The impact of introducing a Medical Examiner Service\(^1\) on the rate of Coronial inquests

This paper represents my attempt to summarise and analyse the information currently available on the likely impact on coroners of introducing the death certification reforms in the Coroners and Justice Act 2009. It is based heavily on experience in the two large pilot sites, in Sheffield and Gloucester, which have now jointly scrutinised over 24,000 deaths. Information from the other pilot sites has not been considered because (as was indicated by the Office for National Statistics) the number of deaths scrutinised at each of those sites is too small to permit meaningful analysis. However, I am aware that my information is incomplete and much of it is not up to date. Most of the figures supplied to me end at 2011, when the pilots had been in existence for only 3 years.

If you have any further information which you think is of relevance to this analysis, I would be very pleased to receive it.

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From the outset, the aims of the death certification reforms in the 2009 Act included improvement of case referral to coroners. This was not merely more reliable referral of possible murders such as those committed by Harold Shipman, but also the many deaths which we knew were currently being inappropriately certified as being due to natural causes by doctors who are poorly trained in how to complete a medical certificate of the cause of death (MCCD). It was also hoped that scrutiny by Medical Examiners would reduce unnecessary referrals to the coroner (and hence avoid unnecessary and unwelcome post mortem examinations).

The opinion of medical examiners in the main pilot sites is that both these aims have been achieved. However, the consequent changes in coronial workload have proved difficult to quantify with accuracy. It must be remembered that the jurisdiction of coroners does not precisely match the areas in which the pilot sites operated; both have changed over time. It is not even simple to count the number of inquests; should we count inquests opened or inquests closed? How can we take account of the very different workload imposed by different cases? Even if an inquest is opened, some are concluded as a ‘paper’ investigation with no hearing, sometimes merely to provide justification for tissue retention for laboratory investigation in cases which prove to be death due to natural causes. At the other extreme, some inquests require a jury and may take many days.

\(^1\) As set out in the Coroners and Justice Act 2009, but not yet implemented other than in pilot sites
The pilots have also seen a small overall fall in the number of deaths referred to the coroner, as was hoped. Full implementation of the reforms might reasonably be expected to result in a larger fall. However, I have concentrated on increased workload due to inquests, rather than on decreased workload due to avoidable referrals to the coroner, because coroners with some justification point out that the referrals avoided by a medical examiner system are, by definition, deaths due to natural causes. This will result in fewer coroner’s post mortem examinations, but such cases take considerably less of the coroner’s time than those that require an inquest.

The main source of information currently available to me is a study undertaken by the Office for National Statistics in 2012, which addressed only deaths in NHS hospitals. This showed that the number of inquests being held across England and Wales was showing a gradual small increase with time, despite a small decrease in the number of deaths in hospital per year and a larger decrease in the number of coroner’s post mortems:

![England & Wales - deaths in hospital graph](image)

Data from the Ministry of Justice relating to all deaths, not just hospital deaths, indicate that over the last ten years the percentage of inquest cases has been relatively stable. Inquest cases represented 13% of all the deaths reported to coroners in 2013, a small decrease. The figures presented graphically above demonstrate that death in hospital is considerably less likely to be followed by an inquest (at just over 5%) than is death in the community.

The ONS figures from Gloucestershire Royal and Cheltenham General hospitals also showed a gradual increase in the number of inquests over time:
It might be argued that this graph shows a small acceleration of the number of inquests after the pilot was introduced there in 2008, but if so this is clearly on the background on an underlying upward trend, which was growing slightly faster than the national figures even before 2008.

More recent information supplied by the Senior Coroner in Gloucestershire, Ms Katy Skerrett, indicates a decline in the number of inquests, notably in 2014:

This decline is regarded by the Senior Coroner as being attributable to changes in local circumstances, notably personnel, rather than being related to the medical examiner pilot.
A comparable analysis for the two main hospitals in Sheffield (excluding deaths in primary care) showed no definite change in the number of inquests per year. Note that the medical examiner pilot started in these hospitals in 2008.

However, the number of deaths in these hospitals showed a large fall in 2011. This is presumably due to more people dying at home, as there were no known corresponding changes in population, but I have no data to prove that.

As a result of the sudden fall in the number of deaths in hospital, the percentage of hospital deaths that are followed by an inquest increased in Sheffield in 2011 from 4.8% in 2007 to 6.3% But this percentage increase might represent no increase at all if uncomplicated, anticipated deaths with no relevance to the coroner were increasingly being transferred from hospital to primary care just prior to death.

Both pilots included some deaths in primary care, but the pilot in Sheffield started predominantly in secondary care and coverage of primary care only increased significantly in 2011/12.

Figures from Sheffield are also available from an analysis undertaken in 2012 for the whole of the South Yorkshire (West) coroner’s jurisdiction (excluding Barnsley):

<table>
<thead>
<tr>
<th>Year</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inquests opened</td>
<td>255</td>
<td>278</td>
<td>274</td>
<td>254</td>
<td>283</td>
<td>270</td>
<td>269</td>
<td>282</td>
<td>328</td>
<td>439</td>
</tr>
<tr>
<td>% of reported deaths</td>
<td>9.9%</td>
<td>11.2%</td>
<td>11.5%</td>
<td>11.0%</td>
<td>11.4%</td>
<td>11.5%</td>
<td>12.6%</td>
<td>13.8%</td>
<td>15.1%</td>
<td>21.2%</td>
</tr>
<tr>
<td>% of registered deaths</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>4.3%</td>
<td>5.3%</td>
<td>4.9%</td>
<td>4.9%</td>
<td>5.5%</td>
<td>5.8%</td>
<td>8.7%</td>
</tr>
</tbody>
</table>

Note that this table indicates inquests opened, whereas the ONS data relate to inquests closed. The numbers are larger because this survey relates to all deaths in the area, not just deaths in the two main hospitals (hence including the GP practices not involved in the medical examiner system).
This broader survey from Sheffield shows that in 2011 there was a sudden increase in the total number of inquests as well as an increase in the percentage of registered deaths subjected to inquest. I am advised informally that this increase has been sustained in subsequent years, but I do not have confirmatory figures. However, it is notable that the percentage of deaths subjected to inquest in Sheffield in 2011 was 8.7%, whereas the percentage of deaths in the two main hospitals that were subjected to inquests was 6.3%. This might be interpreted as suggesting that if in 2011 the number of deaths in secondary care fell because of transfers to primary care during the final illness, then those deaths were ones that would not be of interest to the coroner. But the number in that category is comparatively small, so such a conclusion would be unjustified. **There is better justification for arguing that in Sheffield the large increase in the number of inquests in 2011 related mainly to deaths occurring in primary care**, despite the medical examiner pilot being focussed on secondary care. Indeed, the fact that the ONS data shows no increase in the number of inquests following death in secondary care indicates that most of the observed increase in inquest in Sheffield must relate to deaths in primary care.

Furthermore, the Sheffield analysis from 2012 includes the following explanatory text:

**Whilst this table clearly shows that there has been a significant increase in the number of inquests opened in 2010 and more particularly 2011, it has never been suggested that this increase is wholly due to the ME pilot. Other causes will include:**

- **a significant change in coroners officer staff in late 2010 [meaning cases that might previously have been 'steered away' from an inquest by an officer no longer are]**
- **a change in practice on neutropaenic sepsis cases which are now more commonly held as an inquest**
- **a gradual change in pathology practice meaning that more deaths are regarded as ‘pending histology/toxicology’ etc after an autopsy requiring an inquest to be opened, the eventual verdict most likely being ‘natural causes’**.

These are three very plausible reasons for an increase in the inquest rate that are unrelated to the medical examiner pilot.

The Sheffield paper also attempts to analyse the impact of medical examiners on a case-by case-basis:
The existence of the category ‘unclear if would have been reported’ emphasises the problem of making subjective decisions about what might have happened in the absence of a medical examiner.

The increase in ‘would not have been reported’ deaths from 10 in 2010 to 40 in 2011 cannot be fully explained by the increase in the number of deaths being scrutinised, which approximately doubles between 2008 and 2011.

The Sheffield analysis makes the following comment on the basis of the figures in the table above:

*If we take the figures for 2010/11 we see a total of 175 cases that would have been reported and 50 cases that are known would not have been reported, a total of 225 deaths, thus 22% would not have been reported.*

If this is the source of the widely-quoted figure of ‘an increase in inquests of 20-25%’, then the variation and uncertainty which is self-evident when the actual numbers are examined needs to be understood. If we add to this point the uncertainties discussed above it is clear that we do not actually have an accurate assessment of the impact, even in Sheffield. Furthermore, the lead Medical Examiner in Sheffield has pointed out that a proportion of his additional referrals to the coroner relate to potential industrial lung disease in coal workers or foundry workers, where the certifying doctor had merely identified their occupation as ‘Retired’. For this reason Sheffield may not be representative of the rest of the country.

The Sheffield analysis also attempts to identify the amount of work involved in the ‘additional’ referrals, as follows:

*Complexity ratings were assigned, on the basis of the listed court hearing, as follows:*

1 = Simple case, heard on the papers alone [averaged at 20 mins]
2 = Simple industrial disease case [averaged at 30 minutes]
3 = Case listed for less than 90 minutes [averaged at 75 mins]
4 = Case listed for more than 90 minutes with a number of witnesses [averaged at 2 hours]
5 = Listed for half-day [averaged at 3 hours]
6 = listed for full day [averaged at 5 hours]
This suggests that the majority of the additional inquests are towards the ‘simpler’ end of the spectrum of inquest cases. However, it is important to recognise that this analysis includes all the deaths where it was ‘unclear’ whether an inquest would have been held in the absence of a medical examiner system. It is therefore likely to overstate the increase in workload.

**Provisional conclusions**

My conclusions are ‘provisional’ because, as I explained at the outset, my information is incomplete and out of date. I would welcome the opportunity to do a better analysis.

However, I have so far been unable to identify a reliable figure for the amount by which inquests are increased by the presence of scrutiny by medical examiners. It does seem likely that there is an increase, and this is certainly the opinion of all those who have been involved in the pilots, both coroners and medical examiners. But the size of that increase remains uncertain. On the basis of the figures and arguments above I believe that the figure of 25%, which has sometimes been quoted, is a considerable over-estimate. I am led to suggest that further monitoring and data collection are justified, and I understand that such a post-implementation review has been agreed; but even so, the uncertainties and confounding factors discussed above will make it impossible to come to a reliable figure.

If there are circumstances which make it essential to estimate the likely increase in inquests in England and Wales attributable to the introduction of death certification reform, I suggest 5% would be a generous working figure. But it must be recognised that this is a crude ‘guesstimate’ and further refinement is needed.

However, it seems clear that any change in the number of inquests attributable to medical examiners is relatively small compared to changes from other causes, such as changes in local staff and local practices, which differ considerably between different coronial jurisdictions. Recently we have seen a new reason for a
comparatively large increase in the number of inquests being opened, as the Chief Coroner has instructed that anyone dying while subject to a Deprivation of Liberty Safeguarding order must be investigated by inquest.

It should also be remembered that any additional inquests resulting from the work of medical examiners are ones which are required by our current system of law, based on its interpretation by our coroners.

If the total number of inquests is regarded as excessive, the proper remedy is to change the law or re-train our coroners, not to omit a proportion of inquests. Such omissions allowed Harold Shipman to go undetected for far too long.

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