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Fast track referral for suspected cancer is saving lives

Use of the urgent referral pathway (often called the two week wait system) by general practices for patients with suspected cancer is saving lives, according to a study in *The BMJ* this week.

The results suggest that use of the urgent referral pathway is effective, say the researchers, and general practices that consistently have a low propensity to use urgent referrals could consider increasing its use to improve the survival of their patients with cancer.

Early diagnosis of a disease may mean more effective treatment and better outcomes. So, where there is a possibility that symptoms could indicate cancer, people are referred urgently to see a specialist or take a test to confirm or exclude a cancer diagnosis.

The urgent referral pathway for people with suspected cancer has been available in England since the early 2000s, but its use among general practices varies considerably and its impact on cancer survival is unknown.

So a team of researchers, led by Professor Henrik Møller at King's College London, set out to assess the overall effect of the English urgent referral pathway on cancer survival.

Using national records on cancer waiting times, diagnoses and deaths, they analysed data for 215,284 cancer patients from 8,049 general practices in England who were diagnosed or first treated in 2009 and followed up to 2013.

Three measures were included: the referral ratio (each practice's use of the two week wait system compared with other practices), detection rate (percentage of cancers in a practice that were detected via the two week clinics), and conversion rate (proportion of patients who went through the two week wait system and who were then shown to have cancer).

The research team found that practices with a high referral ratio and those with a high detection rate had reduced cancer mortality, although the conversion rate showed no association.

For example, patients from high referring practices had a 4% improved mortality rate, while patients from low referring practices had a 7% worse mortality rate, compared with patients from practices with intermediate referral rates.

The researchers stress that this is an observational study so no definitive conclusions can be drawn about cause and effect. However, they estimate that an additional 2,400 patients from low referring practices might have been alive at the four year time point if use of urgent referral had been higher.

Results were consistent for the main types of cancer (except breast cancer), but the authors say that, as in any observational study, "there remains, in principle, the possibility of bias from unknown confounding variables."

These results suggest that use of the urgent referral pathway could be efficacious, they conclude. "General practices that consistently have a low propensity to use urgent referrals could consider increasing the use of this pathway to improve the survival of their patients with cancer."

In an accompanying editorial, William Hamilton, professor of primary care diagnostics at the University of Exeter, says fast track referral is one part of an improving picture of cancer diagnosis in the NHS.

Although it is tempting to conclude that increased use of the urgent referral pathway leads to lower cancer mortality, he points out that some of the reported association will be due to case mix (the type and complexity of cases being treated). However, he agrees that practices with a consistently low use of the two week system "should consider why this is so."

Møller and colleagues' study "adds further evidence to the survival and emergency admission figures, and all point in the same direction," he explains. "It is better to develop cancer in the United Kingdom now than it was 10 years ago - and improved diagnostic facilities are a part of the reason why. It may be even better in another 10 years."