This analysis seems somewhat simplistic; BADGER was a much less ambitious study than MASCOT; it recruited 182 patients and followed them for 16 rather than 48 weeks.

The overwhelming impression created by the 'Trials and tribulations' narrative is of a group of investigators who were caught by surprise and did too little too late to remedy things. Some of the problems could not have been anticipated, although costs for IMPs and placebo should have been included in the original proposal. The original assumptions about recruitment should have been tested properly in a feasibility study. This could have assessed where the patients were treated, how best to work in a primary care setting, the relative success of different recruitment strategies and, most importantly, provide an estimate of how many patients might be recruited from different sites over a reasonable time frame. The requirement for a 'run in' period meant that only half of the potentially eligible patients would enter randomisation. A feasibility study could have assessed how necessary the run in period was to the study design. Feasibility studies have traditionally been poorly understood and unpopular. They are often regarded as a 'mini' version of the 'real' trial and difficult to publish. While the latter may be true, the former certainly is not. Feasibility studies for clinical trials are all about testing assumptions, including the importance of the research question and acceptability of trial procedures to patients and clinicians, feasibility and success of recruitment strategies, measurement of outcomes and so on.[5]

What is the role of research networks that have been established in the UK to provide an infrastructure to support high-quality clinical studies such as MASCOT? Clearly staff working on a trial and particularly chief investigators, such as Professor Lenney, need support, first to negotiate the complex regulatory framework, to identify potential study sites and local investigators, and to provide training and administrative support to establish those sites. Once the trial is open, then the major role of the network is to support recruitment. There is a lot of external evidence that MCRN is achieving this very successfully and currently over 8000 children per year are recruited to MCRN portfolio studies, which represents an almost twice doubling in numbers over two successive years. The narrative by Lenney and colleagues is, however, a reminder that despite these impressive developments in capacity for undertaking clinical research with children, much work remains to be done to avoid such trials and tribulations and to ensure that important research questions are answered, for the benefit of children.

Competing interests Professor Smyth is Director of NIHR Medicines for Children Research Network.

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Recognising the importance of national respiratory audits

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Assessment of the quality of care has come to prominence over the past two decades with the increasing realisation that healthcare delivery is an increasingly complex task, that mistakes happen and that the process can be treated as a system to which the same techniques as are used in industry can be applied.

Quality assurance and quality improvement are the twin aims of the recently revamped British Thoracic Society (BTS) audit system, which has the added benefit of providing nationwide snap shots of current practice which can feed into guideline review and patient advocacy programmes.

The web-based system currently runs eight audits—inpatient management of paediatric and adult acute asthma and community acquired pneumonia, acute non-invasive ventilation, oxygen use, pleural procedures (including pleural effusion and pneumothorax) and outpatient management of bronchiectasis. The audit points are derived from existing BTS guidelines and the system provides participating units with a summary of their own data with either current national data or other recent local results for comparison.

Each topic is overseen by a member of the relevant guideline development group, who is charged with commenting on the national results annually and using the results to inform guideline development. It is these summaries which will in future be considered for publication by *Thorax*.

Quality assurance is achieved when contributing centres take part in an audit based on key guideline-based practice points and show that their performance matches guideline recommendations. Having a summary of nationally contributed data for each indicator provides a benchmark[1] or reality check by showing practice elsewhere.

Quality improvement is achieved when contributing centres identify deficiencies in local performance and make changes to the system of care before repeating the audit at a later time point. This requires a separate activity which may not always have been undertaken in the past—the idea of 'completing the audit cycle'—a mantra from earlier days is probably pointless without this.

Future developments being considered to strengthen the quality improvement

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focus of the system include the use of care bundles and run charts,[2 3] and/or better identification of outliers using funnel plots[4] and the provision of regional reports of variability in practice.

Thorax is publishing a new audit section (***see page 548***) with the aim of highlighting both national and international audits which have been carried out to a high standard. These summaries will aim to inform the reader of both the scope of the audit and the key findings, together with a conclusion and learning points. They will highlight both areas of excellence and those in need of improvement.

One of these, is the 2009/2010 BTS pneumonia audit. Drs Lim and Woodhead led the BTS audit team, collecting data on 2741 cases of pneumonia from 64 institutions across the UK over a 2-month period. They found a high 30-day mortality rate of 18%. There was often poor adherence to local community-acquired pneumonia guidelines and less than 60% of patients received their first antibiotic within 4 h of admission. These sort of data are invaluable both locally and nationally when planning ways to improve treatment delivery.

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