

INTERFACES 2: FLOWCHARTING THE INTERFACE BETWEEN FORENSIC SCIENCE, MEDICINE AND LAW IN ADULT AND CHILD SEXUAL ASSAULT INVESTIGATIONS

Final Report

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Interfaces 2: Dismantling the Justice Silos

Flowcharting the interface between forensic science, medicine and law in adult and child sexual assault investigations (A NIFS Project)

Overview and context for the Interfaces projects

Forensic and medical expertise is relied on increasingly by police and the courts to exonerate the innocent and establish links to crime. With increased reliance, the potential for unjust outcomes also increases, especially in serious criminal matters, such as child or adult sexual assault investigations. The more serious the matter, the more likely that multi-disciplinary and multi-agency personnel are involved, adding to investigation complexity and the risk of vital evidence being missed or miscommunicated, particularly if inter-agency information sharing is problematic or not common. The importance of identifying effective inter-agency interactions was highlighted in the wrongful imprisonment of Farah Jama in 2008 for a sexual assault he did not commit (Vincent, 2010). One factor that led to his wrongful imprisonment was the justice silo effect, where the practitioners from forensic science, forensic medicine and law enforcement involved did not communicate effectively or share enough vital information that might have prevented this miscarriage of justice.

Many of the forensic sciences can be highly influential in focusing the direction of police investigations, in exonerating the innocent and establishing links to crime (Julian, Kelty & Robertson, 2012). With this increased reliance, the potential risk for miscarriages of justice, especially in serious matters such as homicide and sexual assault, increases in two distinct ways. First, the more serious the matter, the more likely that evidence mishandling can lead to wrongful imprisonment, even wrongful executions (Gross et al, 2005; Connors et al, 1995). Secondly, the more serious the matter, the more personnel will be involved in the case, and the more likely these personnel will be multi-disciplinary (police, medicine, law, forensic science) and multi-organisational (Health, Justice, Police, private legal/medical). Many of these personnel will have divergent work practices and differing views on what their role is, or how and if they should meet during criminal investigations or court trials (Kelty, Julian & Ross, 2012).

To reduce the risk of unjust outcomes, more emphasis must be placed on how forensic experts communicate with each other and with law and law enforcement agencies. When there is an absence of meaningful and regular communication between the forensic sciences, forensic medicine, law and police this can be described as the 'justice silo effect'. Justice silos effectively mean that practitioners, even within their own organisations, operate in isolation, unaware of the role and responsibilities of other justice personnel.

It is commonplace to think about the criminal justice system as a unified entity with agencies working effectively toward a single purpose and goal (Carter, 2005). However, a recent commentary by Ross (2012) painted a different picture of Australian agency silos having a fragmented approach to collaboration. Within the US similar fragmented interactions and siloed agencies have been noted (NAS, 2009; Carter, 2006). The existence of agency silos and fragmented service delivery is not unique to forensic science; it exists between forensic services, forensic medicine, law and law enforcement (Kelty et al, 2012).

The case of Farah Jama, red flags and the justice agency silo effect

A clear example of how detrimental the justice silo effect can be was demonstrated in the case of Farah Jama in 2008 in Australia. In this case concerns were raised during the investigation but were not dealt with adequately due to the silo effect.

Farah Jama (FJ) was convicted of a rape he did not commit and sentenced to six years imprisonment. The jury's verdict rested solely on the basis of DNA evidence, with no other circumstantial evidence presented at the trial. In December 2009, it became apparent that there was a problem with the original DNA swabs in that there was contamination at the point of collection and a prosecutor from the Victorian Public Prosecutions Office advised the Victorian Court of Appeal in Melbourne that a 'substantial miscarriage of justice' had occurred; FJ was acquitted immediately. In 2010, retired Supreme Court Justice, the Hon. Frank Vincent was asked to head the inquiry into the matter. The Vincent report into this wrongful conviction detailed an extraordinary case of forensic evidence contamination combined with limited interactions and information flow between the medical, scientific, law enforcement and law practitioners involved throughout the entirety of the case. Vincent considered that the Victorian criminal justice system had wholeheartedly let FJ down. Cases such as that of Farah Jama clearly show the importance of ensuring that criminal justice personnel interact and do not operate in isolation (Vincent, 2010).

Circumstances underlying the FJ case

Sometime before the incident, FJ voluntarily provided a DNA sample for an unrelated matter to police. This matter was dropped before any charges were laid or any investigation was carried out. However, FJ's DNA was uploaded to the national database.

On a Saturday night, M, a 48-year-old woman was found semi-conscious in a nightclub toilet cubicle in Melbourne, Victoria. M had no recollection of what had occurred that evening. During discussions with various people after she was found, the issue was raised of whether she may have been assaulted. M was taken to a sexual assault Crisis Care Unit within a hospital for a physical examination. Routine swabs were taken and sent to the Victoria Police Forensic Services Department for DNA analysis.

The DNA Analysis Laboratory found a match between the swab taken from M in the Crisis Care Unit and FJ's profile on the DNA database.

The case was given to a police investigator who became concerned at the lack of other circumstantial evidence to support the DNA evidence. M could not remember anything from that night (it was found that she had drunk heavily that evening and was taking prescription medication). The CCTV footage outside the nightclub (recorded on that night) did not capture FJ (a 19 year old African male). The club where the alleged incident took place was frequented by middle aged, primarily Caucasian, singles looking to meet a partner; no one, including the door and bar staff, remembered FJ being there. FJ provided an alibi that he was at his father's bedside that evening and night as his father was very ill. FJ's friends and family verified his alibi.

The investigator, believing something was not right, raised a red flag by approaching her superior officer. The superior officer contacted the Victorian Police Forensic Services Department and enquired about the matter. The senior officer was told that there was no chance of contamination of that evidence in the laboratory. That was the correct answer (as discussed below the contamination was elsewhere). However it could be argued the response given was too narrow and no consideration was given to where the samples came from in the limited interactions that took place.

At no point during the investigative phase of this matter were any of the other agencies involved beyond the Forensic Science laboratory and the police contacted. No enquiries were made at the Crisis Care Unit or to the forensic physician who collected the samples. No investigative meetings were called where all agencies involved in the process could discuss the problem of other circumstantial evidence not supporting the DNA evidence.

The most likely explanation for the contamination of the DNA samples was that it occurred in the hospital, and probably was from some of the implements left on the trolley in the examination room. In his report, Vincent found that the level of cleaning of the examination rooms was inappropriate given the presence of DNA and the taking of samples for DNA testing. The level of

cleaning was at a level appropriate for a hospital to maintain infection control and to remove contaminants. This was not at the level appropriate for the collection of DNA samples [1, 5].

A red flag was raised during the Jama investigation by a junior police detective; however it appears there were inadequate mechanisms in place to respond to the concerns. Given the circumstances outlined above, it would appear that interactions and meetings between justice agencies is highly beneficial, especially where practitioners raise a red flag and believe that something is not right in a specific case. However, it remains unclear as to how justice agencies should and do interact so that their information-sharing is more beneficial than detrimental, and that practitioner professional boundaries and objectivity as expert witnesses are not undermined.

Background to the Interfaces 2 Project:

The initial Interfaces project and main findings (2011 to 2013)

The first Interfaces project was devised to identify current and preferred forms of communication between police agencies, lawyers, forensic scientists and medical practitioners during investigations of suspicious death/homicide and adult sexual assault matters. The project interviewed 103 practitioners who regularly played a role in the investigation/criminal proceedings of homicide and sexual assault matters. The participants were drawn from seven Australian States and Territories: Victoria, Australian Capital Territory, Western Australia, Queensland, New South Wales, South Australia and Tasmania.

Two key findings from the first Interfaces Project were: (1) that interagency meetings, although routine and common in homicide cases, were extremely rare in sexual assault cases; (2) that forensic physicians were 'semi-invisible' due to a partial justice silo effect and were rarely asked to provide expert opinion during the police investigation phase, or trial preparation phase, of sexual assault matters even if they had opinion evidence that could assist;

A significant finding from the first Interfaces Projects was that in 2013 some practitioners, especially medical physicians, are less visible and the role they play in criminal matters is not well understood by lawyers, forensic scientists and police.

The Interfaces Project report (Kelty and Julian, 2014) was published in 2014. One primary recommendation and four observations relating to the interactions between agencies involved in sexual assault investigations were made. The current project is a response to Recommendation 1 and Observation 1.

Recommendation 1.

To develop comprehensive flowcharts of sexual assault (adult/child). These flowcharts should: map out the complete forensic and evidentiary process from incident scene to the trial preparation phase, provide details of the different agencies and practitioners involved in each step and include feedback loops to advise practitioners of the quality of the evidence they collected/analysed. These would be jurisdictionally specific.

Observation 1.

Seminars or information/promotional materials that provide an overview of the criminal justice system including discussion of comprehensive case flow charts should be developed for all new practitioners in forensic science, forensic medicine, law, and homicide and sexual assault squads.

International interest in the Interfaces Project findings

The first Interfaces Project findings were presented at the European Academy of the Forensic Sciences in 2012 at The Hague. *Forensic Science International* requested that the presentation be drafted and submitted for peer-review. The paper was accepted and published in 2013 (Kelty et al, 2013).

Interfaces 2: The Project

Interfaces 2. Project Team

Project manager and Lead CI - Dr. Sally Kelty (TILES, Uni. of Tasmania and Uni. of Canberra)
CI - Assoc. Prof. Roberta Julian (TILES, University of Tasmania).
NIFS researcher - Ms Eva Bruenisholz (Senior Project Officer, NIFS)
Project Executive - Dr. Linzi Wilson-Wilde (Director NIFS)

The Purpose of Interfaces 2 is to maximise the investigative/evidentiary outcomes of interactions between forensic science, forensic medicine/pathology, law enforcement, victim support and sexual assault centres, victim support services, child protection and other non-government agencies involved in adult and child sexual assault cases.

The rationale for Interfaces 2 is that without understanding the contributions that relevant practitioners can make, it is unlikely that the full benefit of forensic expertise available in sexual assault investigations can be utilised effectively in the criminal justice system; and further, that the problem of justice silos will persist in child and adult sexual assault investigative and criminal proceedings where opportunities for practitioners to provide valuable information, unique expertise or advice are not forthcoming.

Scope of Interfaces 2

The data will be collected from one Australian jurisdiction. This state was selected due to the complexity of interagency arrangements for sexual assault involving state policing agencies, multiple private and commonwealth agencies, private forensic science providers, statutory forensic science agencies, Non Government Organisation (NGOs) and private health service providers. Furthermore, there was an excellent level of support from this jurisdiction for the original Interfaces Project.

The key objectives of Interfaces 2 are to:

1. Identify the range of disciplines currently involved (and the interactions between them) in the complete forensic process (including the pre-reporting, investigation and pre-adjudication stages) of child and adult sexual assault matters in one Australian state.
2. Identify appropriate critical points during or after criminal investigations to advise practitioners of the quality of their expertise or evidence analysis.
3. Produce a jurisdictional specific flowchart that displays the complete forensic process, the organisations/individuals involved and desired feedback loops.
4. Explore the development of promotional materials (such as posters/flyers) that would be informed by the flowchart produced in objective 3.

Two key outputs of Interfaces 2:

1. Two flowcharts that map the critical points in the use of forensic medicine and science in child and adult sexual assault investigation from initial report to trial preparation stage. The flowcharts will also highlight potential feedback loops for forensic practitioners in these matters.
2. Exploration of the development of promotional materials (such as posters/flyers) that would be informed by the flowchart produced in Output 1 and/or Output 2.

RESEARCH CONTEXT

The role of forensic evidence in the criminal investigation of sexual assault

In 2012, a special issue of *Violence Against Women*, was dedicated to the criminal justice response to sexual violence. Its focus was on examining ‘the present capabilities of law enforcement and forensic science to provide victims of sexual assault with just outcomes and hold offenders accountable for their crimes’. The editors noted the ‘low rate at which sexual assaults are reported to law enforcement, offenders are charged, and juries render guilty verdicts for these violent crimes’. They further noted the importance of producing ‘information on sexual violence that directly informs and improves criminal justice practice and response’ (McNamee & Backes, 2012: 135).

Ensuring that victims’ needs are met more effectively within the criminal justice system is critical to changing responses. So is the ‘motivation to enforce the law’ (McNamee & Backes, 2012: 136). With advances in the ‘scientific capabilities of forensic laboratories in examining sexual assault evidence and identifying offenders’ (Johnson et al., 2012: 194) there is now an increased interest in the role of forensic evidence in sexual assault cases because:

Forensic (scientific) evidence has the capacity to contribute important information to the police, prosecutors, and the courts in cases of sexual violence (Johnson et al., 2012: 193)

A recently published US report by the National Institute of Justice on the testing of sexual assault kits emphasises, however, that ‘solving sexual assault cases is much more complicated than simply testing forensic evidence’ (Ritter, 2016: 6).

The Interfaces 2 project was commissioned to examine communication flow and information sharing in the investigation of sexual assault cases - with a focus on the forensic examination and collection of forensic evidence – in order to inform improvements in criminal justice practice and response. The project was informed by a review of published research on the investigation and prosecution of sexual assault cases (see Appendix A, p. 25).

Adult Sexual Assault

In Australia and internationally, research on sexual assault repeatedly finds low rates of reporting (to any agency but especially to police), high rates of attrition, and few convictions (Daly and Bouhours, 2010). Qualitative research has shown that victims do not feel comfortable reporting to police and that they do not pursue the full process through to prosecution, in large part because they are not confident that there will be a positive outcome. A significant number of studies have examined the various stages in case progression from reporting to prosecution in an attempt to identify the factors contributing to convictions and just outcomes (see, for example, Taylor et al., 2012). However, there have been fewer studies that have examined the forensic process in sexual assault cases.

In Australia in 2013, The Australian Centre for the Study of Sexual Assault published a report on *The role of forensic medical evidence in the prosecution of adult sexual assault* (Quadara et al., 2013). The focus in this report was on the value of forensic evidence in prosecutions and legal outcomes, including its use in legal decision-making by criminal justice actors (police, prosecutors and juries). The authors concluded that ‘little research specifically examines the role of forensic medical evidence in sexual assault trial settings’ noting that ‘this is a significant gap’ (Quadara et al., 2013:1).

More recently, in the United States, the National Institute of Justice (NIJ) has embarked on a large scale program of research to address the problem of untested sexual assault kits that were stored in law enforcement evidence facilities around the nation. To date, the NIJ has published two reports on this research: *The Road Ahead: Unanalyzed Evidence in Sexual Assault Cases* (2011) and *Down the Road: Testing Evidence in Sexual Assaults* (Ritter, 2016). Much has been learned from this research about the role of forensic evidence in the investigation and prosecution of sexual assault cases.

Both sets of research acknowledge that forensic medical evidence is only one part of the investigative process. However, they both emphasise the need to have a better understanding of the role of forensic evidence in sexual assault cases ‘in the larger context of improving the justice system’s response to sexual assault’ (Ritter, 2016: 6). As the NIJ concluded in their report:

Although testing kits is part of the solution, it is only one part. Workload then flows downstream – to investigators, prosecutors, and victim advocates – which is why it is so important to think holistically in terms of a *system* response’ (Ritter, 2016: 6).

The Interfaces 2 project adopted a holistic, systemic approach to examine the role of forensic evidence in sexual assault cases. The flowcharts developed begin with first responders and examine the agencies and processes involved up to the preparation of a prosecution brief. The significance of the information in the flowcharts is best understood in the context of previous research on sexual assault investigations and prosecutions, especially those studies that have examined the role of forensic evidence in these cases. Key insights from this research are summarised in the literature review (see Appendix A, p. 25).

Child Sexual Assault

The National Framework for Protecting Australia’s Children 2009–2020 (Council of Australian Governments [COAG], 2009b) adopts a public health model in which the focus is on preventing child abuse and neglect before it occurs. In addressing all forms of child abuse and neglect, the six supporting outcomes of the National Framework reflect this focus on prevention. Importantly, however, child sexual abuse (CSA) is addressed in a separate outcome – Outcome 6 – that includes strategies aimed at increasing awareness of CSA *and enhancing law enforcement and judicial responses* (Quadara et al, 2015: vi; emphasis added). The key strategies for Outcome 6 are to:

- raise awareness of child sexual abuse and the online exploitation of children
- enhance prevention strategies for child sexual abuse
- strengthen law enforcement and judicial processes in response to child sexual abuse and exploitation
- ensure survivors of sexual abuse have access to effective treatment and appropriate support (COAG, 2009 cited in Quadara et al, 2015: vi).

These strategies recognise ‘the dynamics and drivers of child sexual abuse and exploitation may not be the same as other forms of child abuse, and that preventing and responding to sexual abuse may require different strategies’ (Quadara et al, 2015: vi).

In the Interfaces 2 report, we particularly address the strategy aimed at strengthening law enforcement and judicial responses to CSA by identifying critical points at which practices could be improved to enhance the forensic investigation so that forensic evidence adds value to the prosecution brief where this may be important. In this way, the Interfaces 2 project focuses on the perpetrator whilst not losing sight of the protection and safety of the child as the primary concern.

As Quadara (2014: 46) has noted, ‘statutory child protection systems have generally been focused on the safety of the child, and the presence of risk and harm’ rather than focusing on the perpetrator. The focus on prevention reflects this. Our research in the Interfaces 2 project explicitly addresses

the forensic identification and prosecution of the offender; the focus is on the crime that has been committed i.e. a focus on the law enforcement and judicial processes relating to the criminal act.

METHOD, DATA ANALYSIS AND ETHICS APPROVALS

Participants.

Sample 1 (The Interfaces 2 sample). Sample 1 was comprised of 18 experienced senior practitioners working in forensic medicine, forensic science, police or law. All of the participants worked in one Australian state/jurisdiction. All of the Sample 1 participants had a minimum of five years of experience in their role and had extensive knowledge and practice in the care of sexual assault victims and the investigation and criminal proceedings of child and/or adult sexual assault cases.

The data from Sample 1 was used to produce the two flowcharts that mapped a typical adult or child sexual assault case from initial report to trial preparation.

Sample 2 (The combined samples from Interfaces 1 and 2). Sample 2 comprised the combined sample of Interfaces 1 and 2 and included 121 practitioners from four professional groups who on a regular basis play a role in the investigation/criminal proceedings of sexual assault and other serious criminal matters. The four professional groups were: forensic medicine, forensic science, law enforcement and law. Sample 2 was comprised of the 103 participants who took part in the Interfaces 1 data collection combined with the sample of 18 participants from Interfaces 2 (as described above in Sample 1) (Kelty et al, 2012). All 121 participants in the combined Interfaces samples were interviewed by one or more of the authors. All participants from Interfaces 1 had given their consent for the data to be used in the Interfaces 2.

The data from Sample 2 was combined into one data set in order to create a richer data pool that would enable a more generalisable expanded flowchart that would map the opportunities for interagency information flow/advice/collaboration and potential feedback loops for forensic practitioners in adult or child sexual assault cases.

The number of participants in the combined sample and the types of disciplines for each professional group can be seen below in Table 1. The age range was 21 to 80 years. The participants were drawn from seven Australian States and Territories: Victoria, Australian Capital Territory, Western Australia, Queensland, New South Wales, South Australia and Tasmania.

Table 1. Type and Number of research participants (combined sample) interviewed

Type of Participant	Number
Forensic Medicine	
Pathologist	5
Forensic Physician/Forensic Nurse	13
Forensic Science	
Laboratory Sciences (biology and chemistry)	29
Field Sciences (crime scene, ballistics, fingerprints)	19
Law Enforcement	
Senior Police Forensic Managers	5
Senior Homicide/Sexual Assault Investigators	14
Law	
Senior judiciary and State Coroners	8
DPP and prosecution counsel	9
Legal Aid and private bar defence counsel	14

Other services	
Department of Health and family law policy advisor	1
Victim services/rape crisis centre personnel	4
Total	121

Procedure

The Interfaces 2 data was collected in two phases as detailed below.

Phase One involved interviewing senior police investigators and forensic medical and science practitioners to detail the 'typical investigative process' (from crime scene to brief preparation stage) of an adult or child sexual assault case. The interviews were digitally recorded one-on-one in-depth interviews (n = 4) interviews. The interviews ranged from 1.5 to just over 2.5 hours. The format for the interviews was an opening general discussion about each of the practitioner's employment and place of work and then moving to the focus of the interview to describe the stages of a sexual assault case in an Australian jurisdiction.

Phase Two involved more depth one-on-one interviews (n = 5) and focus groups (n= 5) focus groups). The interviews and focus groups ranged from one hour to just over two hours. The format for the interviews and groups were the same, commencing with a general discussion about each of the practitioner's employment and place of work and then moving to the focus of the study. A set of research questions was specifically developed for this research, and each participant was asked all of the semi-structured interview questions (refer Appendix A). The purpose of each interview or focus group was to understand where in the pre-reporting and investigation stage of child and/or adult sexual assault cases various organisations typically take part, what services they offer, and what type of feedback for their service would be desired.

Qualitative data and document analyses

All group and interview recordings were transcribed into word documents. Recordings were erased following verification of the transcription. The data collected in phases one and two were both subjected to narrative content analysis using a sequential idiographic approach. This is where each interview is analysed in full before moving onto the next. During the analysis, themes running through the interview narrative are highlighted and coded.

Document analysis was also carried out on policy and procedural manuals currently in place as of 2016 for the mandatory reporting and investigation of child sexual abuse and the reporting and investigation of adult sexual assault.

The combined interview data analysis and the document analysis was then used to inform the development of the investigative procedure flowcharts (Flowcharts 1 and 2) and then the subsequent more expansive flowcharts detailing potential opportunities for interagency information flow/advice/collaboration and potential feedback loops to inform practitioners of the quality of forensic evidence/advice.

Triangulation of method

To ensure this research was methodologically rigorous, three triangulation methods were employed. Triangulation is a technique that ensures reliability of qualitative data through cross verification (Denzin, 1970). First, data triangulation was achieved by gathering the same information using different methods and populations (focus groups and interviews in four different professional groups, and organisational policy documents). This ensured that much of the interview narrative was verified through organisational documents. Secondly, investigator triangulation was achieved by ensuring experienced interviewers carried out the interviews and groups; thus collecting high quality data.

Ethics approval and confidentiality considerations for Interfaces 2 participants

The study had ethical approval from the Social Sciences Human Research Ethics Committee at the University of Tasmania. All participants in this research freely gave their consent and no rewards were offered or provided. All procedures adhered to the National Health and Medical Research Council (NHMRC) guidelines for ethical research carried out in Australia. No participants

withdrew from the study. To provide confidentiality for the Sample 1 participants, the state/jurisdiction where Interfaces 2 was carried out is not reported. This was also the rationale for combining the samples from Interfaces 1 and 2.

Output 1. The flowchart (adult sexual assault)

Critical points, risk factors and feedback loops in the use of forensic medicine and science in adult sexual assault occurring in metropolitan centres

The flowchart presented as Output 1 was developed to highlight critical points in the investigative phase of adult sexual abuse investigations. The flowchart contains specific critical points at which decisions are made that impact upon a case. Critical points refer to a time point in the sequence of events where a decision is made that impacts upon whether the case proceeds or not. Critical points in this flowchart refer to the points in the sequence where forensic science and forensic medical expertise is used effectively or ineffectively depending on a number of factors. The term ineffective refers to actions or omissions of people, levels of forensic knowledge, or agency philosophy or policies that result in evidence contamination or the prevention of expertise contributing to an investigation¹. The flowchart mapping the effective and ineffective use of forensic science and forensic medical expertise in the investigation of adult sexual assault is presented on page 15. The flowchart can also be seen in Appendix A.

The data used to develop the flowchart came from a number of sources, including court transcripts, judicial sentencing remarks, newspaper and media reports, police journal reports and data from 121 participants who were police officers, detectives, forensic scientists, lawyers, judges, coroners, pathologists and forensic physicians practising Australia-wide who took part in interviews or focus groups to talk through interagency and interdisciplinary issues occurring during the investigative and adjudicative stages of sexual assault cases. The insights from these participants helped us to develop an understanding of where and how forensic expertise adds value to serious criminal cases.

Of note, the flowcharts presented in this report relate to cases where the collection of forensic and medical evidence is still feasible and where the forensic evidence potentially has evidentiary/probative value. **There are three different incidences where flowcharts may not apply.**

Many cases of adult ‘sexual assault’ occur across Australia where victims do not report the assault until weeks or years later. Victims in historical cases rarely keep forms of physical evidence that can assist the investigation, for example clothing or sheets.

Some cases of adult sexual assault occur between people already known to each other (whether acquaintances or partners). In cases where victim and alleged perpetrator are known to each other, some forms of forensic evidence do not assist the investigation, as you would expect to see DNA, fingerprints, evidence of sexual contact etc. Often in these cases, investigation and trial outcomes rest solely on victim and eyewitness testimony and issues of consent.

Finally, even with high quality forensic evidence been collected and used effectively throughout an investigation, there are many reasons as to why adult sexual assaults do not proceed; for example, where a victim at the final stage decided they do not want to testify in court and the police decide not to pursue the matter further.

The flowchart begins at the point where an alleged ‘sexual assault’ takes place. The flowchart ends at the point where accurate and high quality forensic science and forensic medical expertise is used either to charge or eliminate suspects and where forensic expertise is used in the decision to prepare a brief for prosecution.

¹ In the flowcharts the terms ‘expert’ and ‘expertise’ refer to police, science or medical partitioners who have specialised knowledge, training and qualifications in an area (such as sexual assault crime scene procession and collection of forensic specimens) and who are recognised by legal practitioners and the courts as being able to present expert opinion in criminal trials.

Each of the critical points in the flowchart is discussed overleaf.

Critical point one (Response of first responders)

The first critical point is when the victim makes a decision to either report the incident to police, and/or to seek out health services, and/or victim support services.

In Australia, there are four main points where adult victims of sexual assault can seek assistance. The main places are: police (via 000 or to a police unit or police station: police first responder), hospital and hospital clinics (to seek assistance for injuries, family planning services, sexual transmitted infections; sexual assault kits may or may not be carried out in hospitals depending on injuries or whether there is a dedicated forensic rape crisis centre available); specialised rape crisis clinics with dedicated forensic examination facilities; and/or victim support services (these can be in the form of telephone counselling or physical victim support centres where victims can get advice, support and advocacy).

Risk factors in critical point 1. Within critical point 1 the risk factor is the loss of the ability to collect potentially valuable forensic evidence. This risk can occur through lack of forensic knowledge or awareness by personnel working within each of the four main places that victims present to. Forensic awareness in this flowchart refers to knowledge of effective forensic science and medical evidence capture, timely collection and evidence management. For example, do all first responder police officers know to secure effectively both the primary scene (where the alleged incident took place) and secondary scenes (the victim, clothing and the alleged perpetrator/s, if known)? The philosophy or policies of organisations combined with the level of forensic awareness can impact positively or negatively on the effective collection of evidence from primary and secondary scenes. For example, non-forensically trained medical practitioners in emergency departments may have as their priority to attend to a victim's injuries at the expense of physical evidence contamination or collection. Notifying police to secure the primary scene may only occur much later in time. Further, victim support staff or counsellors/psychologists from non-medical clinics/agencies may have as their priorities to make the victim feel safe and to address traumatic reactions; they may not be aware, for example, of the importance of carrying out a sexual assault kit as soon as possible before changing or showering.

Over the past few years maintaining the integrity of the crime scene (including primary and secondary scenes, especially victims and alleged perpetrators) and the management of personnel in attendance has come to be seen as crucial. If the front end of a criminal investigation is not handled effectively, there can be significant flow-on effects in the forensic process and, potentially, in justice outcomes (Brown & Willis, 2009; Julian, Kelty and Robertson, 2012; Sangha, Roach & Moles, 2010).

Critical point two (correct expertise)

The second critical point is a decision made by police investigators about whether to call experts and determining which forensic experts can assist in the investigation.

Risk factors in critical point 2. In some cases it will be obvious to call in a forensic expert, such as when a victim presents at a police station and a decision is made to call a medical practitioner. However, it does not always follow that the right expertise is called at the right time or whether the experts can attend. For example, police investigators may call an on-duty medical practitioner to see a victim; the question is whether the police have the skills, or are expected to have the skills, to be able to differentiate a licenced medical practitioner with limited forensic expertise from a licenced medical practitioner with extensive training in forensic medicine. This can impact on injury interpretation, or lack of injuries, on an alleged victim in the absence of sperm/DNA. The issue would be whether the doctor with limited forensic knowledge would report there is no evidence to support the victim was assaulted.

Having experts attend scenes (whether they be primary or secondary) can be vital for effective investigations. It is also imperative that experts remain within their boundaries of knowledge and that the collection of evidence is not contaminated through flawed, outdated practices, or through limited knowledge as in the example presented above. What counts for expert opinion has been under scrutiny in recent years in relation to what the criminal courts regard as ‘having expertise’ (Edmond & Roberts 2011; McClellan 2009).² According to McClellan, with the increased reliance on specialised knowledge in society, the role of experts in the criminal justice system has expanded so that they now play a crucial role in many civil and criminal trials. One danger of relying on expertise is when experts act outside their area of knowledge and legitimate expertise.

Regardless of the motive for why people act beyond their area of expertise (whether it be self-interest or wishing to assist the police investigation), the outcomes for justice can be less than optimal.

Critical point three (timely submission and effective triage)

The third critical point is the timely submission of sexual assault kits, clothing and other forensic evidence to the laboratory for analysis, followed by effective case conferencing and/or inter-agency information sharing as appropriate and warranted.

Risk factor 1 in critical point three. The first risk is the timely submission of evidence following collection. This can be crucial for certain analyses where time can erode forensic traces. Evidence from Julian et al (2012) has found that police officers do not necessarily have an in-depth knowledge of forensic traces and erosion time frames for different types of traces. The work by Strom and Hickman (2010) showed that police in the US are also not always timely in their submission of evidence to the laboratory in serious criminal matters, especially for sexual assault kits. One issue that became apparent in our interviews with police and forensic practitioners during Interfaces 1 and 2, was that the longer the items remain unsubmitted the greater the chance they may become damaged, misplaced or lost; for example, where items of clothing or other physical evidence was lost/destroyed and were therefore unable to be examined for the presence of hair, DNA, glass, other trace evidence (for example, destroyed at autopsy, incinerated at the hospital, or misplaced at the police station; Kelty, Julian & Hayes, 2015).

Risk factor 2 in critical point three refers to a narrow range of forensic analyses being carried out (where analyses are limited to the ‘usual’ DNA, glass, fingerprints). Decisions about what to analyse, and the timeframe, are primarily carried out at the point of triage. Triage can be narrow, being carried out by one person using written reports from police investigators to prioritise a case (high to low) and to decide what to analyse. Triage meetings can also be in person, such as case conferences, where several different agencies will attend. Holding case conferences in homicide matters is routine across Australia (Kelty, Julian & Ross 2012); however in cases of adult sexual assault it rarely happens today, even in the most serious of cases.

When there is an absence of meaningful and regular communication between experts in the forensic sciences, forensic medicine, law and police this is called the ‘justice silo effect’. Justice silos mean that practitioners, even within their own organisations, operate in isolation, unaware of the role and expertise that other justice or health personnel can offer. A clear example of the detrimental effect of justice silos occurred in *R v Jama*. FJ was convicted solely on the basis of DNA evidence, with no other evidence presented at trial. In 2009, it became apparent that the original DNA swabs had been contaminated in the rape crisis centre. It is noteworthy that during the FJ investigation, there were some discussions between the police investigator and the DNA biologist about whether the DNA evidence may have been contamination. Neither the police investigator nor the forensic

² Also see *HG v The Queen* [1999] 197 CLR 414 and *F v The Queen* [1995] 83 A Crim R 502

scientists who discussed this issue contacted the forensic physician who had undertaken the sexual assault kit/examination of the alleged victim (Vincent 2010).

The silos created from the semi-invisibility of forensic experts is an ineffective use of forensic medicine and science because vital expertise is not called upon or acted upon when police make decisions about how to proceed with their investigations. The Interfaces 1 showed the practitioners most likely to be siloed in sexual assault cases were forensic physicians and nurses during both the investigative and pre-trial/adjudication process. The invisibility (i.e. not asked to investigative or pre-trial cases meetings) of these practitioners was not deliberate (Kelty et al. 2012). In many instances it was an omission by the police, forensic science and lawyers who did not invite them to meetings.

The flowcharts developed for this report show that in 2016 clinical medical results or expertise (such as sexually transmitted infections case notes/reports), forensic medical practitioners and sexual assault victim support and counselling services remain invisible and play a very limited, if any, role in triage processes or case prioritisation decisions in Australia.

Critical point four (forensic analysis reports)

The risk factor in critical point four is the readability of forensic reports. Recent research by Howes, Martire and Kelty (2014) has suggested that many police officers find the written reports from forensic scientists (specifically DNA and glass reports) to be overly complex, dense and not user-friendly with forensic science reports being written more for a scientific peer audience than for police or lawyers. This research has shown that when police 'know' the scientists involved they feel more able to ring the scientist and ask what the forensic results mean. Police are often left with the problem of not knowing whether forensic results will support an arrest and charge or not. Similar results were noted in the Interfaces 1 project where police and lawyers stressed their difficulties in understanding medical reports detailing medical examinations (Kelty et al, 2012).

Current research has found that forensic science and medical reports are user-friendly and understandable to colleagues within a field but are not user-friendly or understandable to personnel working outside the field. For example, forensic medical reports are understandable to forensic and clinical medical practitioners but not to police or lawyers or persons outside medicine (Howes et al, 2014; Kelty et al, 2015).

This risk factor is problematic for two reasons. First, each field develops the guidelines for structure and content of their reports. Therefore even if a field views their reports as professionally drafted and with content reported according to discipline knowledge it does not mean that the report is end-user friendly. Second, findings from Interfaces 1 showed that unless people know each other, or have met, they are less likely to converse with each other by email or on the telephone. It follows that unless a police officer or lawyer knows a forensic practitioner they are unlikely to ask them to state in plain terms what they are trying to say in a report. This is especially of concern for practitioners who are already siloed in the justice system, such as clinical (hospital) and forensic medical practitioners.

Potential feedback loops in sexual assault cases (child and adult)

During the data collection for Interfaces 1 and 2, three feedback loops were identified by practitioners as suitable opportunities to provide a mechanism for practitioners to receive feedback on the quality of their work.

Feedback 1 and 2 would be standardised feedback loops occurring during the investigative and adjudicative phases of adult and child sexual assault. The third feedback loop would occur during post investigation non-specific practice improvement groups meetings.

The feedback loops are not intended to be onerous, and under no circumstances is it suggested that feedback loops could replace the value of attending practice improvement groups or the opportunities for practitioners to meet face to face.

The feedback loops are discussed on page 19.

Regardless of delivery method, the suggested feedback loops (discussed below) need to be integrated into the investigative or adjudication process of adult and child sexual assault matters.

Without feedback loops between police and lawyers and forensic experts any problems that impact negatively on the reliability and quality of forensic evidence will not be addressed adversely impacting on court outcomes and economic efficacies within police and forensic agencies.

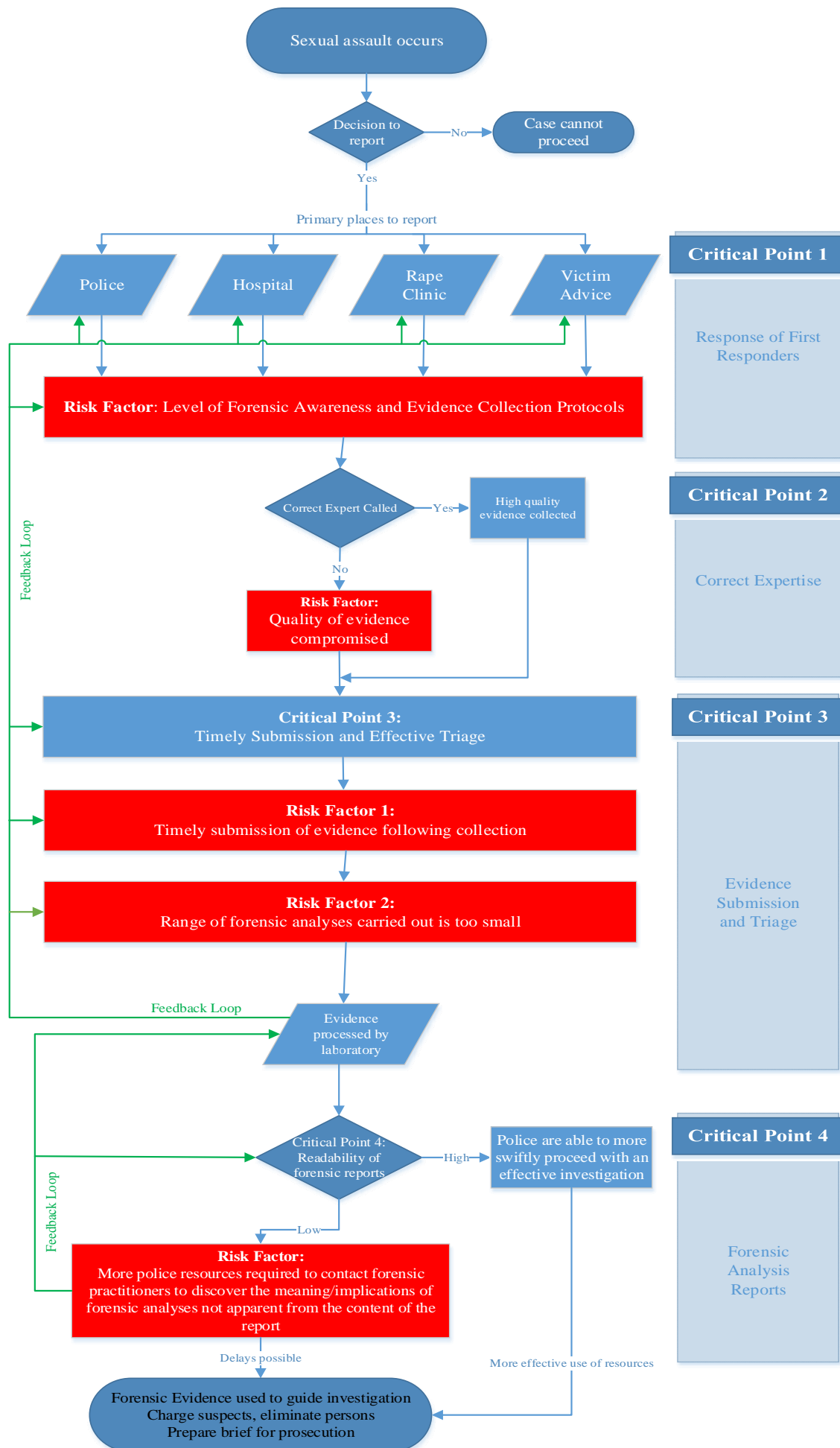


Figure 1. Critical points, risk factors and feedback loops in the use of forensic medicine and science in adult sexual assault investigations.

Output 2. The flowchart (child sexual abuse)

Critical points, risk factors and feedback loops in the use of forensic medicine and science in child sexual abuse occurring in metropolitan centres

The flowchart presented for Output 2 of this report was developed to highlight the critical points in the investigative phase of child sexual abuse investigations. The data used to develop the flowchart was the same or similar sources as discussed under Output 1.

Of note, the flowcharts presented here relate to cases where the collection of forensic and medical evidence is still feasible and where the forensic evidence potentially has evidentiary/probative value.

Many cases of child sexual abuse occur across Australia where victims do not report the assault until weeks, years or decades later. Victims in historical cases rarely keep forms of physical evidence that can assist the investigation, for example clothing or sheets.

The flowchart begins at the point where an alleged 'sexual assault' takes place. The flowchart ends at the point where accurate and high quality forensic science and forensic medical expertise is used either to charge or eliminate suspects and where forensic expertise is used in the decision to prepare a brief for prosecution. Each of the critical points shown in the flowchart is discussed below.

Critical point one (Response of the mandatory reporters)

Critical point 1 in the child sexual assault flowchart is fundamentally different to the one presented for adults.

Critical point 1 for child investigations relates to the experience of mandatory reporters. In each state or territory certain professionals or people who work with children and young people under 18 years of age are mandated by various state or territory legislative acts to report suspected child abuse. The reports stem from a belief that a minor is at risk, or has been sexually abused. Each state and territory has different reporting procedures and workflows for how mandatory reports are dealt with. The mandatory report shown in Flowchart figure 2 is a typical example of what is currently in operation in various states. Within critical point 1 there are two risk factors.

Risk factor 1 in critical point 1. The first risk factor is the level of knowledge required by practitioners or other people in order to reliably and accurately identify sexual abuse of a minor. Further, to have the required knowledge and understanding to consider whether to report a suspicion of abuse that may lead to a false report, or where a suspicion is not pursued for some reason where a real case of abuse remains unreported. This issue was raised by Mathews and Walsh in 2004; it remains a current concern (Mathews, Bromfield, Walsh & Vimpani, 2015) and is represented here as a critical risk factor.

Risk factor 2 in critical point 1. The second risk factor is similar to what was observed in the adult flowchart; that is, the loss of valuable forensic evidence through poor forensic knowledge and awareness. This risk can occur through lack of forensic knowledge or training of mandatory reporters, especially for practitioners or people where knowledge of forensic expertise or evidence is beyond their formal education. For example, it could be reasonable to suggest that school social workers, teachers, GPs, child care centre staff will have very limited awareness of forensic evidence contamination, or the need to preserve evidence, such as not to bathe a child until a forensic examination has been completed. Although information is provided to mandatory reporters it is not known if the information has been fully understood by all potential reporters. Further, interviewees in this current project noted that even if forensic awareness training is provided, not all practitioners attend the training for which they have signed up.

Forensic awareness in this flowchart refers to knowledge of effective forensic science and medical evidence capture, timely collection and evidence management. For example, do all first mandatory reporters know to secure effectively both the primary scene (where the alleged incident took place) and secondary scenes (the victim, clothing and the alleged perpetrator/s, if known)? The philosophy or policies of organisations combined with a level of forensic awareness can impact positively or negatively on the effective collection of evidence from primary and secondary scenes. Over the past few years maintaining the integrity of the crime scene (including primary and secondary scenes, especially victims and alleged perpetrators) and the management of personnel in attendance has come to be seen as crucial. If the front end of a criminal investigation is not handled effectively, there can be significant flow-on effects in the forensic process and, potentially, in justice outcomes (Brown & Willis, 2009; Julian, Kelty and Robertson, 2012; Sangha, Roach & Moles, 2010).

Critical point two (forensic expertise in the mandatory reporting agency)

The second critical point closely relates to the risk factors presented above.

Risk factors in critical point 2. In many states and territories the personnel who review incoming mandatory reports often have extensive knowledge in criminal investigation (specialist child abuse police investigators) or knowledge of legislation involved in the removal and protection of children at risk (child protection practitioners). It does not follow that the review team will always have the sufficient forensic awareness to maintain the integrity of forensic evidence from primary and secondary scenes, especially given any time delays in the review of mandatory reports.

Critical point three (correct expertise)

The third critical point in the child sexual assault flowchart is the same as critical point two in the adult sexual assault flowchart (please refer to page 15).

Critical point four (timely submission and effective triage)

The fourth critical point is the timely submission of sexual assault kits, clothing and other forensic evidence to the laboratory for analysis, followed by effective case conferencing and/or inter-agency information sharing as appropriate and warranted.

These same risk factors that were noted in adult sexual assault investigations also occur in child sexual assault investigations. For an overview please refer to page 13.

Critical point five (forensic analysis reports)

The risk factor in critical point five is the readability of forensic reports. The same risk factor surrounding the useability of reports was discussed in the adult sexual assault flowchart; please refer to page 14. There is no Critical point five.

The potential feedback loops in child sexual assault cases is presented on page 24.

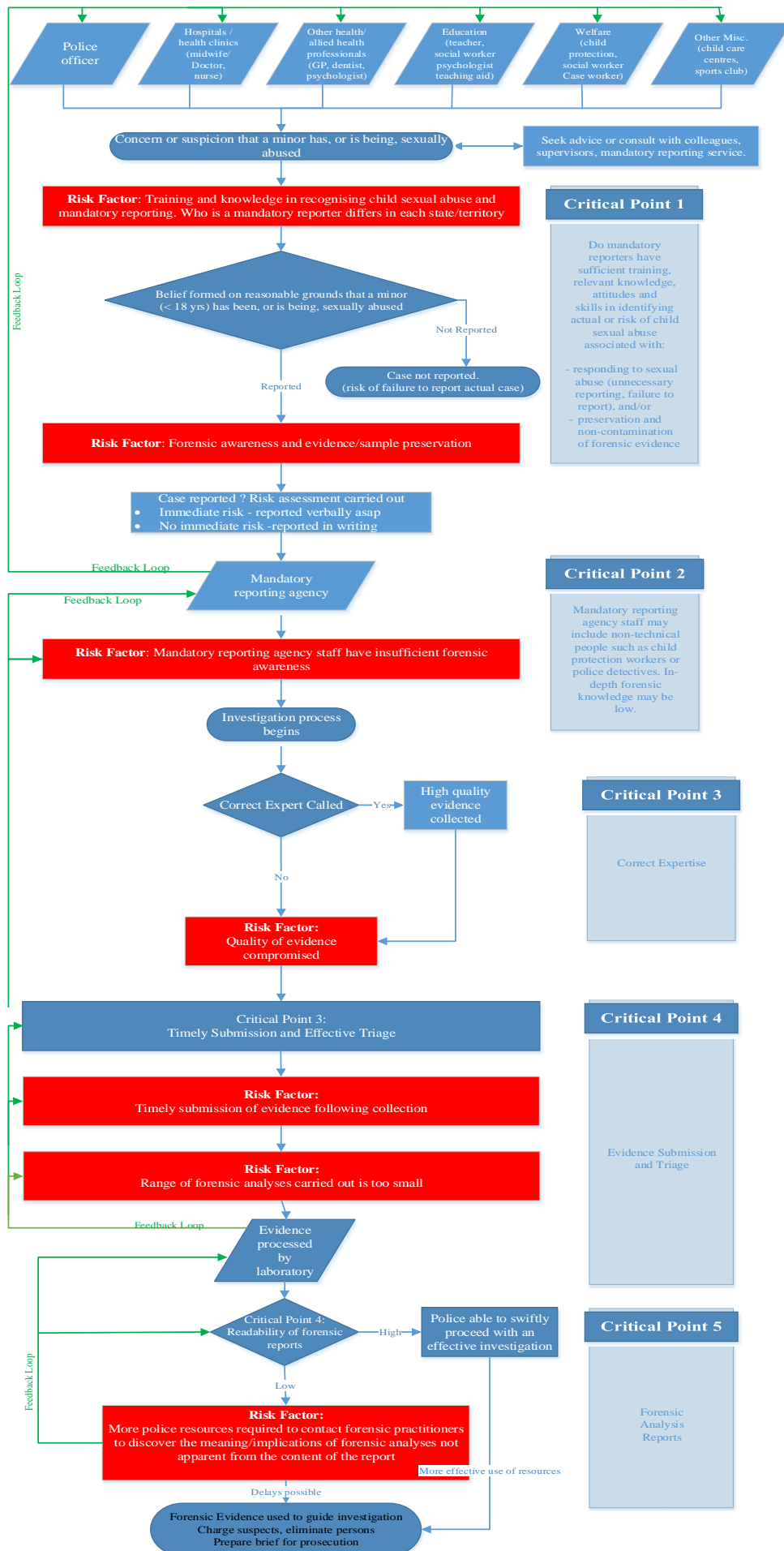


Figure 2. Critical points, risk factors and feedback loops in the use of forensic medicine and science in child sexual abuse investigations.

Suggested feedback loops in adult sexual assault and child sexual abuse investigations

1. Quality of the sexual assault kit/forensic evidence collected.

This feedback loop is specifically concerned with the quality of the forensic samples collected, including the contents of sexual assault kits, swabs, clothing, other physical evidence, CCTV imagery, computer data, fingerprints, shoe marks or other forensic samples, evidence labelling, packaging and wording of the analysis requests.

Suggested method to operationalise this loop. At the bottom of the forensic analysis request submission form for sexual assault kits and other forensic or physical evidence collected, the forensic scientist, clinical or forensic medical practitioner who collected the samples will leave their email address, or ID number if the feedback can occur via a forensic register. The scientist who carries out the analysis (or their team leader) will complete the feedback. The feedback would take the form of a few questions with tick yes/no or unsure responses. If appropriate a short sentence from the analyst or laboratory team leader for future practice improvements for the collection/packaging of samples could be included. The questions would provide an initial indicator of the quality of the samples collected and submission procedures. *This loop is not suggested to be an indicator of whether a case proceeded to court and the court outcome.*

This is the primary feedback loop requested by forensic and medical practitioners.

2. The usability of forensic reports by police and lawyers.

This feedback loop would provide police and legal practitioners (including counsel, magistrates, coroners) with the opportunity to provide feedback to field and laboratory forensic scientists and clinical and forensic medical practitioners about the usability, clarity and comprehension of their reports.

Suggested method to operationalise this loop. To facilitate the provision of feedback the delivery method for feedback should match the delivery method of the report. For example, if reports are delivered as a PDF by email, the feedback should be by return email. Similar to feedback loop 1, for loop 2 the feedback can take the form of a few questions with tick yes/no or unsure responses. If appropriate a short sentence to the report writer for future practice improvements. *Again this loop is not suggested to be an indicator of whether a case proceeded to court or the court outcome.*

3. Practice Improvement Groups (the value of championing them).

One of the unanticipated findings from Interfaces 1 was the growth of non-case-specific practice improvement groups (PI groups). Interdisciplinary PI groups met to share information and knowledge, especially informal and semi-formal groups across most of Australia. In 2012, what was apparent was that for many practitioners, regardless of their profession, attending non-case-specific working groups was an important mechanism to promote what their disciplines could offer and to network (therefore reducing the risk of agency and knowledge silos). The formation of these groups often occurred in two ways.

The self-initiated PI groups usually formed when a practitioner from an agency became aware of certain practices by other agencies that impacted negatively on forensic/police practice, and where this was in part a manifestation of the silo effect. For example, where deceased persons were collected from scenes by newly appointed private undertakers who had not been adequately briefed on procedure for the collection of bodies for forensic post-mortem and this lack of knowledge was creating problems in the morgue. This individual, rather than ignoring the problem, set up an informal working group where all personnel who attend suspicious death scenes within a given geographical area, met to discuss each other roles and what practices each agency did that was beneficial or problematic for the others. As X2, one of the participants who

had initiated a group like this commented, “*you don’t get things fixed by sitting down in your office thinking someone else will do it*”.

The second manner was as a direct consequence of recommendations from parliamentary inquiries or judicial reviews. As in the self-initiated groups, and even though this second type was formed to address recommendations (usually that agencies communicate), the actual setting up of these groups required the initiative and leadership of individual practitioners.

The benefits for practitioners of taking part in PI groups, regardless of profession, were more holistic in nature than purely to resolve practice issues. The holistic qualities of PI groups include.

- Ability to put a face to an email
- Understanding what other people do and their role
- Knowing someone allows you to ask those ‘questions’ you don’t like to ask strangers
- Having an actual point of contact when something looks wrong.

In 2015 and 2016, the number of opportunities provided for PI groups to meet appears to have diminished and does not have the same momentum as was observed in 2012. The factors responsible for this appear to be threefold, as follows:

- *Changes in staffing.* Where the original ‘champion’ of a PI group had either left or taken a new role and the person filling the role of the old champion did not see the value in continuing with, or meeting often as a group
- *Narrow understanding of the value of PI groups.* Where the PI group was formed to address one issue. Once the issue was resolved the group ‘leader’ felt the use of the group had ended and did not consider the more holistic benefits for other group members.

The third feedback loop occurs during PI groups meetings where practitioners can discuss practice improvement in the collection, analysis and forensic report writing issues.

A fundamental feature of PI groups is *collaboration*. The benefits of collaboration have been recognised by policing organisations in recent years with the development of new policing models such as partnership policing, multi-agency policing ((Fleming, 2009) and third party policing (Ransley & Mazerolle, 2009)). Approaches such as these enable practitioners to become aware of the expertise of other agencies while encouraging the cross-pollination of ideas to better address complex problems (see Bartkowiak-Theron, 2011). More specifically, in the area of sexual assault, police benefit from inter-agency and multi-disciplinary collaboration in a number of ways: increased knowledge about sexual assault and sexual assault victims leading to a shift in attitudes away from adherence to traditional ‘rape myths’ and improved reporting practices (Mathews et al, 2015); increased knowledge about the role of forensic evidence in the investigation and prosecution of sexual assault cases (Patterson and Campbell, 2012); and ‘a greater capacity to see themselves as partners alongside other agencies in supporting victim/survivors to engage in the justice system and to prevent further offending’ (Quadara, 2014: 264).

As PI groups are an effective and efficient way for collaboration and information-sharing to occur between agencies, with a flow-on effect in improved practices and reporting, it is important that they are championed by police organisations. As noted in the Interfaces 1 Report, two of the key elements of successful interagency collaboration are organisational support and recognition - especially by senior managers - of the value of these groups to the organisation.

Project recommendations

Based on the findings from Interfaces 2, a number of recommendations are proposed to improve the effectiveness of practice and investigations. The practice improvement recommendations are divided into child and adult investigations.

The recommendations: Child sexual abuse investigations

Recommendation 1: Enhancing awareness in mandatory reporters.

- To develop a brochure or brief informative materials that will enhance practice in mandatory reporters. The brochures would be developed to enhance mandatory reporters' knowledge of evidence of actual or risk of child sexual abuse and raise awareness of procedures that can ensure the timely collection and storage of forensic evidence.

Recommendation 2: Multidisciplinary teams in mandatory reporting agencies.

- To develop social science seminars to be delivered on-line or by videoconferencing for all new practitioners in forensic science, forensic medicine, law, and homicide and sexual assault squads that provide an overview of the criminal justice system including discussion of the end-to-end case flow charts developed in Recommendation 1. These seminars would be delivered to enhance the development of multidisciplinary, collaborative teams in the mandatory reporting agency so that, as well as child protection and police, they include forensic expertise.

Recommendation 3: Operationalise feedback loops for practitioners.

- To integrate the proposed feedback loops into the investigative and adjudication process of adult and child sexual matters.

In the child sexual abuse flowchart a number of feedback loops were suggested. These loops provide feedback to both the mandatory reporting agency and the mandatory reporters about the quality of their work. Regardless of delivery method, the feedback loops proposed need to be integrated into the investigative or adjudication process of adult and child sexual assault matters.

Without feedback loops between police, lawyers and forensic experts any problems that impact negatively on the reliability and quality of forensic evidence will not be addressed. This will adversely impact on court outcomes and economic efficacies within police and forensic agencies.

The recommendations: Adult sexual assault investigations

Recommendation 4: Need for a victim advocate.

- To assess the feasibility of a victim advocate and to determine in which agency or organisation the advocate would be best situated.

The findings from the adult sexual assault process showed that once an adult victim enters the criminal justice system there are few supports during the investigative stage that guides them through the forensic and investigative process. The support of the victims often falls to the investigative officers within sexual assault squads who provide a form of pastoral care. The role of a victim advocate was proposed by all practitioners in this project. The advocate would support the victim from the initial report up to the court preparation stage.

Recommendation 5: Wider collection of forensic evidence.

- To deliver training to police and forensic medical experts (nurses and physicians) on the value of forensic evidence other than DNA, the value of DNA in no suspect cases, and the value of DNA in nonstranger (i.e. acquaintance) sexual assault.

Recommendation 6: Operationalise feedback loops for practitioners.

- To integrate the proposed feedback loops into the investigative and adjudication process of adult and child sexual matters.

In the adult sexual assault flowchart a number of feedback loops were suggested. Regardless of delivery method, the feedback loops proposed need to be integrated into the investigative or adjudication process of adult and child sexual assault matters.

Recommendation 7: Multidisciplinary teams and practice improvement meetings.

- To ensure that Practice Improvement groups meet, on an informal or semi-formal basis, to share information and knowledge.

Attending non-case-specific working groups was identified in the Interfaces project as an important mechanism to promote what the various disciplines and agencies could offer and to network (therefore reducing the risk of agency and knowledge silos). The 'reciprocal knowledge' that develops is critical to successful collaboration between agencies and enhances the development of a multidisciplinary team.

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APPENDIX A: Literature Review

The Interfaces 2 project was informed by the following review of published research on the investigation and prosecution of adult and child sexual assault cases. This review identifies insights from prior research that are relevant to the effectiveness of forensic evidence in these cases.

Adult Sexual Assault

What is the value of forensic evidence in sexual assault cases?

The objectives of a forensic medical examination are ‘to detect, recover, and characterise the physical evidence and provide information about the crime to law enforcement investigators and the courts’ (Johnson et al, 2012: 193). The forensic evidence in sexual assault cases includes more than DNA. It encompasses:

- Biological evidence (i.e. DNA)
- Physical injuries
- Physical evidence (such as bedding, weapons etc.)
- Evidence from other forensic disciplines (e.g. toxicology)
- Emotional injuries.

In sexual assault cases, as in other offence types, the forensic evidence has the potential to provide more information than just the identification of the suspect. Physical evidence can:

- establish the elements of the crime
- reconstruct the sequence of events
- establish the identities of the victim and assailant
- corroborate or challenge witness statements and alibis (Johnson et al, 2012: 194).

Research has identified a tendency among police officers to focus overwhelmingly on DNA when investigating sexual assault cases often to the exclusion of other types of forensic evidence. In addition, research has also found that police often do not perceive the forensic evidence as valuable in the investigation of nonstranger sexual assaults (i.e. the majority of cases) because the identification of the offender is not in question. However, recent research by the NIJ has noted the loss of information resulting from decisions not to analyse forensic evidence when there is a known suspect. This research points to the loss of intelligence, particularly in the investigation and prosecution of serial crimes (Ritter, 2016).

The Investigation Phase

Research has shown that police investigators are increasingly aware of the importance of forensic evidence in the investigation of many sexual assault cases. A US study on the ‘Use of Forensic Science in Investigating Crimes of Sexual Violence’ claimed that:

Investigators have recognized the importance of preserving potential evidence associated with the victim, having the victim examined as quickly as possible after the event, collecting and preserving that evidence, and submitting the evidence to a forensic laboratory for analysis (Johnson et al, 2012: 193),

However, other US research has found that ‘the criminal justice system does not consistently *use* the data from forensic testing to guide investigations and prosecutions (Campbell et al, 2016: 6; emphasis added). This supports the findings from other studies on the impact and effectiveness of forensic science both in Australia (Julian & Kelty, 2015) and internationally (Strom and Hickman, 2010).

Analysis of FE in stranger and nonstranger cases

Research has shown that in sexual assault cases, decisions about whether or not to request DNA analysis are often made on the basis of whether the suspect is known or not known (Strom and Hickman, 2010). One of the most significant conclusions in the NIJ study conducted in Detroit was that there is considerable value in analysing DNA in *both* stranger and nonstranger cases. Past research has shown that ‘many rapists, in both stranger and nonstranger assaults, are serial rapists who have committed more than one assault’ (Ritter, 2016: 18). As noted by one of the researchers in the NIJ study:

In nonstranger cases ... if the assailant’s identity was known in Case A, police may not test the kit. Similarly, if identity was known in a separate crime, Case B, police may not test the kit. However, if A and B were both tested, it is possible they would match, indicating a pattern of serial sexual offences’ (Campbell, cited in Ritter, 2016: 18).

Overall, the NIJ study in Detroit concluded that there is merit in testing DNA in both stranger and nonstranger cases in terms of (1) the ability of profiles to be uploaded to the DNA database, (2) the likelihood of hits on the database, and (3) discovering the serial nature of some sexual assaults (Ritter, 2016: 14).

The benefits of analysing DNA in nonstranger cases lie in its (1) ‘forensic intelligence’ value when uploaded to the DNA database, (2) potential to identify and solve serial cases, (3) provide victims with the recognition that the collection of DNA analysis (i.e. the forensic examination) matters, and (4) symbolic value by signalling to the community about the justice system’s responsiveness to the crime of sexual assault.

The NIJ report also noted broader societal benefits including ‘enhanced police legitimacy or greater rates of victim reporting’ (Ritter, 2016: 21). This broader significance is also noted by Strom and Hickman who argue that analysing sexual assault kits in a timely manner ‘can increase the legitimacy of the justice process not only for victims but also for others that are impacted by these crimes’ (Strom and Hickman, 2016: 8).

Analysis of FE in no suspect cases

Research has found that police investigators may not submit forensic evidence for examination when a suspect has not been identified (Strom and Hickman, 2010). In a study that focused on sexual assault cases, 31% of law enforcement respondents reported that they did not submit DNA evidence to a laboratory because they had no suspect in the case (Lovrich et al, 2004, cited in Campbell et al, 2016: 6). Recent research by Patterson and Campbell (2012) identifies the negative consequences of these trends; in particular, the loss of information. In their study of the testing of sexual assault kits (SAKs) they found that:

DNA may be particularly important in some cases in which the victim does not know the identity of the assailant.... Of the 60 cases involving victims assaulted by strangers, 27 did not have SAKs submitted to the crime lab – a surprising finding given that the kit may have produced information about the assailant’s identity by entering the DNA sample into the CODIS database (Patterson and Campbell, 2012: 2269).

Importantly, even if the assailant’s identity was not discovered, they noted other benefits from analysing the forensic evidence:

Although this linkage may not yield the identity of the suspect, it can unveil important information about the offender’s pattern of behaviour, which could lead to the apprehension of the offender (Patterson and Campbell, 2012: 2269).

Adjudication/Prosecution

In 2002, Briody assessed how biological forensic evidence (FE) was used in 200 Australian sexual offence cases with reference to decisions to prosecute, guilty pleas and convictions. Of the 200 cases, 102 had DNA evidence. The results showed that the impact of biological FE at various stages depended upon other aspects of the case. DNA evidence did not significantly predict guilty pleas. However, with DNA present, cases were more likely to result in decisions to prosecute, to reach court, and to attract slight increases in sentence length. Rape cases were less likely to reach court when the defendant did not make a statement. The most important variable for explaining convictions was a confession to police. Juries were more likely to convict if tangible evidence was present. The prosecution was weakened, even with DNA, if the complainant used alcohol or drugs at the time of the incident (Briody, 2002).

In the United States, Johnson et al. (2012) conducted a comprehensive study of the use of forensic science in investigating sexual assault. They found that forensic evidence was a significant factor in decisions to prosecute. More specifically, they found that:

- prosecutors exercise a great deal of discretion and reject a significant percentage of rape cases at screening
- the actual charging of cases was predicted by the victim's report of the offense to police, victim receiving medical treatment, and *laboratory-examined evidence*
- prosecutors were more likely to file charges when the evidence against the suspect was strong, and *the presence of forensic biological evidence* was a significant factor contributing to a strong case against the suspect• prosecutors were no less likely to file charges if the victim and suspect were acquaintances, relatives, or intimate partners than if they were complete strangers. The forensic evidence was a relevant factor in both types of cases (Johnson et al., 2012: 213-4; emphasis added).

This research also identified the importance of DNA evidence in both no suspect cases and nonstranger or 'acquaintance' sexual assault (Johnson et al., 2012). The researchers point to the benefits of submitting DNA profiles to the national database because of the value of linking the subject's DNA to other offences (rapes or other crimes) committed by the accused:

Linking such multiple offenses together may convince prosecutors to file charges against an accused whose involvement in a single acquaintance rape may not be convincing enough to the prosecutor to proceed. ... (E)ntering an individual's DNA into (the database) also holds the possibility of linking him to future crimes he may commit where he sheds his DNA (Johnson et al, 2012: 215).

All these studies point to:

- the value of forensic evidence in sexual assault cases, including new or historical cases and stranger or non-stranger cases
- the fact that forensic evidence is not always submitted for analysis and the loss of information as a consequence
- the role of police in the forensic process, particularly in the decision to submit forensic evidence for analysis or not, and the extent to which this decision is based on a limited evidence base. It is often determined by 'traditional' police practices that are informed by stereotypes of sexual assault cases and victims, and the view that forensic evidence is of no value in no suspect cases (see White et al, 2015). That is, it is used predominantly to confirm the identity of a suspect in stranger sexual assaults.

Critical issues impacting on the effective use of forensic evidence

A review of the literature reveals a range of social and human factors that influence the effective use of forensic evidence in sexual assault cases. These are of particular relevance to different stages in the progression of cases from initial reporting through to prosecution. If forensic evidence is to be used effectively in the investigation and prosecution of sexual assault, it is critical that the victim participates in the full process. Given the high attrition rate in sexual assault cases, barriers to participation at any of these stages are significant.

Pre-reporting and reporting

Many studies, including the recent NIJ report, note that ‘most sexual assaults are not reported to law enforcement, and there is no forensic evidence for many assaults that are reported’ (Ritter, 2016: 28).

Knowledge and awareness of the value of forensic evidence among first responders is critical in the collection of forensic evidence and in maintaining the victim’s involvement in the criminal justice system. Traditional emergency department staff, for example, typically have limited contact with law enforcement and low levels of forensic awareness. As a result, US research has found that they are less likely to submit sexual assault kits to the crime lab (Patterson and Campbell, 2012). On the other hand, when victims seek help from rape crisis centres, this may reduce the barriers to their participation in the criminal justice system. This is because victim advocates often address ‘the common concerns that victims have about participating in the CJ process’ (Patterson and Tringali, 2015: 1987-8).

Advocates can help dispel common myths, particularly those that encourage self-blame. (D)ispelling myths can shift victims’ feelings of anger away from themselves and toward their offenders, which may serve as an impetus to participation in the CJ process (Patterson and Tringali, 2015: 1991).

Forensic Examination

Research has shown that the training and skills of personnel who perform the medical examination and the collection of forensic evidence are important (Johnson et al., 2012). Forensic medical practitioners (nurses and physicians) require specialist forensic training that includes training in the value of forensic evidence beyond the identification of the suspect. The NIJ study in Detroit found that, prior to 2006, ‘medical examiners were not trained in the potential usefulness of evidence in a rape kit. As a result the message the police often got from medical providers was “I don’t think this is going to be really useful to you” ’(Ritter: 2016: 10).

To address the problems arising from this limited knowledge, Sexual Assault Nurse Examiner (SANE) programs have been developed in the United States. SANE nurses are registered nurses who conduct medical forensic exams of sexual assault victims.

(SANE) Nurses receive specialized training in forensic evidence collection, sexual assault trauma response, forensic techniques using specialized equipment, assessment and documentation of injuries, *identifying patterned injury*, and expert witness testimony (Patterson and Campbell, 2012: 2262; emphasis added).

Importantly, SANEs collaborate with law enforcement. As Patterson and Campbell note:

SANEs provide ongoing case consultation with law enforcement, such as providing further information about a victim or case, explaining medical forensic evidence findings from the exam, and/or brainstorming about further investigational leads (Patterson and Campbell, 2012: 2262).

This ongoing case consultation between SANEs and law enforcement has been found to increase the investigational effort of law enforcement (Campbell et al, 2008 cited in Patterson and Campbell, 2012: 2263). For example, in relation to the submission of sexual assault kits (SAKs), researchers found that:

SAKS were almost three times more likely to be submitted when a law enforcement agency had a high level of engagement with the SANE program as when an agency had a low level of engagement. In this study, engagement was defined as an active relationship of ongoing consultation and collaboration. ... it is possible that a higher level of engagement places pressure on law enforcement to follow all evidentiary leads, including submitting the SAK for analysis (Patterson and Campbell, 2012: 2270).

Forensic evidence analysis

Police officers are involved in many of the decision-making points that sexual assault cases will go through as they progress in the CJS. The discretion that police officers have in relation to these decision-making points (for example, in determining whether a reported incident constitutes a criminal sexual assault) is an important step in the progression of the case. A study that examined detective decision-making in sexual assault cases:

Each of these decision-making points represent occasions in which incident, victim, and suspect characteristics can influence case outcomes. They also represent instances in which personal biases and attitudes can come into play because of the amount of discretion *individual* officers have when making decisions at each of these points. The individualistic nature of police decision making renders who is making the assessment just as important as the factors used by those officers (Alderden and Ullman, 2012: 5).

Where the progression of sexual assault cases is investigator-driven (that is, where a police detective is responsible for requesting forensic analyses including DNA), it is important that police officers understand the value of forensic evidence and the symptoms of trauma among victims. This is particularly important in times of budgetary constraint when traditional attitudes and myths about victims may influence decisions with respect to the analysis of FE. One of the lead researchers in the NIJ study noted:

DNA testing was expensive, and, frankly, resources available to police investigators were limited, which led to victim blaming and insensitivity – and for these and other reasons, victims often dropped out of the criminal justice process (Ritter, 2016: 12).

Where the decision is made in consultation with forensic scientists, it is equally important that the forensic scientists understand the value of the forensic evidence. Research on the submission of sexual assault kits concluded that decision about the submission of forensic evidence for analysis:

should be evaluated by multiple system personnel (e.g. supervisor, prosecutor, crime lab scientist) instead of relying on a single investigator. Jurisdictions should consider developing a protocol that outlines who should be consulted, as well as a decision-making tree to follow when deciding whether a SAK needs analysis, In addition, law enforcement personnel should be required to document their rationale when they do not submit the SAK (Patterson and Campbell, 2012: 2272).

Victim involvement

In the NIJ study, the Houston project found that ‘in 46% of the cases, the victim did not participate in the case after the SAK exam’ (Ritter, 2016: 15) and that less than one-third of the victims had

provided a sworn statement. The report noted that this was important ‘because police investigators indicated that, except in rare situations, cases do not advance without a sworn statement from the victim’ (Ritter, 2016: 15).

The NIJ report states:

In understanding the investigation and prosecution of sexual assault, it is important to understand that the victim’s participation is critical. As Wells says in his report on the Houston findings, “The lack of victim participation is an important reason why CODIS hit cases do not advance through the criminal justice system, so devoting time and resources toward improving victim engagement and participation may pay significant dividends that amplify the value of the forensic testing” (Ritter, 2016: 21).

Research has shown that developing victim-centred, trauma-informed protocols lead to more positive outcomes in terms of victim needs which have the potential to lead to higher rates of victim participation in the criminal justice system.

The NIJ defines these terms as follows:

‘Victim-centred’ means that the victim is at the center of all decisions regarding recovery and any involvement with the criminal justice system. The focus is on the victim’s choice, safety, and well-being, and the needs of the victim are everyone’s concern (Ritter, 2016: 24).

‘Trauma-informed’ means attending to the victim’s emotional and physical safety and using resources, services, and support to increase the victim’s capacity to recover. It means educating victims, service providers, and the community about the impact of trauma, which may cause victims to behave in ways that are confusing to them and which can lead to recollection of what happened coming slowly or in fragments (Ritter: 2016: 24).

Despite the benefits of a victim advocate, Patterson and Tringali’s (2015) research also found that health care and law enforcement systems do not always collaborate with rape crisis centres when providing services to victims. They suggest that ‘advocates may need to educate other systems about the value of the services they provide’ because ‘further understanding of advocacy’s role in this process (the CJS) may lead to increased inter-system collaboration which in turn could provide a more comprehensive, victim-centred approach to this pervasive social problem’ (Patterson and Tringali, 2015: 1995).

Multidisciplinary Teams - Collaboration and Co-location

One of the key findings of the NIJ research related to the value of multidisciplinary teams in addressing sexual assault. In particular, they noted the benefits of ‘increasing collaboration among the entities that work on sexual assault issues’ (Ritter, 2016: 6).

In Australia, Victoria Police has developed a new model of operation for sexual assault investigation that involves collaboration between ‘specialist teams ... responsible for investigation *and* victim support’ and co-location of all key services in a single building separate from police stations (Powell and Wright, 2012: 333). These ‘Multidisciplinary Centres’ (MDCs) were established in response to the Victorian Law Reform Commission’s (2004) final report on sexual offences whose recommendations included the need for: ‘increased specialisation of investigators; improved working relationships between key players; and a response that was more cognisant of the context of sexual abuse and the challenges facing victims’ (Powell and Wright, 2012: 334).

The guiding philosophy underlying ... the new service delivery model is that they enable more coordinated, efficient and specialised responses, thereby increasing victim reporting

rates, optimising victim recovery and facilitating high quality briefs of evidence (Powell and Wright, 2012: 334).

At the core of this model are specialist teams of investigators referred to as ‘Sexual Offence and Child Abuse Investigation Teams (‘SOCITs’) whose principal responsibilities include ‘sexual assault investigation, victim support and liaison, forensic interviewing of witnesses and suspects, and management of the Sex Offenders Register’ (Powell and Wright, 2012: 333). At the pilot metropolitan site, ‘the professionals servicing the MDCs included SOCIT investigators, counsellors and ... child protection workers. Further, each site contained facilities to conduct medical examinations of victims on a needs basis by members of Victorian Institute of Forensic Medicine’ (Powell and Wright, 2012) (i.e. forensic medical officers).

An evaluation of the pilot MDCs found that:

All of the stakeholders ... expressed at the outset (of the interviews) that the adoption of a multidisciplinary, ‘victim-centred’, ‘one-stop shop’ model of service delivery was a major step forward in the service delivery to victims of sexual assault, and towards maximising legal outcomes and victim wellbeing’ (Powell and Wright, 2012: 338).

Benefits of co-location

Powell and Wright (2012) identified a number of inter-related benefits of co-location:

- referrals between professionals, particularly between counsellors and police, had increased
- enhanced knowledge and rapport with other service providers
- ‘victims who are hesitant about reporting, due to negative stereotypes of police or uncertainties about legal process, can meet police informally in a supported environment prior to making a decision about whether to report offences’
- matters were dealt with in a more direct and immediate manner in part because ‘it is easier to schedule impromptu meetings or case conferences, which in turn facilitates rapid decision-making’
- more rapid information exchange
- enhanced collaboration during case management, both within and across organisations
- improved victim’s participation in and understanding of the various professionals’ roles’ (Powell and Wright, 2012: 338-9 and 341).

Importantly, the researchers note that:

Informal, as well as formal, networking was perceived to be critical for improving understanding of and respect for the unique roles and responsibilities of each partner agency, and for identifying precisely how professionals could assist one another (Powell and Wright, 2012: 339-340).

It was also recognised that ‘co-location in itself was not synonymous with good collaboration and that continued investment in building and maintaining relationships was required’ (Powell and Wright, 2012: 357). There was a need for regular team meetings, informal liaison and case discussions between professionals across organisations. The importance of ‘informal socialisation’ and exchange was also acknowledged (Powell and Wright, 2012: 348). As noted in other studies, ‘communication and collaboration are facilitated by personal familiarity, not just institutional contact’ (Waugh and Streib, 2006: 137).

Benefits of collaborative teams

Research in the US has found that where law enforcement departments collaborate with victim-based organisations there is a higher tendency to place a priority on investigating sexual assault cases and on submitting forensic evidence to the laboratory (Lord and Rassel, 2002 cited in Patterson and Campbell, 2012: 2262).

It has also been found that consultation between law enforcement officers and forensic scientists has benefits in terms of information-sharing that impacts on decisions about submitting physical evidence for forensic examination. For example, in one study it was found that:

Cases in which the victims engaged in postassault actions such as bathing were 25% less likely to have their kits submitted to the crime lab. This may be due to law enforcement personnel believing that postassault actions eliminate any possibility of finding useful evidence that may lead to prosecution. However, because it is possible to find DNA even when the victim engages in postassault actions, officers should consider consulting with crime lab scientists to determine whether the victim's postassault actions should play a role in submitting the SAK (Patterson and Campbell, 2012: 2270).

Benefits for police

One of the benefits of a multidisciplinary team is an increase in police officers' knowledge of post-trauma phenomena which leads to a better understanding of victims' responses. This is an important factor impacting on police officers' decisions to progress a case, including decisions to analyse the forensic evidence. As the NIJ report states:

Research on the neurobiology of trauma show that 'blunt presentation' – when a victim is not crying, for example can actually be a normal human response to trauma. Some police reports indicated that cases had been closed in Detroit – and sexual assault evidence was therefore not sent to the crime laboratory for DNA testing - because the victims' reaction was not what police thought it should have been (Ritter, 2016: 9).

Australian research has also noted the significance of police officers' attitudes towards victims and their understandings of victim behaviour as key factors influencing the decision to adjudicate (see, for example, Taylor et al, 2012).

Specialisation of police sexual assault investigators

In their evaluation of the MDCs in Victoria, Powell and Wright (2012) found that police professionals and members of the Office of Public Prosecutions 'overwhelmingly perceived that having a qualified police member undertake the entire investigation, from the initial statement to brief authorisation, ensured a more streamlined and user-friendly system for victims' (Powell and Wright, 2012: 338).

As well as maximising victim wellbeing, this more streamlined response had a positive impact on the collection of forensic evidence because it reduced loss or contamination of evidence. This is important in sexual assault cases because:

Although contamination of evidence is a risk with all offence categories, it is particularly problematic in sexual offences, where the victim's statement is usually the only available evidence (Powell and Wright, 2012: 343).

The specialisation of police in the SOCIT role also led to higher quality briefs of evidence. Members of Victoria Police and the Office of Public Prosecutions who were responsible for authorising and assessing briefs:

held that briefs were of a consistently higher standard compared to those received prior to the implementation of the SOCIT model, and that the charges proposed by SOCIT

investigators were less likely to be overturned or challenged (Powell and Wright, 2012: 344).

Prosecutors also welcomed the positive outcomes of the more specialised SOCIT model because it enabled the boundaries between the role of the investigators and the prosecutors to be maintained. In particular, they noted a reduction in the need for them to provide written and oral ‘advices’ which were often in relation to operational investigative decisions. As one prosecutor explained in relation to these requests:

It puts us in a very difficult position sometimes as prosecutors because we should not be privy to the investigative decision-making process which goes into the brief of evidence... And that’s where I think the SOCITs get it right more. You don’t get that degree of request for assistance on an operational basis because they’re more specialised. They’re going to make their own investigative decisions and they’re not relying so heavily on us to make some of the tough decisions. With the SOCITs, we’ve had a lesser degree of involvement in the investigative process, which is a good thing because it means they’re getting it right (Powell and Wright, 2012: 344).

Importantly, this change did not reflect poorer collaboration between investigators and prosecutors. On the contrary, prosecutors:

...reported that SOCIT members appeared *more* willing to consult with their agency at an earlier stage about the most suitable charge, which is entirely appropriate and saves a lot of time down the track (Powell and Wright, 2012: 344).

Powell and Wright’s evaluation of the pilot MDCs in Victoria found that a critical component of the success of this model was the strong organisational support and commitment that came from Victoria Police. The SOCITs were ‘being given the time, resources and professional development to investigate sexual assault cases properly’ (Powell and Wright, 2012: 345).

Forensic medical officers at MDCs

Despite the benefits of a co-located multidisciplinary team, Powell and Wright’s (2012) evaluation of the pilot MDCs in Victoria raised some concerns regarding the role of the forensic medical officer in multidisciplinary teams. They reported that:

...forensic medical officers ... held that the quality of their service is compromised if it cannot be offered on the campus or in the vicinity of a hospital or major health service site. Whilst the pilot site locations are set up with appropriate facilities to enable forensic medical examinations to be conducted on-site, medical professionals who service the metropolitan site expressed concerns about lack of medical management on-site and necessary restrictions on the functions performed at MDCs (for example, dispensing of medications, and the lack of immediate access to a hospital including an Emergency Department and other acute medical services) (Powell and Wright, 2012: 342).

The issue here is about finding the right balance between the need to eliminate travel to medical facilities and the need to optimise expert medical service delivery. In the words of one of the forensic medical officers they interviewed:

We need to further explore whether the medical people actually sit in this unit or not...I think everyone would agree that if you could find something which balances the ability to provide a service that’s of use and ease to somebody with the expertise and specialist nature of the work, and resources, and location, etcetera, then we’re on to something. For us, it’s about findings that balance’ (Powell and Wright, 2012: 342).

The forensic medical officers in this study also noted problems in relation to the availability of human resources:

Providing a medical response at the independent service site significantly reduces the pool of available medical practitioners who are willing and able to offer this service' (Powell and Wright, 2012: 342).

Conclusion

The benefits of collaboration through a multidisciplinary approach to sexual assault are clear in this review of prior research. This literature, together with the findings from the Interfaces 2 study, indicates the need for forensic expertise to be embedded into the criminal justice response to sexual assault. This can be achieved by ensuring that multidisciplinary collaborative models of service provision include forensic expertise. This would include specialised forensic training for police investigators as well as providing forensic medical nurses and forensic medical officers with specialised training in the uses of forensic evidence in the investigation and prosecution of sexual assault cases. This will enhance the effective use of forensic science in the investigation and prosecution of sexual assault cases through harnessing the benefits of reciprocal knowledge. Reciprocal knowledge is 'knowledge which is not restricted to an individual's own specific role (e.g. prosecutor, investigator, forensic specialist) but also sufficient knowledge about other people's role involved in an investigation in order to understand how to collaborate productively' (Ludwig et al, 2012). This could lead to:

A more nuanced dialogue about the complexity of sexual assault – one that emphasises effective investigations and effective prosecutions, *with forensic evidence as part of the process* (Ritter, 2016: 28; emphasis added).

Child Sexual Assault

The factors identified in the literature on the investigation and prosecution of adult sexual assault are of relevance to child sexual assault. However, there are some additional aspects of child sexual abuse that are relevant to the effective use of forensic evidence in the investigation and prosecution of cases.

Investigating and prosecuting child sexual assault cases

In Australia, research has shown that the numbers of incidence of child sexual abuse that enter the criminal justice system and that result in conviction are very small when compared with the numbers of people in Australia who are survivors of child sexual abuse (Quadara, 2014: 262). Approximately 8 out of 10 victim/survivors do not report to police at all and, in New South Wales between 1995 and 2004, fewer than 16% of the cases reported to the police resulted in proven charges (Cossins, 2010).

The gap between prevalence and attrition has been recognised in Australia which has led to 'an extensive program of reforms across Australian jurisdictions for both child sexual abuse and sexual assault (including adult survivors of child sexual abuse)' (Quadara, 2014: 263). Research has identified 48 distinct approaches that aim to improve both victim/survivors' experiences of the justice system and improve systems' outcomes (e.g., decreasing victim withdrawal, and increasing guilty pleas and verdicts) (Daly, 2011 cited in Quadara, 2014: 263).

Mandatory reporting laws

A key issue in the investigation and prosecution of child sexual assault is the low level of reporting. This raises important concerns about reporting among first responders and the introduction of mandatory reporting laws. There are supporters and critics of mandatory reporting laws.

Research on child abuse often does not distinguish child sexual abuse from other forms of child abuse, neglect and maltreatment (Mathews et al, 2015). Criticisms of mandatory reporting regimes suggest they lead to a focus on law enforcement (and the forensic investigation) and away from prevention strategies (see Mathews et al, 2015: 204-5). However, such criticisms are usually referring to prevention of all types of child abuse, neglect and maltreatment (Mathews et al, 2015: 204). Even critics of mandatory reporting in the field of child abuse acknowledge its significance in addressing child sexual abuse (Mathews et al, 2015: 205) and in particular in preventing repeat victimisation. As Mathews et al (2015: 205) note:

there appears to be more support overall for reporting laws regarding physical and sexual abuse; and more opposition to reporting laws regarding emotional abuse, neglect, and exposure to domestic violence.

Each state and territory in Australia has enacted ‘mandatory reporting laws’ as part of the system of responses to address child abuse and neglect.

Mandatory reporting laws are laws passed by Parliament that require designated persons to report certain kinds of child abuse and neglect to government authorities (Mathews & Walsh, 2014: 132).

However, there are significant differences between the state and territory laws that can lead to confusion and low reporting among mandated reporters.

There is also a public campaign to encourage the view that there should be a community response to child abuse and neglect to further encourage reporting by non-mandated reporters (Mathews & Walsh, 2014: 131). Non-mandated reporters includes those who have a duty to report suspected child abuse and neglect as a consequence of either the ‘duty to care’ or ‘duties under professional or industry policy’ (Mathews & Walsh, 2014: 131). Some concern has been expressed that this has led to an increase in unwarranted reports and an increased burden on the child protection system (CPS) that is already under-resourced (Mathews et al, 2015: 204).

Reporting patterns

With respect to child abuse and neglect, concern has been expressed that mandatory reporting increases the proportion of unsubstantiated (and therefore ‘unwarranted’) reports that overburdens the child protection system. However, the commonly-held assumption that all unsubstantiated reports are unwarranted has ‘been cogently criticised and shown to be misconceived’ (Mathews et al, 2015: 204).

In their analysis of South Australian official government data on child abuse and neglect from 2003 – 2012 (data on reporting by mandated groups such as police, as well as non-mandated groups), Mathews et al (2015: 7) found that:

Large numbers of notifications were not investigated This may suggest an element of unintended reporting, but it may also indicate genuine social need and reflect additional needs for resourcing at agency levels (Mathews et al, 2015: 7).

Furthermore, when examining notifications of sexual abuse by police, they found that:

Substantiations of sexual abuse are generally very low. Large numbers of notifications were not investigated (Mathews et al, 2015: 7).

Mathews et al (2015: 7) also found that non-mandated reporters made 47% of notifications of child abuse and neglect. They concluded that there is a need to enhance reporting practices and outcomes among both mandated and non-mandated reporters (Mathews 2015: 7).

Reasons for non-reporting

A variety of reasons have been identified for high rates of non-reporting, especially among mandated reporters. In their systematic review of the international research on the reporting of child abuse and neglect, Mathews et al (2015: 188) found that:

Apart from case characteristics, the major factors that appear to influence mandatory reporting are **reporter attitudes**, **reporter knowledge** (encompassing education and training), **reporter fears and concerns** about the effects of mandatory reporting, and **reporter experience with and confidence in child protection services** (CPS). Emerging areas of research also point to the importance of workplace support for reporting, and the wording of the reporting statute.

These findings point to the importance of education and training, communication and collaboration and feedback loops among those who are in a position to influence the detection and reporting of CSA.

As Mathews et al (2015: 190-191) note:

Many of these issues relate to reporters' perceptions of CPS roles and effectiveness. None of the included studies specifically investigated the impact of more effective communication between CPS and mandatory reporters and thus we do not know whether improving communication and collaboration could influence reporter perceptions of and confidence in CPS. Feedback mechanisms for mandatory reporters may be one way to create a communicative/collaborative alliance. Outside the field of child protection, the education literature indicates clearly and strongly the effectiveness of feedback (see for example Hattie, 2009). Feedback is linked to expectations, motivation, and task performance. Correctional review, focused on goals, and two-way feedback appear to be most effective. Extrinsic rewards are least effective.

These researchers conclude that:

There is a lack of rigorous Australian research on factors influencing mandatory reporting, especially for the professional groups whose reporting has on occasion presented challenges (e.g., police).

The benefits of a multi-disciplinary, multi-agency approach to CSA

Detection and reporting

The detection and reporting of CSA is the first step in the forensic investigation of CSA (Mathews et al, 2015: 187). This requires that agencies/actors for whom child protection (and the identification of abuse) is not their primary role become more aware of the valuable role they can

play. It has been acknowledged that detection and reporting can be enhanced through multi-agency collaborations.

As Higgins and Katz (2008 cited in Quadara et al, 2015:55) noted:

The challenge for these services is that child protection is not their “core business”, and often the families who are at risk of involvement in the statutory child protection system are not high priorities for their services. Only by working together in a multidisciplinary way can these services really come together to protect children.

The benefits of multidisciplinary teams in the investigation and prosecution of CSA was also acknowledged by Powell and Wright (2012: 339) in their evaluation of the MDCs in Victoria. The researchers report that:

As protective interveners, both police and the DHS are required to work collaboratively and to notify each other of cases where children are deemed ‘at risk’. Delays in response time due to DHS procedure have been a common source of frustration for police members over the years. In the old child abuse investigation model, police officers are required to notify a *centralized* intake team within DHS of any new referral, and the intake team subsequently refers the case to a particular team within DHS. In the new system, any ‘notifications’ requiring joint DHS–police investigation can be *directly* received by the DHS team located on-site. The more immediate referral procedure evolving from co-location was perceived by police and DHS workers to increase the efficiency of case management and victim wellbeing (Powell and Wright, 2012: 339).

Specialisation of police investigators

Quadara (2014: 263) identifies two key efforts that have been made in recent years to improve the justice system’s response in child sexual assault cases. They are (i) increasing the level of specialisation of police investigators, and (ii) improving collaboration among first responders, such as sexual assault services, child protection, police and forensic examiners.

The move towards the specialisation of police investigators reflects the need to challenge the stereotypes of sexual abuse and sexual abuse victims that continue to dominate police culture (see Winter, 2012) and the changes that have occurred in the cases being reported to police. As Quadara (2014: 263) notes in relation to CSA, ‘reported cases increasingly involve family members, historical incidents, ongoing sexual abuse, and adult survivors reporting abuse upon discovering the perpetrator abusing another child’ (see Daly and Bouhours, 2010).

The benefits of specialist training for police in CSA cases has been recognised in Australia:

An effective and appropriate investigative response requires a significant degree of knowledge about child sexual abuse and offender behaviours, and a high level of skill in conducting investigations and interviewing victims, witnesses and suspects. Thus specialist police responses have been established, such as the Sex Offences and Child Abuse Investigation Teams (Victoria), the Joint Investigation Response Teams (NSW), and the Sexual Assault & Child Abuse Team (ACT) (Quadara, 2014: 263).

Conclusion

In their Australian study, Quadara et al (2015: 66) conclude that:

Child sexual abuse is a complex, cross-policy and cross-sector issue. While there are many options for prevention, enormous commitment to prevention among a range of stakeholders, and agreement that child sexual abuse has long-term effects, there are some

important tasks to be done to underpin and coordinate this activity... (It is necessary *to have a shared framework* across research, policy and practice communities to guide these different activities (emphasis added)).

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