

WEDNESDAY, 15 DECEMBER 2021

## **Surrey Public Mortuary – partnership between Surrey County Council, the Surrey Coroner, Surrey NHS hospital trusts and the University of Surrey**

Purpose of report: This paper seeks to update and consult CEHSC on the work to develop the business case for a public mortuary including alternative options. A paper is scheduled to be taken to SCC Cabinet in February 2022 which will include detailed costs. Work is currently underway with specialist cost consultants, the four NHS hospital trusts and the University of Surrey regarding options and funding arrangements.

### **Introduction**

1. Surrey County Council (SCC) has a statutory responsibility to provide the support required by Surrey's Coroner to fulfil their function. This includes administrative and investigative support and all necessary infrastructure, including court buildings. It also includes the storage for the deceased under Coronial jurisdiction, and any post-mortem examinations and laboratory diagnostic work required in ascertaining the cause of death. These hospital-based functions are discharged by way of Service Level Agreements with the hospital trusts.
2. There is insufficient body storage capacity within the existing Surrey hospital mortuaries during the winter months. The staffing and mortuary infrastructure within the hospitals to support post-mortems is not resilient. In addition, there is a lack of pathologists to conduct the post-mortems with little chance of this improving in the future. Historically these factors have led to unacceptable delays with post-mortems and the bereaved waiting excessive periods to bury or cremate their loved ones. The situation has deteriorated over the last 3 years with significant problems experienced in the winter months immediately prior to the start of COVID pandemic. The Human Tissue Authority (HTA) have raised their concern about this situation and the reliance on temporary body storage arrangements within some hospitals. There are limited opportunities at most of the hospitals to increase body storage capacity and the number of post-mortems.
3. The risks associated with this situation came into acute focus during both waves of the COVID pandemic when nearly all Surrey hospital mortuaries quickly became overwhelmed.

4. SCC, the Coroner and the four chief executives of the Surrey NHS hospitals have agreed that a long-term sustainable solution is required. They have supported a proposal for a public mortuary. A partnership has been formed with the NHS hospital trusts to develop a full business case which includes an on-site digital post-mortem facility. SCC are working closely with the Berkshire and Surrey Pathology Service (BSPS), who are responsible for the provision of mortuary services, and the Royal Surrey Foundation Trust (RSFT) Radiology team, who are responsible for CT scanning, on the design and costings of the options.
5. The University of Surrey is seeking to become an independent medical teaching school. They are working with the RSFT and the other Surrey hospital trusts on this application. Their aspiration is to become a public medical school. They have assessed that their current anatomy provision is a gap which needs to be addressed. The public mortuary proposal is a way for them to address this gap. The University also wishes to develop its research capabilities in digital imaging and digital pathology. A purpose-built public mortuary with digital imaging provision provides the opportunity for a 'centre of excellence' in the area of learning, research, technology, and innovation.
6. The University has identified land on their Manor Park campus for a facility and SCC are in the process of assessing its suitability. Architects commissioned by SCC have incorporated teaching and research facilities requested by the University into the design. Specialist consultants are assessing the costs. Discussions are ongoing between SCC and the University regarding funding and the potential for a partnership.
7. The establishment of an interim body storage facility at Bagshot will relieve certain pressures on the system in the medium term (3-5 years). This also provides the breathing space for more detailed planning of the public mortuary, especially allowing the opportunity to explore the potential for digital autopsies.
8. The initial capital allocation for this project was made in 2018 for £10.6m. The context and business need have now changed, based on seasonal pressures and the COVID pandemic. A better assessment of business need has now been completed which increases the amount of body storage required and includes the provision of digital imaging. SCC Land & Property have recommended £16.1m (pipeline) is allocated within the MTFs Capital Budget Refresh for Cabinet Approval January 2022. This project is likely to take up to 5 years to complete.

## **Statutory responsibilities**

### **Coroner's Service**

9. SCC have the responsibility to support the Coroner. This support falls into four main areas:

- i. Staffing and back-office functions for the administration and investigation of cases referred to the Coroner, and any resulting inquests. This includes the provision of appropriate premises e.g. court.

In relation to the deceased under the jurisdiction of the Coroner this includes:

- ii. Transport of deceased to a body storage location and place of examination.
- iii. Storage of the deceased at an approved location.
- iv. Examination of the deceased and samples taken from the deceased.

In relation to 2, 3 and 4 above, SCC use contracts or Service Level Agreements to ensure the provision of services.

### **Disaster response**

10. In addition to the above, SCC has a responsibility through the Surrey Local Resilience Forum to work with the Coroner and Surrey Police in relation to responding to a major incident which involves mass fatalities and 'disaster victim identification'. Examples of such incidents are airplane or train disasters.
11. SCC has the responsibility to fund any temporary mortuary required as part of the response together with supporting services and staff. Like many other areas SCC has a contract with a specialist provider for these services.

<b>The case for service improvement and investment</b>
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### **Background**

12. Hospital mortuaries in Surrey are used to store patients who die in hospital and the deceased from a community setting e.g. residential house or care home, where a Coroner's referral has been made. In relation to deaths in the community which are subject to a Coroner's referral, the deceased are taken from their place of death to a designated hospital mortuary. SCC contracted funeral directors carry out this task. Post-mortem procedures conducted on behalf of the Surrey Coroner are carried out at three designated hospitals (Royal Surrey hospital, St Peters hospital and East Surrey hospital). Post-mortems should be conducted in a timely manner, normally within a week of the death.

### **Historic winter pressures**

13. Prior to 2020 and the COVID-19 pandemic, Surrey experienced significant pressures in hospital mortuaries during the winter months when the death rates are higher. The hospital mortuary facilities are old and key equipment like the fridges and ventilation units are subject to frequent breakdown. This places additional stress on the system. In three of the five years prior to 2020 SCC, the Coroner and the NHS hospital trusts had to invoke emergency excess death procedures to address the problem. This involved increasing temporary body storage within the hospitals and at funeral directors. The capacity pressure led

to delays in post-mortems being carried out. Both the Coroner's Service and hospitals received complaints from the bereaved who were waiting excessive periods to bury or cremate their loved ones.

14. There is insufficient body storage capacity within the existing hospital mortuaries during the winter months. The existing mortuary facilities are not resilient with frequent closures when essential equipment breaks down. Other county's do not experience this problem due to having greater capacity and better facilities. The HTA have raised concerns about the continued use of temporary storage in Surrey. The configuration of hospital estates means there is limited opportunity to build or expand on existing mortuary facilities. The continued use of funeral directors to store the deceased prior to post-mortems is no longer an option. Guidance from the HTA has meant that deceased awaiting a post-mortem need to be stored in HTA licensed facilities i.e. hospital mortuaries.

### **COVID-19 pandemic**

15. In late March 2020 when deaths associated with COVID-19 started to increase, Surrey hospitals had already reached a critical point. There was no capacity within the hospital mortuaries and there was a significant backlog in post-mortems. Some deceased were waiting up to 6 weeks for a post-mortem. This impacts on the ability of the post-mortem to establish the cause of death. It also has an impact on the requirement to treat the deceased with dignity and respect, and the bereaved with care and compassion. Delays in the release of a deceased can lead to increased complaints to hospitals and the Coroner, and distress to the bereaved.

### **Pathologists**

16. The lack of histopathologists willing to conduct post-mortems is a national issue. The profession currently has a high vacancy rate (>20% nationally) and their initial training no longer includes post-mortems. They are in high demand and for a number of reasons, including financial, pathologists prefer to carry out other work. It is unlikely this situation will improve in the future and availability is likely to get worse. The lack of availability of pathologists has contributed to delays in examinations being conducted and is an ongoing risk.

### **Experience for the bereaved**

17. The current experience for the bereaved is variable. When the system is under pressure, for example during winter months, some hospitals close their viewing rooms so that temporary body storage units can be erected. There are limited facilities for ritual washing. Any new facility can have well designed reception and waiting areas for the bereaved, with purpose-built viewing rooms with ritual washing facilities.

## **Forensic and high-risk examinations**

18. Certain post-mortems are conducted by Home Office registered forensic pathologists. These are normally where there is a police-led criminal investigation. Presently, a hospital mortuary will be closed to ordinary post-mortems to allow for these examinations to take place. In addition, where a deceased has been classified as high-risk e.g. infectious disease, certain measures need to be taken involving limiting other procedures. These cases can have an impact on the timely commission of other post-mortems. Any new facility can have a separate post-mortem room for forensic and high-risk cases ensuring other procedures can continue in a timely manner.

## **Digital imaging and partnerships**

### **SCC commissioned review 2020**

19. Between waves 1 and 2 of the pandemic, SCC commissioned a review of arrangements. This recommended SCC, the Coroner and Surrey NHS Hospital Trusts work collaboratively to address the identified risks and identify a long-term solution.
20. In November 2020 the chief executives of the hospital trusts and SCC met and supported the development of a business case for a public mortuary. The Coroner also supported the proposal having been a long-term advocate of the creation of such a facility. It was agreed that the case for investment was strong. It was also agreed that the business case should include the provision of an on-site digital post-mortem facility.
21. The review found that the management of a public mortuary would require clinical input. SCC does not possess the necessary capabilities nor experience to operate this service. Representatives from SCC and the NHS Berkshire & Surrey Pathology Service (BSPS) were tasked to work together to develop the business case.

### **Digital imaging – non-invasive post-mortems**

22. There is widespread senior level support from the hospital trusts and SCC for the use of imaging. It is recognised that in the future most causes of death will be determined using imaging supplemented by invasive post-mortems when required. Currently digital imaging is not widely used in the UK for Coroner's cases. However, the evidence base supporting its use is strong. Research currently indicates that between 75% and 90% of all cases would not require an invasive post-mortem with the cause of death being established via digital autopsy. The decision on whether to use CT scanning sits with the Surrey Coroner. He is supportive of the use of this means of establishing the cause of death with appropriately skilled and experienced staff.

23. There are obvious benefits for the bereaved, many of whom find the need for an invasive post-mortem on a loved-one only adds to the distress they are experiencing at a difficult time. In addition, the use of digital imaging has the support of a number of faiths who have called for the use of digital autopsy to be introduced.
24. Although there are potential savings with the number of invasive post-mortems being significantly reduced, any digital autopsy will involve, upfront, new costs associated with the radiographer, radiologist and cost of the CT scanner and its operation.
25. Current CT scanning facilities at hospitals are rarely used for the deceased. The demand for this diagnostic method on live patients is high and increasing. Often the CT scanner is located away from the mortuary meaning the movement of the deceased through the hospital is difficult. The current estate configuration at the Surrey hospitals means building such facilities is not feasible. In addition, the number of cases at any one hospital would not warrant such an investment.

### **Surrey NHS hospital trusts**

26. SCC have been working closely with BSPS which represents the Surrey hospital trusts for its pathology services. The BSPS Board, which comprises of the hospital chief executives, are supportive of the proposal although have limited capital to invest. BSPS are currently assessing the staffing model required and associated revenue costs. A new Surrey facility is likely to relieve the pressures on certain hospitals to make capital investment in building additional body storage. A different NHS staffing mix is likely to be required at any new facility which includes the provision for CT post-mortems. The hospital trusts are aware of the revenue pressures on SCC and discussions are taking place about how they can help ease these with their fee structure.
27. SCC are working with NHS colleagues from the Radiology team at the Royal Surrey hospital to develop a proposal for a CT post-mortem service to be provided. The Trust is keen to support this development. There are also a small number of non-NHS providers of CT post-mortems. SCC are engaged with these providers to scope what they have to offer this project and the costs of any out-sourced provision.

### **University of Surrey**

28. SCC have been engaged with senior staff from the Faculty of Health & Medical Sciences at the University of Surrey regarding the opportunities presented by a public mortuary. The University is working on an application to become a medical teaching school. They have assessed that the current anatomy provision is a gap which needs to be addressed.

29. The University also wishes to develop its research capabilities in digital imaging. A purpose-built public mortuary with digital imaging provision provides the opportunity for a 'centre of excellence' in the area of learning, research, technology, and innovation. This aligns to the University's strategic objectives.
30. The University has identified land on their Manor Park campus for a facility and SCC are in the process of assessing its suitability. Architects commissioned by SCC have incorporated teaching and research facilities requested by the University into the design. Specialist consultants are assessing the costs. Senior level discussions are ongoing between SCC and the University regarding funding and the potential for a partnership.
31. A partnership with the University opens up the potential for grant funding from sources not normally available to public sector organisations. An assessment is being carried out regarding such funding applications.

### **Disaster response**

32. The options being developed will ensure sufficient body storage contingency to deal with a mass fatality disaster response or the early stages of a pandemic. It will also enable additional storage and other services to be added temporarily to the facility. The design of the options will reduce the need for the procurement of some of the additional services required in a disaster response.

### **Interim body storage facility**

33. In order to ensure sufficient body storage capacity over the next 5 years, SCC is building an interim body storage facility at the SCC Highways depot in Bagshot. Planning approval has been obtained and construction work is due to commence with an expected completion date of early 2022. This facility provides the opportunity to progress the detailed business case for the public mortuary.

<b>Options assessment</b>
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#### **34. OPTION 1 – Do Nothing**

##### PROS

- None

##### CONS

- Statutory responsibilities: fails to meet the statutory responsibilities regarding storage of deceased and timely post-mortems
- Inadequate body storage capacity and resilience to cope with winter pressures and the initial effects of a pandemic or disaster (hospitals mortuaries become overwhelmed)
- Unacceptable delays in post-mortems resulting in bereaved waiting excessive periods to bury or cremate loved ones.

35. **OPTION 2 – Increase hospital mortuary body storage capacity and SCC provided excess death body storage facility (no post-mortem or digital autopsy provision)**

This is the Bagshot model which uses the body storage facility at time of excess deaths i.e. seasonal pressures or pandemic, when the hospital mortuary provision becomes overwhelmed. The Bagshot facility has planning permission until July 2026. SCC could seek to extend the planning permission or identify alternative suitable land and build a permanent facility.

PROS

- Statutory responsibilities: provides increased capacity and resilience to deal with the storage of excess deaths

CONS

- Statutory responsibilities: fails to meet the statutory responsibility for timely post-mortems
- Relies on present hospital post-mortem capacity which is not resilient across the three existing sites.
- Limited options within hospitals for expansion of existing mortuary body storage due to estate. HTA critical of reliance on recurring use of temporary storage.
- Does not provide a viable digital autopsy capability due to location of CT scanners on hospital estates and existing use.
- No dedicated provision for forensic/high-risk post-mortems
- Increases revenue costs associated with staffing SCC body storage facility on an ad hoc basis (only stood up when required)
- University of Surrey will not be involved in this option
- Likely to require identification and acquisition of suitable land and associated planning permission

36. **OPTION 3 – SCC body storage capacity with digital autopsy provision (hospitals continue to provide post-mortem capability)**

This provides a body storage facility for all Coronial deceased and operates all year. In addition, it provides digital autopsy facility which reduces the number of invasive post-mortem required. Although these could be two separate facilities, there are advantages with them being combined. There are different operating models, but this option assumes all Coronial community deaths are taken initially to a hospital mortuary and then together with Coronial hospital deaths transferred to the facility. The deceased need to be prepared for the CT scan which involves a clinical procedure. The alternative would be for the facility to have a clinical preparation room with qualified staff. Any invasive post-mortem would need to be carried out at a hospital.



## PROS

- Statutory responsibilities: provides increased body storage capacity and is likely to improve timely post-mortems
- Ensures a sustainable solution to body storage for winter pressures and in response to a pandemic and disaster.
- Provides a bespoke digital autopsy capability for the deceased
- Improved experience for the bereaved
- Reduces capital investment required as option does not require post-mortem facilities which are costly

## CONS

- Statutory responsibilities: does not provide a robust service for timely post-mortems
- Relies on present hospital post-mortem capacity which is not resilient across the three existing sites. May require capital investment depending on model chosen e.g. one hospital or more conducting post-mortems
- No dedicated provision for forensic/high-risk post-mortems
- Increases revenue costs as NHS accredited staff will be required at body storage facility and hospital mortuaries
- Increases movement of deceased and associated costs
- Increases times for post-mortem and incurs delays in release of deceased
- Not supported by Coroner or NHS hospital trusts as their preferred long-term solution
- University of Surrey will not be involved in this option
- Likely to require identification and acquisition of suitable land and associated planning permission

### 37. **OPTION 4 – Public mortuary with digital autopsy provision**

#### PROS

- Statutory responsibilities: provides increased body storage capacity and a robust service for timely post-mortems and capability to use digital autopsy
- Ensures a sustainable solution for body storage both for winter pressures and following a pandemic or disaster.
- Ensures timely commission of post-mortems
- Provides a bespoke digital autopsy capability for the deceased
- Improved experience for the bereaved
- Bespoke provision for forensic and high-risk post-mortems
- Supported by the Coroner and NHS hospital trusts as long-term solution
- Secures University involvement and aspiration to become 'centre of excellence' in the area of learning, research, technology, and innovation.

- Use of University land which is close to RSCH
- Addresses a gap in anatomy provision for University and RSCH application to become a teaching/medical school

CONS

- Significant financial commitment

**38. Summary of options appraisal**

<b>Statutory responsibilities/risk mitigation</b>				
	Do nothing	Body storage	Body storage & digital imaging	Public mortuary with digital imaging
Storage (excess deaths)				
Timely post-mortems (hospital mortuary services)				
Timely post-mortems (pathologist availability)				

<b>Other factors/value added</b>				
	Do nothing	Body storage	Body storage & digital imaging	Public mortuary with digital imaging
Dignity/respect deceased (storage & non-invasive)				
Bereaved experience (non-invasive & viewing rooms)				
Religion/culture (non-invasive PM & ritual wash)				
NHS resilience & HTA compliance (costs)				

Forensic & high-risk post-mortems capability				
Medical School - RSCH & University (anatomy & teaching facilities)				
University (learning, research, technology & innovation)				

## Financial

39. The initial capital allocation for the public mortuary project was made in 2018 for £10.6m. The context and business need have now changed, based on seasonal pressures and the COVID pandemic. A better assessment of business need has now been completed which increases the amount body storage required and includes the provision of digital imaging.
40. SCC have commissioned architects and cost consultants who have experience in mortuary design to cost the options. Their initial scoping has concluded the previous allocation was insufficient. SCC Land & Property have recommended £16.1m (pipeline) is allocated within the MTFs Capital Budget Refresh for Cabinet Approval January 2022. This covers both the construction and purchase of land.
41. Further detailed costing is now underway based on feedback from the RSCH radiology team and the University of Surrey that has led to design revisions.
42. Detailed work is currently taking place with the Surrey NHS hospital trusts to develop the operating models and business case for staffing the different options. This will include revenue costs for the provision of their services. At this stage it is not anticipated that revenue savings will be realised.
43. Discussions with the University of Surrey are progressing, and the project has the support of the Vice-Chancellor. The University recognise that such a partnership will require capital investment from them. Further discussions on the partnership and funding arrangements are planned for December 2021.

## Conclusions:

44. The case for improvement and investment is strong with the Coroner, chief executives of hospital trusts and senior staff within SCC supporting the need for improvement and investment. The partnership between SCC and BSFS is

positive and is bringing together public sector organisations to address risks and improve the service for Surrey residents. The developing partnership with the University represents an exciting opportunity for SCC, the NHS and University.

45. Options 1 and 2 do not address the statutory responsibilities for SCC so should be discounted as long-term solutions. Although option 3 is worthy of consideration, it will not be supported by the University as it does not address their teaching and research needs. It is also not the preferred option for the Coroner, or the Surrey hospital trusts. It continues to rely on the present hospital infrastructure for post-mortems which has consistently proven not to be resilient.
46. Options 4 meets the statutory requirements for SCC but represents a considerable capital investment. It achieves the most value-added benefits, especially improving the bereaved experience and the needs of certain religions and cultures. It will address a gap in the University's aspirations to become a medical school. It will also provide unique facilities for research, technology and innovation.
47. Work is currently being carried out with both the NHS and the University to understand the potential funding arrangements to support the business case. This covers both revenue and capital costs, and funding contributions towards the cost of the project. In addition, an assessment is being conducted on the potential for grant funding. SCC commissioned consultants are working up the capital costs for the options. This work is scheduled to be completed by the end of 2021 to inform SCC Cabinet decision making.

<b>Recommendations:</b>
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48. Members of CEHSC are requested to:
  - i. Note the progress that has been made in developing the business case, especially the partnerships with the Surrey NHS hospital trusts and University of Surrey.
  - ii. Provide any observations prior to the full costed business case going to Cabinet in early 2022.

<b>Next steps:</b>
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49. Full business case to be developed for consideration by SCC Cabinet.

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**Sources/background papers**

[List of all documents used in compiling the report, for example previous reports/minutes, letters, legislation, etc.]

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