**Safety for Patients through Quality Review" (SPQR)**

**Scientific abstract**

*Background*

Potentially avoidable deaths in hospital are a source of public concern. Retrospective case record review (RCRR) can identify potentially avoidable deaths and problems with care and is now being implemented across the NHS through the national Mortality Case Record Review Programme. However, the workload implications are such that ‘pre-screening’ is likely to be necessary to select cases for review.

The role of the Medical Examiner (ME) was created to review the recorded cause of death and ensure appropriate referral to the coroner, but has developed to address patient safety by identifying clinical governance issues. ME assessment could be used to pre-screen deaths for RCRR. First we need to determine how ME assessment compares to RCRR and whether it identifies deaths that are judged as potentially avoidable by RCRR.

*Aims in relation to the issue to be addressed*

We aim to determine how ME assessment and RCRR can best work together to identify potentially avoidable deaths due to shortcomings in care. We also aim to ensure that insights gained from the problems in care identified by ME assessment or RCRR in this study can be used to improve quality of care.

Our specific objectives are to:

1. Estimate the sensitivity and specificity of ME assessment for identifying potentially avoidable deaths compared to a reference standard of RCRR and determine whether the ‘miss rate’ is low enough to allow ME assessment to be used to pre-screen deaths for RCRR.
2. Examine discordant judgements between ME assessment and RCRR to determine how each process might be improved and could work alongside each other.
3. Identify themes in the problems in care revealed by ME assessment and RCRR.
4. Increase understanding of the ME role.
5. Explore the impact of implementing systems combining ME assessment and RCRR.

*Research plan and methods of investigation*

We will identify 2500 consecutive hospital deaths across five hospitals with established MEs. Deaths referred to the coroner before ME assessment will be excluded. ME assessment will be undertaken according to standard practice and result in coroner referral, clinical governance notification or no further action. RCRR will then be undertaken according to national programme methodology, resulting in an estimate of the probability that death was avoidable on a 1 to 6 scale and an assessment of the quality and safety of care using structured clinical judgements. Analysis will estimate the accuracy of ME assessment compared to RCRR and examine discordant judgements in detail.

Thematic analysis of potentially avoidable deaths or poor care will determine the relative strengths and weaknesses of ME assessment and RCRR, and gain insights that can be used to improve quality of care.

Qualitative interviews with MEs will explore what their assessment involves, how judgements are made and identify common themes and variations in practice.

Implementation analysis will model different scenarios for implementing ME assessment alongside RCRR to determine the resource implications of implementation.

*Research team*

SG is an experienced Chief Investigator. AF is an experienced ME who will oversee ME involvement. AH developed the RCRR method and will oversee the reference standard RCRR process. JC worked with AH on developing the RCRR method and will manage this project and undertake the qualitative study. JN is an experienced statistician who will be responsible for statistical analysis. AG is Clinical Lead for the RCP National Mortality Case Record Review Programme and will provide expert advice.

 *Potential impact/influence on the relevant policy field, users and wider stakeholders*

This study will determine how ME assessment and RCRR can work together to provide a robust and efficient way of identifying avoidable mortality and ensuring lessons are learned.