History and background of the Macmillan Virtual MDT

The concept of a Virtual Multi-Disciplinary Team (vMDT) in cancer care was proposed by Professor Alastair Munro (BJC 2013).

Through its work with the National Cancer Survivorship Initiative from 2008-2013, Macmillan Cancer Support had developed a strong interest in testing new service models for people affected by complex, debilitating long-term side effects of cancer treatment.

Hence, Macmillan awarded Professor Munro’s team at Dundee University a grant to develop the vMDT concept and live-test a prototype vMDT software platform for managing people with complex consequences of cancer treatment. Dr Gill Levitt (Macmillan Specialist Advisor and expert in consequences of treatment) advised and supported the development of the model, as well as clinical engagement with this initial phase of testing.

The vMDT is an online platform which allows referrers to access written expert opinion within two weeks on the management of complex consequences of treatment for which local expertise may be lacking. In doing so, it enables a reduction in outpatient appointments, saving patients’ time and NHS resources. It also acts as an educational resource, as closed cases can be browsed. A flowchart of the process for a referring healthcare professional can be found later in this document.

The vMDT system is overseen and administered by a vMDT coordinator who is the main point of contact, ensuring the experts provide advice on referrals and creating a summary of each case.

The original vMDT platform was developed on Wordpress software. After the appointment of the first vMDT coordinator at Dundee in 2013, the system went live in 2014. Initially, the project focused on information and clinical governance issues between the host organisation (Dundee University) and the source of referrals (University College Hospital, London (UCH)).

Dr Vicky Grandage and the haematology team from UCH agreed to test the vMDT by referring people who had complex consequences as a result of cancer treatment as a child or young person, with a specific focus on bone marrow transplant patients. Due to the resignation of the Dundee vMDT coordinator the testing phase was closed early. A total of 12 patients were referred, with notable benefits such as reducing the need to travel to see different experts. It is estimated that each vMDT referral saved at least one outpatient appointment, and initial costing indicated the vMDT would at least pay for itself through savings in NHS resources. If running efficiently at capacity, it has the potential to save considerable resource.

A full project report was generated, and there was opportunity to reflect on what had been achieved. While the vMDT was useful for the 12 patients referred, it was agreed that the total number of referrals was lower than expected. This could be due to insufficient marketing of the vMDT concept, there was little time to promote the existence of the system within the timescale, and referrers were not convinced of its value. Additionally, by testing within the field of cancer care for children and young people, where late effects care is already the most developed, it was clear that there were potentially fewer gaps in expertise (or access to expertise) that the vMDT could fill.

Overall, the feedback from referrers and expert vMDT panel members was positive, the concept was well-received within the NHS and with people affected by cancer. We were delighted to win two conference poster prizes in 2014, and were also shortlisted for the NHS England Innovation Accelerator scheme in 2015.
Current position

Following the overall success of the first phase of testing with the University of Dundee, and positive feedback from a stakeholder event held in 2015, Macmillan Cancer Support is proceeding to test the concept further. We have partnered with The Christie NHS Foundation Trust, who will host the system and have employed a new Macmillan vMDT Coordinator who came into post in August 2016. In order to accommodate the second phase of testing we commissioned the development of new software which will operate within the N3 secure NHS network, in place of the original Wordpress vMDT platform. We aim to receive the first referral to the vMDT in October 2016, and have over 80 healthcare professionals available to provide expertise on referrals.

All patient information is anonymised for the vMDT and the system is only available on a secure NHS N3 connection. In this phase of testing the vMDT (2016-2018), referrals will be accepted from UK healthcare professionals for UK residents who:

- were treated for cancer in childhood through to young adulthood
- have undergone a bone marrow transplant
- have been treated for a pelvic cancer by any treatment modality

The project is governed by a Project Board, with input from a Clinical Reference Group and a Reference Group for People Affected by Cancer.

The vMDT system will be tested for two years, with this phase of testing (focusing on people affected by consequences of treatment) concluding in late 2018. The vMDT Project Board will be monitoring the performance of the vMDT throughout its 2-year testing and Macmillan will conduct a thorough evaluation. Depending on the outcome of our own evaluation, we may commission a wider external evaluation of the project. We will be looking to monitor key outcomes around whether healthcare professionals can make better informed decisions about patient management, whether the needs of patients are met more quickly and holistically, and if we are able to obtain a better understanding of the needs of patients experiencing complex consequences following cancer treatment. If you would like to find out more about our evaluation plans, please email consequences@macmillan.org.uk