

From: Barbara Cooper Corporate Director, Growth, Environment and Transport

To: Mike Hill Cabinet Member for Community and Regulatory Services

Subject: **Digital Autopsy Unit**

Decision number: 21/00010

Classification: Unrestricted

Electoral Division: Maidstone Rural North

Summary:

This project will enable KCC to deliver a Digital Autopsy and body storage facility. The digital solution will deliver a body image scanning facility that will seek to provide efficiencies for the service by significantly reducing the number of invasive post-mortems required and making the process quicker and more efficient. This in turn will deliver a higher level of service to Kent's communities, from having their loved ones returned sooner and avoiding the need for invasive procedures which is not supported by some faith groups and can be distressing for some families.

This digital approach is supported by the Kent Senior Coroners whilst also future proofing the resilience of the service and mitigating future unfunded costs. It could also strengthen KCC's ability to respond to Mass Fatalities and mitigates against significant financial outlay that would come with such an event.

Recommendation:

The Cabinet Member for Community and Regulatory is asked to agree, in relation to the delivery of the Digital Autopsy facility, to delegate authority to the Corporate Director of Growth, Environment and Transport to:

- Enter into and or vary significant legal agreements including, but not limited to, a Service Level Agreement, Memorandum of Understanding and Collaboration Agreement with Medway Council and any other stakeholders as required.
- Enter into and or vary contracts for the delivery of the Digital Autopsy service including, but not limited to, body scanning and body transport.
- Consult with the Director of Infrastructure and enter into all necessary legal agreements for the delivery and the construction of the project, including purchase of the site if necessary.

1. Introduction

- 1.1. This project seeks to develop a Digital Autopsy (DA) function as part of the Coroner Service in order to reduce the number of expensive invasive post-mortems, made possible by more precise and faster scanning technology. The outcome is anticipated to see a reduction in the number of invasive procedures¹ of over 68% and a much faster turn-around for the coroner service releasing bodies back to their loved ones. Maidstone NHS currently take on average 16 days to release bodies and the revised timeline using the DA is anticipated to see this reduced to 6-9 days.
- 1.2. The diminishing pool of pathologists and increasing costs associated with the NHS contracts for delivering post-mortems and body storage, have put significant stress on the coroner service. This proposal, supported by the Chief Coroner will ultimately seek to reduce revenue costs and strengthen KCC's ability to mitigate against ongoing significant financial outlays, including from a mass fatality incident.
- 1.3. KCC has a statutory responsibility for funding all costs of the Coroners Service for Kent and Medway which includes provision of a mortuary service which is currently delivered through NHS hospitals. Medway Council contributes 15.3% (based on Medway population) to the running costs of the service. It is planned that the DA facility will be located in Aylesford on a site currently owned by KCC.

2. Background

- 2.1 There are several key issues putting the continuation of the current service arrangements at risk:
 - a) NHS mortuaries currently do not have sufficient capacity to deal with the normal throughput of Coroner cases during the winter period, as well as their own hospital deaths and must hire in temporary storage for which KCC pays a proportionate contribution and which is a further unfunded and growing pressure.
 - b) Pathologist costs have and are continuing to rise sharply due to a national shortage of staff which has created significant unfunded pressures for the service with further costs of £277k built in for 20/21.
 - c) The uncontrollable nature of both of the above issues builds in risk to the Coroner Service budgets, which has seen the costs increase year on year.
 - d) Potential risk of Judicial Review if the current arrangements adversely affect service delivery to the statutory standards set by government. If Coroners do not have sufficient pathologists to deliver the service, this will put Coroners in breach of the Coroners and Justice Act 2009
- 2.2 Digital Autopsies are now modernising the approach to post-mortems with Sheffield, Preston, Bradford, and Sandwell councils having recently entered into contract for the service and with further authorities such as Birmingham and Essex similarly now investing in the technology.

¹ 3265 invasive procedures in 2018 would reduce to 1045

- 2.3 The technology uses a CT (computerised tomography) scanner to scan the deceased in order to determine a cause of death and thus avoid the need for an invasive procedure. Cause of death success rates by this technology vary between parts of the UK dependent on the population types², with variations of between 50% and 90% success rates. Following examination of KCC's current causes of death, the likely outcome is that 75% of notifiable deaths will be able to be determined by this technology. The business case has reduced this success rate to 68% in order to be prudent and ensure a robust economic model.
- 2.4 The number of post-mortems required changes annually and this business case is predicated on there being an average 3,250 scans being required each year, based on historical figures. The DA scanner, which will be owned and maintained by the successful tenderer, will have the capacity for up to 4,000 post mortems per year. This additional capacity could be sold to neighbouring councils to provide an income generation and could also mitigate significant costs associated with any mass fatality in Kent or surrounding regions. These opportunities have not been included in the business case. Of the c3,250 scans, it is therefore anticipated that 68% of bodies requiring a post mortem will be able to be released back to their families within days, with the remaining 32% then going on to have a full or partial invasive post-mortem at an NHS facility.
- 2.5 KCC oversees the delivery of Coroner services on behalf of Medway Council. To date this has been done on an at cost basis. Subject to the project proceeding, KCC is engaging with Medway Council seeking a funding element that would support the capital and or revenue investment.
- 2.6 A site in Aylesford has been identified which is close to the Coroner Courts in Maidstone and has good connections to NHS hospitals which will be responsible for delivering the remaining post-mortems. The new location has been tested with current transport (body removal) contractors to determine the impact on costs of using a single location, as opposed to the current multiple NHS Trust locations and the business case takes account of these financial results.
- 2.7 It is planned that the project will be delivered by no later than March 2023.

² Population age, ethnicity etc. and correlations with types of death

3 Options analysis

3.1 Four options have been considered. The recommended option is **option 3 to Deliver the Digital Autopsy facility with NHS Mortuary Contract(s) plus the development of a Public Mortuary.**

3.2 Table 1 – Options appraisal

Factors	Options			
	1 – Do nothing	2 – Deliver DA only with NHS Mortuary Contract(s)	3 – Option 2 plus the development of a Public Mortuary to planning	4 – Deliver DA and PM
Capital costs (excluding partner contributions)	<p>Costs have risen by £260k (on a £1.1M budget) over the last two years as a consequence of price increases arising from the renewal of the post-mortem contracts in 2017, and the NHS Trusts moving to passing on a share of the cost of temporary body storage units to manage winter capacity pressures. This is an unfunded pressure and the gap between base budget and actual costs will continue to rise as there is an annual inflationary uplift built into our contracts with the NHS Trusts.</p> <p>Due to the lack of pathologists the service has had to employ agency pathologists with considerably higher fees. The impact of this increase, and the continued use of agency staff will continue to put pressure on costs.</p>	c£3M	c£3M but allowing for a future expansion to include a post-mortem facility (public mortuary) should providers ever pull out.	c+£6.5M
Mitigation of NHS cost increases	X	Some mitigation, though the NHS will still be required to do some post-mortems.	Partial mitigation. By having the proposals for the public mortuary ready should this scenario ever transpire, it ensures KCC can mitigate these costs fully. Providers must give KCC 12 months' notice before they pull out of delivering post-mortems.	Full mitigation.
Revenue savings	X	Invest to save confirmed by KCC finance; delivers savings against	Invest to save confirmed by KCC finance will deliver a payback of	Does not meet invest to save criteria, albeit KCC would retain a

	Options			
Factors	1 – Do nothing	2 – Deliver DA only with NHS Mortuary Contract(s)	3 – Option 2 plus the development of a Public Mortuary to planning	4 – Deliver DA and PM
		pathology costs, and availability of pathologists in Kent (and nationwide) are reducing.	less than 10 years, including borrowing costs.	more valuable asset and would be providing a statutory service.
DA suppliers	X	KCC would work with DA suppliers to determine options to lower KCC costs.	KCC will work with DA suppliers to determine options to lower KCC costs.	KCC will work with DA supplier to determine options to lower the costs to KCC.
KCC Coroner's Service capabilities	X	Enhanced capabilities, e.g.: <ul style="list-style-type: none"> • less invasive, • better outcomes for families, • less distressing, • quicker, • more efficient process, and • ability to deal with mass fatalities. 	Enhanced capabilities, e.g.: <ul style="list-style-type: none"> • less invasive, • better outcomes for families, • less distressing, • quicker, • more efficient process, and • ability to deal with mass fatalities. 	Most enhanced capabilities, e.g.: <ul style="list-style-type: none"> • less invasive, • better outcomes for families, • less distressing, • quicker, • more efficient process, and • ability to deal with mass fatalities.
Capital / revenue contribution - Medway Council	X	Yes - contribution towards the facility including land value.	Yes - contribution towards the facility including land value.	Yes - contribution towards the facility including land value.
SE7 partners	X	X	There is potential to work with SE7 ³ partners to secure a capital contribution towards the facility to provide a South-East Region Mass Fatality option e.g. scanner which has the capacity to provide cause of death for this scenario and which will be a lower cost to either KCC (or SE7 partners) who will currently need to enact their own Mass Fatality contingencies and often have to displace business as usual activity. This can be delivered alongside the Kent service. This is not included in the business case but is a further benefit.	X

³ Surrey County Council, East Sussex County Council, Brighton and Hove City Council, Kent County Council, Hampshire County Council, Medway Council and West Sussex County Council.

3.3 Table 2 – Options and Recommendations

Option	Recommendation
1 – Do nothing	This option is not recommended due to the risk of continuing increases in costs for covering shortfalls in pathologists, causing an ongoing unfunded inflationary, budgetary, and capacity pressure. It also does not allow for contingency planning should all NHS providers ever pull out of undertaking KCC post-mortems.
2 – Deliver DA only with NHS Mortuary Contract(s)	The recommendation is not to proceed with this option as it does not allow for contingency planning should all NHS providers ever pull out of undertaking KCC post-mortems.
3 – Option 2 plus the development of a Public Mortuary to planning	This is the recommended option.
4 – Deliver DA and PM	The recommendation is not to proceed with this option at this stage due to poor payback period, level of capital funding required, complexity of funding agreements and potential delay in constructing the DA facility. This can be progressed later subject to need determined by NHS continuing to agree to providing post-mortem facilities at a cost the council deems affordable. This is currently a growing financial pressure. This option might also be progressed when there is more certainty of cost.

4 Finance

4.1 Total capital costs of the proposed facility are anticipated to be up to c£3M with funding coming from KCC and Medway. The funds will ensure the delivery of the Digital Autopsy facility including body store.

4.2 The project is anticipated to deliver revenue savings that will see the project achieve a 10-year payback period. It will also seek to mitigate future unfunded cost increases while ensuring that KCC can avoid significant costs from any mass fatality incidents.

4.3 Costs provided to date are based on feasibility assessments undertaken by quantity surveyors and include market data from other authorities to determine costs and associated payback periods. While the outcome is likely to be broadly in line with the business case, the final position will remain subject to tender on the build contract and service contracts. A further Record of Officer Decision may be required to update the final figures subject to the outcomes remaining beneficial to KCC.

4.4 The following table sets out the anticipated savings to be delivered.

Table 3 – Anticipated savings

	£ Total	£ 19-20	£ 20-21	£ 21-22	£ 22-23	£ Later
Existing revenue budget (net)*			2,879,050	2,879,050	2,879,050	2,879,050
Revenue cost savings (net)					(473,700)**	(473,700)**
Proposed revenue budget					2,405,350	2,405,350
Net increase\ (reduction)					(473,700)**	(473,700)**

*existing budget but including Medway Council contributions in 20/21 and no allowance is given for future year increases in 21/22 and 22/23

**assumes 15.3% reduction in saving passed to Medway council

5 Legal

- 5.1 KCC will enter into several legal agreements including but not limited to a Service Level Agreement, Memorandum of Understanding, and a Collaboration Agreement with Medway Council over the funding elements. If capital funding is not available from the partnership, then KCC will also consider revenue funding options.
- 5.2 In addition, KCC will also be seeking to enter into legal agreements with the preferred supplier of the Digital Autopsy service, body removal services, post-mortem services and the consultants and contractors to deliver the building.

6 Strategic case

- 6.1 The Coroner Service is a statutory service that is funded by KCC but not directly controlled by it.
- 6.2 KCC's Interim Strategic Plan sets out the short terms goals and this project will assist in meeting the Economic Challenge, Demand Challenge and Partnership Challenge.
- 6.3 Through its contribution to the wellbeing of residents, the project will offer an innovative non-invasive service which will be quicker, more effective and which will significantly lower the need for invasive procedures which will be supported in particular by many faith groups and will provide economic benefits as well as enhanced capabilities to deal with mass fatalities.
- 6.4 The impact of Covid19 is not anticipated to directly impact this project, however the enhanced capabilities of the facility could yet be called in to use to mitigate costs associated with future pandemics.

7 Equalities and data protection implications

- 7.1 An Equality Impact Assessment (EqIA) has been undertaken and is attached to this report.
- 7.2 No adverse impacts have been identified.
- 7.3 Some positive impacts have been identified in particular the reduction in invasive post-mortems which are not supported by some faith groups.
- 7.4 The EqIA will be kept under review as the project progresses.

8 Data protection

- 8.1 No adverse data protection issues are expected as part of this project.

9 Conclusions

- 9.1 The opportunity has arisen for KCC and Medway to benefit from new technology that will offer a digital solution to the Coroner Service. This will reduce the need for invasive procedures; be more efficient and effective; allow bodies to be returned to families sooner; deliver enhanced

capabilities to KCC and mitigate against ongoing revenue pressures including the potential for a mass fatality.

10 Recommendation

The Cabinet Member for Community and Regulatory Services is asked to agree, in relation to the delivery of the Digital Autopsy facility, to delegate authority to the Corporate Director of Growth, Environment and Transport to:

- Enter into and or vary significant legal agreements including, but not limited to, a Service Level Agreement, Memorandum of Understanding and Collaboration Agreement with Medway Council and any other stakeholders as required.
- Enter into and or vary contracts for the delivery of the Digital Autopsy service including, but not limited to, body scanning and body transport.
- Consult with the Director of Infrastructure and enter into all necessary legal agreements for the delivery and the construction of the project, including purchase of the site if necessary.

11 Appendices

- Appendix A – Proposed Record of Decision
- Appendix B – Equality Impact Assessment

12 Contact details

Report Author: Jonathan White
Title: Project and Operations Manager
Telephone: 07988375334
Email address:
jonathan.white@kent.gov.uk

Relevant Director: Stephanie Holt-Castle
Title: Interim Director of Environment,
Planning and Enforcement,
Telephone: 03000 412064
Email address:
Stephanie.Holt-Castle@kent.gov.uk