Project list (Indicative, other projects may also be considered)

Generating novel insights in the chronic kidney disease pathway	
Deanery priority	Analogue to digital/treatment to prevention
MFT strategic fit	Care on Time/Value for Patients
Digital lead	Anthony Wilson
Point of contact	John Hartemink/Darren Griffiths
MFT has recently purchased the MDClone platform, a sophisticated software tool to visualise patient timelines and outcomes. In this project you'll help build the data specification for our chronic kidney disease (CKD) registry and then use MDClone to identify opportunities for improvement in how we care for patients with CKD. A novel feature of the MDClone platform is the ability to generate synthetic data. Time permitting, you will be able to evaluate the synthetic data that can be created with this tool and explore how it could be used in research settings.	

Optimising advice and guidance routes and data sharing primary/secondary care interface	
Deanery priority	Analogue to digital/hospital to home
MFT strategic fit	Care on Time/Value for Patients
Digital lead	Cristina Avram
Point of contact	Mark Gillespie/Lisa Wilkinson
MFT has launched an ambitious elective recovery programme this year, Care on Time. One of the main priorities of this programme is optimising "Advice and Guidance" opportunities, in keeping with "getting it right first time" (GIRFT) principles. In this project you'll help streamline this process by clarifying entry/exit processes for patient data into the system, identifying the best digital solution for this and systems integration requirement, deliver the solution in partnership with primary care and analyse initial outomes of the project	

Multi disciplinary meeting data capture and output to national registries	
Deanery priority	Analogue to digital/health inequalities
MFT strategic fit	Improving cancer care/Value for Patients
Digital lead	Cristina Avram
Point of contact	Lisa Wilkinson/Jen Darlington
MFT is a large trust offering a huge volume of multi-disciplinary care, both in cancer and non-cancer services. We have a reliable way of documenting MDT discussions and outcomes, but are embarking on a review of the process aiming to assess how AI could	

help pull data from various sources and reliably populate MDT output, with a view to optimise cancer staging/COSD data capture.

Digital audit and registry data collection	
Deanery priority	Analogue to digital/health inequalities
MFT strategic fit	Digital innovation and research/Value for Patients/Reducing inequalities
Digital lead	Cristina Avram
Point of contact	Cassian Butterworth

As one of the largest trusts in the UK, MFT contributes to numerous national audits and registries looking to ensure standards of care are maintained. This currently happens through manual data entry. As part of this project, you will help move towards transforming data collection into an automated digital process while increasing your understanding of data flow between systems and data security principles by focusing on building audit tools/communication with registries, with initial priority given to Diabates and Respiratory areas.

Understanding Perioperative Risk for Major Cancer Surgery	
Deanery priority	Analogue to digital/hospital to home
MFT strategic fit	Digital innovation and research/Value for Patients/Reducing inequalities/Improving Cancer Care
Digital lead	Peter Alexander
Point of contact	John Moore

MFT is the largest provider of surgical and cancer surgical services across Greater Manchester (GM). It has invested in the Epic electronic health record which provides a very rich dataset. GM has developed a population risk model which allows high level and patient level measures of risk. This solution provides access to primary care information and will allow us to understand the influence of health inequalities.

We will support you to examine outcomes in major surgical patients at MFT, particularly those undergoing cancer surgery and understand how better knowledge of population risk can be utilised to initiate better patient preparation, surgery and recovery, improving outcomes. This project will be supported by the University of Manchester.

British Sign Language Use and Cardiovascular Disease	
Deanery priority	Health inequalities, treatment to prevention
MFT strategic fit	Digital innovation and research/Reducing inequalities
Digital lead	Anthony Wilson, Henry Morriss
Point of contact	Claire MacDonald/ Katherine Rogers

In this project you'd work with MFT's clinical data science unit and researchers from the University of Manchester to explore associations between hearing impairment and

cardiovascular outcomes. MFT's electronic patient record and patient app means that we are able to identify a large cohort of patients who indicate that BSL is their preferred language. You'll explore differences in outcomes for this group and a matched cohort in MFT's data warehouse.

Phenotypes of frailty	
Deanery priority	Treatment to prevention
MFT strategic fit	Digital innovation and research/Reducing inequalities
Digital lead	Anthony Wilson
Point of contact	Claire MacDonald/Thomas Knight

Working with clinical academics and MFT's clinical data science unit, you'll support a data science project funded by the Health Data Research UK alliance. Using MFT's comprehensive EPR, you'll build a comprehensive frailty data set and explore the best way to define frailty in a hospitalised population (so called "phenotypes of frailty"). If time and resource permits, you'll use this definition to explore the impact of polypharmacy in a frail population.

Evaluating large language models in the electronic patient record	
Deanery priority	Analogue to digital
MFT strategic fit	Care on time, value for patients
Digital lead	Alexander Parker
Point of contact	tbc

In the latest update to our electronic patient record (Epic) it will be possible to automate the generation of discharge summaries using artificial intelligence powered by a large language model (LLM).   Before we can roll this out to all our staff, we need to make sure that the discharge summaries are accurate and safe.

In this project, you'll be one of the first to be granted access to this tool. You'll evaluate discharge summaries created by the LLM for completeness and accuracy, whilst checking that they treat all patients fairly. Your results will play an important role in our plans to roll this technology out across the Trust.