**Title**

Effect of rapid on site leucocyte and differential counts on use of antimicrobial medicines: pilot study

**Author and affiliations**

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**Background**

When patients attend acutely unwell with or without a fever, general practitioners often need to decide whether the cause is more likely to be a viral or a bacterial infection. Use of antimicrobial medicines generates risks, costs, inconvenience to the patient and increases bacterial resistance. Increasing resistance of bacteria to antimicrobials is currently a major national and global topic, and the subject of campaigns aimed at the public and at the medical profession to reduce the use of antimicrobials and to make their use more appropriate.

**Aims**

To test the assumptions and processes for a proposed cluster randomised controlled trial of rapid on site leucocyte and differential count in urban general practice.

**Method**

Hemocue WBC DIFF System machines, that provide a leucocyte and differential count in five minutes, will be installed in two urban general practices. The GPs will be free to use the machines for any patients that they wish, until 100 tests have been performed in each practice. The GPs will be asked to complete an online survey about their experience, and when the surveys are completed, they will be asked to attend a focus group in their practice to discuss the survey results.

**Results**

Results will be presented at GP18.