

<b>Meeting</b>	<b>Forensic Services Committee</b>
<b>Date</b>	<b>3<sup>rd</sup> February 2021</b>
<b>Location</b>	<b>MS Teams</b>
<b>Title of Paper</b>	<b>Demonstrating the Value of Forensic Science</b>
<b>Item number</b>	<b>4</b>
<b>Presented By</b>	<b>Fiona Douglas, Scientific Head of Function</b>
<b>Recommendation to Members</b>	<b>For information</b>
<b>Appendix Attached</b>	<b>Yes</b>

**PURPOSE**

To update members on progress on work to assess the value of Forensic Science.

## 1. BACKGROUND

1.1. It is well recognised that forensic science adds significant value to the criminal justice system. Without forensic science, individuals may not be identified, charges may not be brought and convictions may not be possible. Indeed the confirmation of those responsible for crimes committed would be a lot less reliable.

1.2. Whilst this value is not in dispute, being able to quantify what this value is or allow for value measures to be identified is an area which requires more work. Being able to measure the value of forensic science is important;

- To understand the contribution of forensic science within the Justice System
- To determine how forensic science contributes to overall public safety, crime prevention and confidence in policing
- To influence decision making in the justice process
- To influence research and innovation
- To support change and future strategic direction
- To use resources effectively
- To define and track investment outcomes
- Demonstrate value for money to the taxpayer

1.3. Gaining a better measure and understanding of the value of forensic science is not easy. There are differing views of value amongst those that use Forensic Services and a general need to share a common view on what value is, how it is measured and how it can be used to grow the delivery of forensic science services. A diagram highlighting the different levels of assessment of value is included in Appendix 1.

1.4. Broadly speaking value can be assessed at four levels as detailed in the diagram with only Level 1 or 'Scientific Value' able to be assessed to some degree at the current time.

1.5. As part of the HMICS Thematic Inspection of Forensic Services in 2017 a recommendation was identified that;

*The Scottish Police Authority should work with Police Scotland and COPFS to develop capability and capacity within Forensic Services to systematically address failure demand.*

1.6. It is known there are studies being carried out by the Home Office and Northern Ireland Forensic Science Service. Of particular interest is the work currently being undertaken by the Home Office which has set out a project to develop an approach to measuring the impact of forensic science across the Criminal Justice System through a number of proof of concept studies in England and Wales.

## 2. FURTHER DETAIL ON THE REPORT TOPIC

2.1. There is a requirement to undertake assessment of value work in Scotland for the reasons identified. Not the least of which aligns value judgements into decision making within the revised Memorandum of Understanding to ensure the best utilisation of Forensic Services capacity. This also aligns to the HMICS recommendation with regards to eliminating, as far as possible, failure demand.

2.2. Measures of value at level one can be undertaken, evaluated and reported with the data available within forensic systems and databases. However it is not always straightforward to combine data sets across multiple systems in order to provide meaningful analysis of the full value of a forensic submission from a scientific viewpoint. It must also be noted that these assessments can only be made based on the data to which Forensic Services have access to and there must be an understanding of this limitation when considering data.

2.3. Beyond level one there is significant challenge in demonstrating the specific value that forensic science brings to an investigation or prosecution, how this impacts on detections and judicial outcomes and ultimately how it contributes to keeping the communities of Scotland safe.

2.4. Interestingly the Home Office study has identified a number of similar challenges to measuring the impact of forensic science;

- **The breadth of the question:** Forensic Science is a term used for a very broad portfolio of techniques and scientific disciplines - from DNA to digital. The Criminal Justice System is a complex set of organisations, interactions, processes and practices – from crime scene to court.
- **The lack of data:** Disconnected IT systems across different organisations, using different nomenclature and no common metrics or references mean that “normalised” datasets are unlikely to exist.
- **Understanding the impact of attrition and what is “not done”:** A relatively small percentage of investigations result in a court case – there is some anecdotal evidence that this includes only 10% of cases where forensic science is used. It’s also important to consider that local policies and financial limitations may mean that forensics is not always used where it might be so it’s potential value or impact is “lost” or hidden.
- **All the other factors that have impact:** Outcomes and decisions in the Criminal Justice System result from a multitude of factors and demographics, not just Forensic Science so it is important to try and ensure that any analytical method is focused on forensic science alone and not falsely attributing impact and value.

2.5. In November 2018 a research proposal was developed by Forensic Services to look at the following areas;

- How much value is brought from forensic science and how should this be broken down into measureable units?
- How does this value measure become one of value to the Police, COPFS or even Jury?
- What does value mean for each of Forensic Services key partners?
- How does forensic science strengthen cases taken to court or even prevent them getting there through an increased likelihood of guilty pleas?
- How does multimedia presentation of a crime scene in court help the jury understand complex crime scenes and forensic evidence?
- Which crime types are reliant on forensic evidence for bringing prosecution cases?
- Which cases place reliance on forensic evidence but require other supporting evidence?
- Which cases are not reliant on forensic evidence but use forensic evidence for corroborative purposes?

2.6. Unfortunatley this proposal was not able to be progressed due to financial constraints, it is clear however that these questions are as relevant today as they were two years ago.

2.7. The Home Office study on the impact of forensic science may go some way towards answering some of these questions. Although this is an England and Wales project there will be parallels that can be drawn to forensic science in Scotland although the drivers around how the data could be utilised will be different due to the differing models of funding and delivery of forensic services.

2.8. In the absence of specific Scottish research in this area it is recommended that the focus continues to be at level one at this time and to develop within the MOU a methodology for considering value in the context of minimising failure demand. Further learning can be taken from the studies underway by the Home Office and in Northern Ireland that can inform further work in Scotland to look at assessment beyond level one in due course.

### **3. FINANCIAL IMPLICATIONS**

**3.1.** There are no additional financial implications associated with this paper.

### **4. PERSONNEL IMPLICATIONS**

**4.1.** There are no personnel implications associated with this paper.

**5. LEGAL IMPLICATIONS**

5.1. There are no legal implications associated with this paper.

**6. REPUTATIONAL IMPLICATIONS**

6.1. There may be reputational implications of this paper due to the inability to directly assess the value of forensic science in keeping the communities of Scotland safe and delivering our vision of 'scientific excellence for safer communities'.

**7. SOCIAL IMPLICATIONS**

7.1. There are no direct social implications associated with this paper.

**8. COMMUNITY IMPACT**

8.1. There are no community impacts associated with this paper.

**9. EQUALITIES IMPLICATIONS**

9.1. There are no equality implications associated with this paper.

**10. ENVIRONMENT IMPLICATIONS**

10.1. There are no environmental implications associated with this paper.

**RECOMMENDATIONS**

Members are requested to note the current position with regards to work to demonstrate the value of Forensic Science.

# APPENDIX 1 – LEVELS OF VALUE ASSESSMENT

