood of attracting external funding?</p>	<p>High, once we get to Y2. This could be a combination of national NHS funding (e.g. via FDP), commercial partnerships and grant opportunities based on having a platform that can provide better efficiency/better data/quality improvement opportunities.</p>
<p>6. High-level indication of how the budget would be used*</p>	<p>In year 1 we would use the funding to commission an external team for:</p> <ol style="list-style-type: none"> 1) Stakeholder and process mapping 2) Proof-of-concept user interface development <p>We are looking to hire experts in this field, ideally with healthcare expertise.</p>

	<p>UCLH would provide access to subject-matter-experts and management and technical oversight (using other funding). We are looking to collaborate with Tayana Soukup, an MDT researcher at Imperial College London.</p>
<p>Section 5 – Anything Else</p>	
<p>7. Is there anything else you would like to flag?</p>	<p>This nature of this project introduces significant dependency risk – due to dependencies on other sites and on external suppliers.</p>

Additional Guidance on Completing this EOI

General

- All EOIs must not exceed 2 pages.
- Please submit to uclh.nclcanceralliance@nhs.net by 25th June 2026.
- Only NCLCA colleagues may submit.

Section 1 – Project Details

- Our current expectation is that we will fund a small number of projects from a total funding pot of ~£600k.
- Proposed end date for the project must be no later than March 2029.

Section 2 – The Idea

- Question 1 - Describe the problem or unmet need. Include relevant data or evidence where possible.

Section 4 – Resources

- Question 6 - e.g., staffing, clinical time, technology, evaluation, overheads. Precise costings are not required at EOI stage.