# Single Reader Hit and Miss Rates in the Breast Screening Service

**Descriptor:**

Audit to assess efficacy of double reading practice in breast screening units and to allow identification of any worrying trends.

**Background:**

Since the introduction of the NHSBSP Screening Programme in Scotland in 1990 double reading has been standard practice and this is now widespread practice throughout the UK. Although double reading without arbitration or consensus does increase the recall rate, it also has been shown to increase the cancer detection rate by approximately 10% [1-5]. It would therefore be expected that approximately 10% of all cancers picked up each year in each screening centre would be picked up by one reader and missed by the other. In view of the relatively small numbers involved, there is likely to be a year-on-year variation between single reader pickup rates and the number of cancers that each of the individual readers failed to recall. Differences in individual reader pickup rates are also likely to be affected by differences in individual reader’s recall rates. This review can however be carried out annually to ensure that there are no worrying differences in the cancer detection rates between readers or any obvious cancer type that an individual reader is not detecting.

## The Cycle

**The standard:**

Single reader cancer pickups should account for approximately 10% of the total number of cancers detected.

**Target:**

Single reader cancer pickups should account for between 5 and 15% of the total number of cancers detected. Too high or too low a rate may indicate a problem with individual cancer detection rates or that consensus / arbitration is returning too many cancers to routine recall.

## Assess local practice

**Indicators:**

Number of single reader detected cancers.

**Data items to be collected:**

• Reader details for all single reader cancers to allow both first and second reader hit and miss rates to be calculated

• Type of mammographic feature

• Individual recall rates

• Individual reading numbers

**Suggested number:**

12 months data.

**Suggestions for change if target not met:**

Results should be fed back to individual readers and it is often a useful educational exercise for all readers to review single reader cancer cases as these are often subtle mammographic abnormalities. Any worrying patterns in individual performance may require specific retraining.

[**111\_single reader audit summary form.doc**](https://www.rcr.ac.uk/sites/default/files/audit_template/cr/111_single%20reader%20audit%20summary%20form.doc)WORD - 33 KB

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**Submitted by:**

K A Duncan. Updated by E Hafez 2024.

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