

# CANCER DECISION SUPPORT TOOLS

electronic Cancer Decision Support Tools  
(eCDS)

Project Summary & Update  
May 2014

## Introduction

This summary is intended to give an update on Macmillan's electronic Cancer Decision Support Tools (eCDS) project. Cancer Decision Support tools are an aid to clinical decision-making. They assist GPs in their decisions about whether or not to refer or request further diagnostic investigation, in patients where they believe there is a risk of cancer. The tools in this project display the risk of a patient having a specific type of cancer based on a range of factors including symptoms, medical history and demographic data. Following completion of the 9 month pilot, we are now moving into the wider rollout phase of this project - if you have any questions or would like more details, please contact us at [macmillan\\_primary\\_care@macmillan.org.uk](mailto:macmillan_primary_care@macmillan.org.uk)

## Executive Summary

- Macmillan Cancer Support and BMJ Informatica have worked collaboratively to promote and support GPs to use an electronic cancer decision support tool (eCDS).
- The eCDS is designed to assist GPs in the assessment and earlier diagnosis of cancer patients. It works alongside the electronic system that runs at the GPs practice. We worked closely with developers to ensure that the tool could be downloaded and used in conjunction with all current IT providers.
- The tool calculates a person's risk of 5 different types of cancer (lung, colo-rectal, pancreatic, ovarian, Oesophago-Gastric) based on the symptoms that a person presents with to their GP during consultation, as well as taking into consideration their recent medical history and some demographic information. The tool is used to support the GP in considering whether further investigations or referral would be appropriate. It is an aid to clinical decision-making.
- Working with Cancer Network leads and our Macmillan Primary Care Community, we engaged and recruited over 550 GP Practices across England, Scotland and Wales to test the eCDS over a 9 month period.
- CRUK are currently in the process of finalising the formal project evaluation with the final report and recommendations due in July 2014. Interim evaluation findings have shown that the eCDS was welcomed by the majority of participating GPs as a way of raising awareness of cancer as well as a useful tool for reinforcing clinical judgement. Of patients who were referred or intended for investigation, GPs reported that in around 20% of these cases they would have taken no action without the software.
- One of the main aims of the pilot was to test the acceptability and usability of the eCDS as a tool for GPs to support them in their clinical decision making. As such, we focussed on the functionality of the tool and how easy it was to incorporate into GP/patient consultations.
- Following the pilot, we have made some changes to the tool to make it easier to access and use, including making it available to download to all GPs across the UK. We are now in the process of communicating information about the project and details of how GPs can download the eCDS free of charge. We are also working to make the tool available via other systems providers such as EMIS, TPP SystmOne and Vision and will be update more on this later in the year.
- We believe the eCDS helps support GPs in their clinical decision making by raising awareness of cancer, and the importance of early detection in improving patient outcomes.

## Background to the project

Over 300,000 people in the UK are diagnosed with cancer every year. We know that when cancer is diagnosed at an early stage treatment is often simpler and more likely to be effective.

We also know that, on average, a GP will only see 8 or 9 new patients with cancer each year. Using our Macmillan GP community we want to help raise awareness among GPs of what symptoms to look out for in patients and support them in their clinical decision making so that appropriate referral for further investigation and specialist treatment can be sought as early as possible.

The eCDS project was designed to promote the use of cancer decision support tools in general practice. The aim was to develop and test an electronic tool that would help support GPs in referring for cancer. The eCDS built on academic work around decision support tools for cancer diagnosis in primary care, specifically, the Risk Assessment Tool (RAT), developed by Professor Willie Hamilton and QCancer developed by Professor Julia Hippisley-Cox. It formed part of the National Awareness and Early Diagnosis Initiative (NAEDI) which was established to promote earlier diagnosis of cancer and improve patient outcomes including survival rates in England.

## Engagement and recruitment of practices

Over 2000 GPs across 550 Practices were recruited to take part in the 9 month pilot. Macmillan worked actively with Cancer Network Leads and utilised our own Primary Care Community to engage and recruit GP Practices across England, Scotland and Wales.

## Training and support

To support GPs in using the eCDS, Macmillan's Early Diagnosis Team visited all participating Cancer Network areas from January – March 2013 to deliver comprehensive training on how to use the tool to network leads and GPs with a view to them further training participating GPs within their locality.

To complement these training sessions we also developed a number of training resources including video clips on both the functionality of the tool as well as some more detailed clips detailing the background research and information around the development of the RAT and QCancer risk tools; FAQs collated throughout the training sessions and a "walkthrough User Guide". All of the resources can be accessed via our website:

[www.macmillan.org.uk/earlydiagnosis](http://www.macmillan.org.uk/earlydiagnosis)

We also hosted a series of interactive national WebEx training sessions that GPs to attend for further training where requested.

## Interim Evaluation findings

CRUK have completed their interim report with a final report due in the summer of 2014. Top line messages for the interim report were positive, showing that, overall:

- *The risk calculated by the tool was different from the GP's perceived level of risk 46% of the time.*
- *A fifth of all patients for whom we have evaluation data were referred for suspected cancer; nearly a quarter (23%) were intended for investigation; no action was taken for 47%.*
- *Of patients who were referred or intended for investigation, GPs reported that in around 20% of these cases they would have taken no action without the software.*
- *The tools were welcomed by the majority of participants because they raised awareness of cancer symptoms and both reminded and alerted GPs to 'think cancer'.*
- *The tool was useful in group practices where different GPs will see the patient.*
- *There were some challenges in promoting and measuring usage of the software.*

The final report will also contain results of analyses of urgent referrals for suspected cancer, and key insights from the qualitative investigation undertaken with a selection of GPs that participated in the pilot.

## Software development

We worked with BMJ/Informatica to develop the software which works with all current GP IT systems including EMIS/EMIS Web, Vision, SystemOne/TPP and iSoft. The software is downloaded to the GP practice and runs unobtrusively in the background. Following the 2013 pilot, we collated feedback from participating GPs and Practices and have made a number of improvements to the software including; enabling a simpler, self-download installation process; improvements to the user interface - making the software itself easier to navigate; as well as developing an additional Symptom Checker for Melanoma. We have also agreed in principle that we will work with EMIS, TPP SystemOne and Vision to develop versions of the software within their platforms.

## Macmillan's vision for eCDS

We believe that this software can make a real and immediate difference and promote earlier diagnosis of cancer. We want every GP Practice in the UK to have access to eCDS, as soon as possible. From mid May 2014, GP Practices will be able to register their interest in having the software installed, free of charge within their Practice. This will either be the existing Informatica version, or versions developed in the GPs core IT software such as EMIS, SystemOne or Vision. Macmillan will be providing a series of online WebEx training sessions for GPs, Practice Managers and any other health professionals at your Practice that may be interested in using the eCDS tool. We have also updated our supporting training documents, videos and guidance to support the wider rollout.

## Call to action

We would be very grateful if you could continue to promote awareness of the eCDS tool within your locality. The tool is free of charge for all Practices and can be easily downloaded. To register interest in getting the tool installed; to sign up for training sessions or for more information on the eCDS project in general, please email us at [macmillan\\_primary\\_care@macmillan.org.uk](mailto:macmillan_primary_care@macmillan.org.uk)