Report to: Housing and Neighbourhoods Overview and Scrutiny Committee

Date: 21st November 2019

Subject: Computed Tomography Post Mortems (CTPM)

Purpose of Report

This report is to advise on progress made in respect of the provision of Computed Tomography Post Mortems (CTPM, also known as Digital Autopsies) for Birmingham and Solihull residents.

Progress and Issues since Last Report to O&S

This item was last considered by O&S Committee in March 2019. Since that time there has been a successful negotiation with iGene London Ltd resulting in a trial of CTPM for Birmingham and Solihull which commenced in July 2019 and will continue as a pilot approach until July 2020.

The trial is for a minimum of 250 post mortems annually to be conducted via a Computed Tomography Post Mortem (CTPM). In respect of the trial the cost for each CTPM carried is reduced from £500 plus vat and transport costs, to £238 inclusive of transport.

The scanner is located in Sandwell and owned by iGene. It provides the Coroner with access to a non-invasive scanner that will assist with autopsies in such instances of cases involving trauma.

Louise Hunt, the Senior Coroner for Birmingham and Solihull said,

"It's fantastic that we will be able to trial the use of the CTPM here in Birmingham. Research has shown that where a death has been traumatic, CTPM is the most effective method for helping us to establish a cause of death. We hope to see some positive results from the trial which will lead to further discussions to extend the project."

Since this item was last considered by Scrutiny Committee various other matters have materialised to help inform planning in respect of the potential ongoing use of CTPM. These matters are set out as follows:

Condition Report on the Mortuary and Coroner's Court

Long term decisions about the provision of digital autopsies must have regard to the future of the mortuary and coroners court buildings situated in Newton Street which are both in poor condition.

Maintenance requirements and costs to repairs in respect of the existing Court buildings have been increasing year on year, and in the previous report to Scrutiny, details were outlined of the significant investment required if the Council is to retain the current

property. A condition report which identified the level of repairs and maintenance needed estimated that this would total £868,000 (worst case scenario) over the next 3 years.

The building is in need of remodelling and extensive refurbishment; however given the increased workload and requirements for jury inquests the facility does not meet modern day or service needs.

The current court facility comprises only one court able to hold jury inquests. A second court was provided by Solihull Council twice weekly, and charged at a rate to Birmingham of £165 per day. This facility has now been withdrawn by Solihull Council, resulting in the need for hiring extra court facilities.

A temporary Court facility is being prepared to provide Court facilities from December 2019 at the Council House extension in Margaret Street, whilst a permanent solution is sought.

As an interim measure the Coroner has used Maple House in Birmingham at a cost £1,000 per day; a proportion of these costs can be reclaimed from another Local authority where the proceedings relate to other local authority areas

Currently works are only being undertaken to make the building watertight and to meet statutory requirements of regulators.

Inspection by the Human Tissue Authority (HTA)

The HTA grants the City Council the licence to run a public mortuary. The inspection which was conducted by the HTA in January 2019 required the Council to address a number of building related concerns, such as the floor to the Mortuary which did not form part of the condition report, and other health and safety matters. The work has been successfully completed at a cost of around £50,000 in order to retain the licence. The temporary ventilation system in use in the mortuary has been accepted by the HTA, but only until such time that the Council decides to either relocate the services to a new purpose built building or to invest and remain in the current building.

Future Mortuary and Court facilities for Birmingham and Solihull

The above factors have resulted in considerations that it would be better to invest in a new purpose built mortuary and coroners court rather than continue to prop up a very old building that is rapidly deteriorating and, much of which is not fit for purpose.

When this matter was last brought to the attention of O&S in March 2019 it was advised that officers had started discussions with neighbouring Black Country local authorities about shared mortuary facilities. The Black Country Authorities (Sandwell, Dudley, Wolverhampton and Walsall) form between them, the geographical jurisdiction of the Black Country Coroner. The Black Country authorities do not have a public mortuary (apart from Wolverhampton) and rely instead on hospitals for the storage of bodies and for the conduct of post mortems.

Birmingham has since joined with the Black Country local authorities to commission a feasibility study which commenced in August 2019. The outcomes from the study are due for publication in December 2019 and are expected to scope the possibilities around creating a shared Centre of Excellence for Mortuary and Pathology Services for the West Midlands authorities; this is a stated aim of the Portfolio Holder, and the principle has been endorsed by West Midlands Metropolitan Council Leaders.

In conjunction with this, a Modernisation proposal has been put forward which requires the provision of a suitable new building. This proposal will enable provision of a facility which meets the requirements of the judicial function of the Coronial Service, without the continued need for hire of external court facilities. The building will be central and accessible to the public.

Providing the Coroners Court and Mortuary in separate buildings opens up the opportunity to provide a centre of excellence with a shared service providing mortuary and pathology services. Purchase of the Youth Court facility will decrease ongoing maintenance costs in the existing coroners' court building.

Providing a compliant Mortuary Provision- the existing mortuary is housed in the Coroners Court complex. However its design, condition and ventilation requirements give cause for concern. To install a permanent ventilation system in the pathology room of the Mortuary section of the building would require an investment of the order of £1 million. Currently the contract for this temporary solution has to be renewed with the company every six months. A new building will meet the requirements of the Human Tissue Authority and provide a Shared Service facility for Mortuary and pathology services which will enable the costs of the provision of a new building to be shared as well as the revenue costs of running the service. This would potentially reduce the financial burden on the City Council and provide the opportunity for better services and the potential for selling services to other agencies.

Digital Autopsy Trial

The trial with iGene brings Birmingham City Council into line with all bar one of the Black Country Authorities, being Sandwell, Wolverhampton and Dudley. These authorities utilise CTPM at Sandwell Valley Crematorium as their first line of intervention (i.e. all bodies are automatically scanned). The cost is funded by each Local Authority, but again, with the provision that where a scan does not determine cause of death, the authority will not have to pay.

Birmingham has negotiated the same deal of £238 for the trial of a minimum of 250 cases, which equates to a cost for the pilot of £59,000 if it pays for every case. However, the Council will only pay for the scan when the CTPM has successfully determined the cause of death. Igene provided evidence that the scan is able to determine cause of death in over 70% of cases, in approximately 25% of CTPM cases, the cause of death is not determined. As such the estimated cost to the Council may drop to £44,600 p.a.

1768 post mortems were authorised by Birmingham and Solihull Coroners in 2018.

For the purposes of this particular trial, it is not possible for Coroners to authorise CTPM for all cases at this stage, however consideration is given for cases where the death was traumatic. The reason for choosing these cases is that research has shown they are the most suitable for CTPM.

The Senior Coroner has stated that 'We hope after the trial to have positive results which will lead to further discussion with BCC to extend the project'.

Families that want a CTPM for cases not in the trial can still request them and the coroner will consider each request. However in these cases the family will have to be responsible for the costs at the rate BCC have agreed for the trial with Igene.

This facility was publicised in a press release in July 2019 and information can also be found on the Council website.

Initial results from the trial have shown that:-

- During the first quarter of the trial to the end of October 2019, the cause of death has been established in 47 of 91 cases at a cost of £11, 186
- CTPM has taken place at a family's request in 5 cases and 2 cases have been scanned following road traffic accidents at the request of West Midlands Police
- CTPM's can often take longer than standard post mortems meaning a small delay in releasing the deceased
- The process requires the body to come into the mortuary at Birmingham, then be transported to Sandwell for the scan
- The scans are only reported on in the evening after the scan has been taken so
 results are not available until the following day; the pathologist then examines the
 body and reviews the circumstances and CTPM report to determine if a suitable
 cause of death can be given. If there is no suitable cause of death the pathologist will
 proceed to an invasive examination.

Interim Review of CTPM Trial

The results from the interim review show that there have been issues with the availability of the scanner and the speed with which the Coroner receives the scan reports from the radiologists.

Currently there is no system in place for the pathologist to speak to the radiologist which would improve the possibilities of getting a suitable cause of death. The Coroner has asked igene to introduce a system of communication with on- call radiologists. It has also been

agreed following a meeting with Igene on 4^{th} November that they will try to provide the scans and reports within a better time frame.

A further review of the pilot and associated issues will be conducted in January 2020 and a report to O&S can be presented after that if required.