

Risk Assessment Tools (RATs)

What evidence are the Risk Assessment Tools based on?

The RATs were developed using a mix of population based case-control studies and electronic cohort studies. These studies were collectively known as the 'Cancer Prediction in Exeter' (CAPER) studies, which aimed to quantify the risk of a particular type of cancer, based on a given symptom, either independently or in combination with others.

The studies benefit from having relatively large sample sizes. The main limitation is the reliance on symptoms recorded at practice level via READ codes, which may be recorded differently by different GPs.

[See more on the CAPER studies](#)

See the research underpinning each RAT:

[Bladder](#)

[Colorectal](#)

[Breast](#)

[Lung \(for smokers and non-smokers\)](#)

[Hodgkin lymphoma](#)

[Ovarian](#)

[Non-hodgkin lymphoma](#)

[Prostate](#)

[Myeloma](#)

[Brain](#)

[Kidney](#)

[Children's cancers](#)

[Oesophago-gastric](#)

[Pancreatic](#)

[Uterine](#)

How effective are RATs in practice?

An evaluation of lung and colorectal desk-based RATs published in 2013, which suggested that using RATs in a cohort of over 600 GPs from 7 former English Cancer Networks led to increased cancer investigations, urgent referrals and cancer diagnoses.

[See the study](#)

The results are encouraging but it is not possible to assess the extent to which using the RATs were responsible for the changes seen in the study. Further research could help determine its impact, but this is challenging given the rollout of different algorithms and a range of other activities within the early diagnosis sphere.

In a separate interview study with around 20 GPs most found desk-based RATs useful in supporting clinical decision making without superseding clinical judgement. However, as part of the study, practices were supported and provided with training by cancer network staff which may have impacted on acceptability of the tools.

[See the study](#)

In a similar interview study offering adequate training alongside the implementation of the tool was highlighted as a key factor for successful implementation. Although the tool was felt to increase GP awareness of cancer as a potential diagnosis, concerns about 'prompt fatigue' were also raised.

[See the study](#)