

FORENSICS UNDER THE MICROSCOPE

CHALLENGES IN PROVIDING FORENSIC
SCIENCE SERVICES IN QUEENSLAND

OCTOBER 2002



CMC Vision:

To be a powerful agent for protecting Queenslanders from major crime and promoting a trustworthy public sector.

CMC Mission:

To combat crime and improve public sector integrity.

Abbreviations

CMC	Crime and Misconduct Commission
CRISP	Crime Reporting Information System for Police
DNA	deoxyribonucleic acid
DPP	Director of Public Prosecutions
FSB	Forensic Services Branch
FSS	Forensic Science Service
NATA	National Association of Testing Authorities
QHSS	Queensland Health Scientific Services
QPS	Queensland Police Service

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FOREWORD

On 10 April 2001, the Court of Appeal in Brisbane upheld an appeal against a rape conviction when fresh forensic evidence established that the appellant was not guilty of the crime. After the appeal, aspects of the police investigation and the trial were referred to the Criminal Justice Commission (as this organisation then was) to determine whether criminal or disciplinary proceedings were warranted against anyone.

The Commission's investigation found there was no basis for criminal or disciplinary proceedings against any person. However, our investigation brought into focus the relationship between the Queensland Police Service and Queensland Health's forensic science services, revealing challenges in providing forensic science services in Queensland.

The CMC has a statutory function to help prevent misconduct. It may perform this function by analysing the results of its investigations and the information it gathers, and by providing information to the general community (ss. 23 and 24(a) and (f) of the *Crime and Misconduct Act 2001*). Hence, while the *catalyst* for this report was the Commission's investigation of a wrongful conviction, the *major purpose* of this report is to identify for wider public scrutiny those systemic concerns not addressed as part of the formal Commission investigation. Addressing the matters raised in this report may reduce the potential for a repeat of what the Court of Appeal described as a 'black day in the administration of criminal justice in Queensland'.

The first chapter of this report describes in some detail our investigation into the wrongful conviction of the appellant, and our reasons for finding no basis for criminal or disciplinary proceedings against anyone. The second chapter examines the state of forensic science services in Queensland and makes recommendations for their improvement so as to avoid similar miscarriages of justice in future. In so doing, the CMC acknowledges that forensic science has a unique history and place among Western systems of jurisprudence.

The issues identified in this report clearly require further examination and discussion. Many of them were consistently raised in the submissions we received from concerned stakeholders. Fortunately, Queensland has many motivated key stakeholders who are committed to improving the delivery and management of forensic science services for the benefit of the court system across the State.

Brendan Butler SC
Chairperson
Crime and Misconduct Commission

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SUMMARY AND RECOMMENDATIONS

Catalyst for this report

On 10 April 2001, the Court of Appeal in Brisbane upheld an appeal against a rape conviction when it decided that fresh forensic evidence proved the appellant was not guilty of the crime. After the appeal, the Director of Public Prosecutions referred aspects of the police investigation and the trial to the Criminal Justice Commission (as this organisation then was) to determine whether criminal or disciplinary proceedings were warranted against anyone. Much publicity was given to the matter and to some of the allegations.

Outcome of the Commission's investigation

The Commission's investigation found there was no basis for criminal or disciplinary proceedings against any person. On 29 January 2002, the subjects of complaints were informed by letter of this result, as was the Director of Public Prosecutions and the solicitor acting for the appellant. A media release advised the public of the result and indicated that a public report would follow setting out the Commission's conclusions in the matter. The Queensland Police Service was advised on 11 February 2002.

Purpose of this report

Although the Commission found no basis for any criminal or disciplinary proceedings, the investigation brought into focus the relationship between the Queensland Police Service and Queensland Health's forensic science services, revealing challenges in providing forensic science services in Queensland.

Hence, while the *catalyst* for this report was the Commission's investigation of a wrongful conviction, the *major purpose* of this report is to identify for wider public scrutiny those systemic concerns not addressed as part of the formal Commission investigation. Addressing the matters raised in this report may reduce the potential for a repeat of what the Court of Appeal described as a 'black day in the administration of criminal justice in Queensland'.

This report first of all details the steps in the Commission's investigation of the original police investigation and the conduct of the forensic examination of evidence, and then goes on to raise for discussion the systemic concerns identified by the agencies that deliver forensic science services in this State.

An overview of the Commission's investigation

The Commission's investigation focused on:

- (1) The allegation that the investigating officer had intimidated an important prosecution witness into making a statement that incriminated the suspect, and, linked to this, the suggestion that the investigating officer had ignored the possibility that the offender could be someone other than the suspect.
- (2) The circumstances that led to the forensic scientist involved in this case not examining the bedsheet taken from the complainant's bed following her complaint to police.

Findings related to the alleged intimidation of the witness and the conduct of the investigating officer

During the police investigation, a nephew of the suspect's made a statement to police that, in a conversation between himself and the suspect, the suspect had confessed to

the rape. However, during the course of the trial, the witness recanted this statement, saying that he had been intimidated by the investigating officer into making it. The investigating officer denied this allegation.

The allegation cannot be substantiated. The witness advanced many contradictory statements about the nature and extent of the alleged intimidation, and made no complaint of intimidation (against the police officer) either to the Crown Prosecutor or to Defence Counsel prior to trial. Furthermore, the Justice of the Peace who read the statement before M signed it denied that M had said that the original statement was false. There is no reasonable suspicion of official misconduct on the part of the investigating officer (or anyone else) over the circumstances in which M made his statement.

The suggestion that the investigating officer had ignored the possibility that the offender could be someone other than B must be considered in the context that the complainant had identified the suspect as the offender and has not resiled from that identification. The fact that the complainant's identification of B was belated, and that the totality of evidence identifying B was not strong, might have prompted an investigator to pursue all reasonable lines of inquiry in an attempt to confirm the identity of the offender. On the other hand, there were no obvious and productive further lines of inquiry. There has never been a suggestion that the investigating officer targeted the suspect as the offender when he knew, or ought to have known, that he was not the offender. In the absence of such evidence, it cannot reasonably be said that the investigating officer's actions (or inaction) amounted to official misconduct.

Findings related to the conduct of the forensic scientist

The Commission investigated whether the conduct of the forensic scientist in not testing the bedsheet taken from the complainant's bed, and in not initially identifying a DNA profile, could constitute official misconduct.

To constitute official misconduct, it would have to be established that the scientist's conduct was dishonest or lacked impartiality. It is not sufficient merely to show that he failed to conduct tests that might have exculpated the accused. It would have to be established that the failure to conduct these tests was done dishonestly, or lacked impartiality. Differences of professional opinion regarding the decisions the scientist made do not mean that he acted dishonestly or with partiality. On the contrary, he went to great lengths to obtain the results that led to the quashing of the conviction. Those efforts are inconsistent with any notion that he had earlier acted dishonestly or with partiality, nor are they consistent with any notion that he was attempting to cover-up perceived inadequacy in his work.

The evidence fails to give rise to a reasonable suspicion of official misconduct on the part of the forensic scientist.

Other allegations investigated

These allegations were:

- 1 that information about the suspect had been improperly released to the press
- 2 that an important witness had been intimidated by a police liaison officer into providing an incriminating statement
- 3 that the complainant's aunts had unduly influenced her to name her assailant
- 4 that the complainant had a sexually transmitted disease and this fact had been suppressed
- 5 that the basis for the suspect's arrest was improper and inadequate
- 6 that two potentially important people in the case were not interviewed by police
- 7 that a further attempt to intimidate a witness was made by allowing him to overhear a conversation about the punishment for perjury
- 8 that under-resourcing in the Queensland Police Service had caused the investigating police to act improperly.

The first of these allegations could not be productively investigated, and no evidence was found to substantiate numbers 2 to 7. The final matter was irrelevant as no reasonable suspicion of official misconduct on the part of the police involved in the criminal investigation was found. In any event, the sufficiency of resourcing involves government and departmental policy, and will rarely, if ever, give rise to a reasonable suspicion of official misconduct on the part of an individual.

Forensic science in the Queensland criminal justice system

Unquestionably, forensic science services, which in this State are provided by the Queensland Police Service and Queensland Health, present many important opportunities for shaping court outcomes. But, at the same time, the rapid development of these technologies and related services, as well as the rapid increase in their demand, have potentially outstripped the capacity of established systems for ensuring effective court outcomes.

This report illuminates the tension between the role of contemporary technologies and their potential to shape investigative processes, the management of forensic science, legal procedures and the criminal justice system more generally.

All involved parties have established procedures and general work patterns that are not easily modified. The **police** employ investigative practices that focus on individuals, the **public health system** has major commitments to hospitals and non-crime-related health care, while the **courts** rely on their own unique processes related to timely and informed decision-making. That these three vital organisations do not necessarily share the same strategic focus illustrates the challenges facing the development of an integrated forensic science service for the courts.

Material collected through a review of the literature, as well as the submissions received, revealed a range of concerns which, if addressed, could improve the efficiency of forensic science services in Queensland. These concerns are raised in this report to foster discussion and resolution among the key parties responsible for providing forensic science services in the State. Continued inattention to these concerns has the potential to perpetuate the challenges for individuals and courts dependant on forensic science services.

These concerns, which should not be regarded as exhaustive, relate to:

- police procedures for identifying, collecting and passing on items for scientific examination — indiscriminate collection of items, for example, can seriously overload scientific examiners, while unclear communication between police and Queensland Health scientists can have a detrimental effect both on efficiency and outcomes
- training for police investigators and senior crime staff — this is critical to the effectiveness of forensic science, but has cost and priority implications
- the roles of the QPS and QHSS in deciding what gets tested — the need for a more transparent decision-making process for prioritising forensic testing of evidence, and also the appropriate role of Defence Counsel in accessing forensic science services
- the need to make better use of information technology for record keeping and information sharing
- the challenge presented by increasing workloads and diminishing resources
- the need for a review mechanism to evaluate decision-making; for example, the rationale behind a scientist choosing to test certain items and not others is not currently subject to review.

Recommendations

Providing forensic science services for the courts highlights a series of complex managerial and systemic issues that, in Queensland, is compounded by the involvement of several bodies — the QPS, Queensland Health, and the Department of Justice and Attorney-General — as well as the representatives of the defendant. In the first instance, it is perhaps appropriate to assess whether the present mixed model of forensic science service delivery is preferable, and, if so, to take appropriate steps to improve its operations, reduce opportunities for administrative errors and enhance the services provided to the courts. Toward this end, the following recommendations have been developed for forensic science stakeholders.

Recommendation 1: That the QPS and QHSS collaborate on the preparation of protocols and guidelines to ensure the most prompt, transparent and effective means of relaying requests from the QPS to QHSS, and to develop strategies that will make the number of items submitted for forensic testing more manageable.

Open communication between the QPS and QHSS will raise awareness of organisational demands, increase understanding of the reason for certain testing requests, and lead to protocols and guidelines for determining appropriate levels of testing requests and tests.

Recommendation 2: That the QPS and QHSS collaborate on developing a coordinated and ongoing training program for key agencies involved in the delivery of forensic science services.

The best available training and training providers need to be used. There may be value in involving specialist groups outside QHSS. As well, training could be extended to include the defendant's representatives.

Recommendation 3: That an inter-agency working party, responsible to the Interdepartmental Coordinating Committee, be established to explore efficient work practices within and between all agencies involved in the delivery of forensic science services, and to consider other issues raised in this report.

Structured communication between the key agencies — including the QPS, Queensland Health and the DPP — along with consultation with all key stakeholders would lead to a coordinated forensic science service. Formalising inter-agency communication would improve planning, help identify overlapping and agency-specific goals and objectives, and develop a means for enforcing requirements between agencies. The working party could also look at increasing the usefulness of existing electronic database and communication systems. Reforms in this area will depend on the parties acknowledging:

- the importance of the security and integrity of information and data-management systems
- the need for appropriate access by the defendant's representatives
- the uneven levels of technological capital (in terms of existing hardware as well as experienced personnel) existing between agencies.

THE INVESTIGATION

OVERVIEW

On 18 February 1999, a 13-year-old Aboriginal girl from a Queensland country town told police that in the early hours of that morning she had been raped in her bed. The ensuing police investigation resulted in the arrest of a 28-year-old man, 'B', who was living in the same house as the complainant at the time of the attack. The prosecution case against B included evidence that the complainant had identified him as her attacker.¹

One of the first steps in the police investigation was the collection of physical exhibits. As part of that process, the girl underwent a medical examination, which included the taking of swabs from her genital area. Her clothing and bed linen were also collected. These physical exhibits were delivered for scientific examination to the Forensic Laboratory at Queensland Health Scientific Services (QHSS), Brisbane (often referred to as the 'John Tonge Centre'). A scientist, 'G', was assigned the task of examining the exhibits.

When G examined the complainant's vaginal and vulval swabs, he found spermatozoa, but initial testing failed to reveal the DNA profile of the 'donor'. The complainant's outer clothing and bed linen were not tested at that time because G believed they were unlikely to reveal evidence that would identify the perpetrator of the crime. (G's belief was based upon the fact that the suspect, B, had enjoyed unrestricted access to the complainant's bedroom, and, accordingly, the presence of his spermatozoa on those items would not necessarily prove his guilt. G gave evidence to this effect at B's trial.)

During the police investigation, 'M', a nephew of B's, made a statement to police that, in a conversation between himself and B, B had confessed to the rape. However, during the course of the trial, M recanted this statement, saying that he had been intimidated by the investigating officer into making it. The investigating officer denied this allegation.

On 17 August 2000, a District Court jury convicted B of the rape, and he was sentenced to imprisonment for seven years. He appealed against his conviction to the Court of Appeal on the grounds that the complainant's bedsheet had not been scientifically tested, and 'no other tests going to identify the rapist were undertaken'. G then undertook further DNA testing, which included examining seminal stains found on the bedsheet taken from the complainant's bed. G concluded that B had not been the donor of the seminal stains on the bedsheet. Upon further testing of the vaginal and vulval swabs, he was able to opine that 'there seems little doubt the same male donated sperm to the sheet and the vulval swab'. Upon reference to a database of known offenders, the identity of the donor was confirmed. It was not B.

On 10 April 2001, the Court of Appeal quashed B's conviction and directed an acquittal on the rape charge. The Court referred to the testing of the bed linen, which established '... a sufficient match between the male staining on the sheets and the spermatozoa to conclusively establish that the appellant was not the perpetrator of this

Legend

B: Man found guilty of rape and cleared on appeal.

G: Forensic scientist who examined the physical exhibits and whose evidence eventually cleared B.

M: Prosecution witness and nephew of B, who at first said B had admitted to the crime, then recanted, claiming he had been intimidated by police into making the statement.

S: Man shown by DNA evidence to have had sex with complainant.

W: Woman who had allegedly seen 'love bites' on the neck of S the day after the rape.

1 She did not immediately name B as the offender. At first, she said she was unable to identify her assailant. After some hours, she made a second statement naming B as the offender. At B's trial, the prosecution contended that the girl's initial reluctance to identify B was borne of timidity and embarrassment.

crime.' During the course of argument upon the appeal, Mr Justice Williams expressed concern at the possibility that the investigating officer had not had an open mind as to the identity of the offender, but, instead, had been determined to prove the offender was B.

As a result of these comments, on 11 April 2001, the Director of Public Prosecutions (DPP) asked the Chairperson of the Criminal Justice Commission to examine the circumstances that led to the wrongful conviction of B. The CJC's attention was drawn to the argument in the Court of Appeal and to the judgment of the Court.²

Having regard to the provisions of the *Criminal Justice Act 1989*, and the information contained in the DPP's letter, the CJC assessed the matter as giving rise to two issues requiring investigation. These were:

- (1) The allegation by M that he had been intimidated by the investigating officer into providing a statement falsely incriminating B, and, linked to this, the suggestion that the investigating officer had ignored the possibility that the offender could be someone other than B.
- (2) The circumstances that led to the forensic scientist, G, not examining the bedsheet taken from the complainant's bed following her complaint to police.

NOTE: On 1 January 2002, the Criminal Justice Commission (CJC) merged with the Queensland Crime Commission to become the Crime and Misconduct Commission (CMC). For ease of reporting, the word 'Commission' will refer to either the CJC or the CMC regardless of whether the particular event under discussion happened before or after 1 January 2002.

INVESTIGATIVE STEPS

Legend

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All witnesses considered relevant to these issues were interviewed by Commission investigators. These witnesses included police officers who had been involved in the criminal investigation, officers of Queensland Health and the Office of the Director of Public Prosecutions, B's legal representatives, and other civilians including teachers, relatives of the complainant and a justice of the peace. B and the witness M were also interviewed. As well, the Commission briefed the Victoria Forensic Science Centre to provide an independent opinion.

Issue 1: The conduct of the investigating officer

Some time after B had been charged, the investigating police officer was informed that M, who is B's nephew, had been heard to say that B had admitted responsibility for the rape to him (M). (A social worker employed by Queensland Health had received the information from the complainant's mother and passed it on to the investigating officer.) A formal written statement was obtained from M.

On 10 August 2000, M gave evidence at B's trial. At that time, M said he had been forced by the investigating police officer to sign a witness statement that falsely incriminated B. M explained that the officer had placed the statement in front of him and that he (M) had signed it. He said he felt intimidated by police and had been this way since he was young. M was declared a hostile witness by the trial judge, with the effect that evidence of the content of the written statement was placed before the jury.

The Commission's investigation disclosed the following:

- 1 On 9 December 1999, upon receiving the information concerning M, the investigating officer asked a police liaison officer to find M. The liaison officer told the Commission that M agreed to accompany him to the police station for

2 The DPP's letter contained two pieces of information that were inaccurate. Firstly, the letter incorrectly identified the donor of the sperm; and secondly, the letter referred to the failure of the John Tonge Centre to identify the presence of gonorrhoea in the complainant's blood. (Subsequent investigation revealed that there was no evidence the complainant was suffering from any form of sexually transmitted disease.)

formal interviewing. The liaison officer did not stay for the interview, but later drove M home. According to the liaison officer, M appeared relaxed during the journey home.

- 2 M made a written statement in which he claimed that B had said to him, 'I did that thing to [the complainant]'. The investigating officer had arranged for a Justice of the Peace (JP) to read the draft statement to M. The JP told the Commission that the investigating officer had informed him that M did not have a good understanding of the English language.
- 3 The JP met the investigating officer and M in the interview room of the police station. The JP informed M that his role was to protect M's interests and to assist him. He read the statement to M, asked him if he was happy with it, and whether anyone had forced him to make the statement. According to the JP, M said that he had voluntarily provided the statement and that he was happy to sign it. It is the JP's belief that M understood what was read to him. He said that M gave no sign of having given the statement under duress.
- 4 The Crown Prosecutor 'proofed' M at the start of the District Court trial. ('Proofing' entails a short discussion with a witness regarding the contents of the witness's statement. Generally, this is designed to confirm the accuracy of the document and to satisfy the Crown Prosecutor that the witness is willing to give evidence consistent with the statement.) At the time that the Crown Prosecutor proofed M, M did not question the veracity of the document.
- 5 The day after being proofed, M appeared upset and said that he was frightened about giving evidence. He claimed he had been threatened. The investigating officer contacted the Commission's Witness Protection Division seeking advice. (This is confirmed by the division's logs for 8 August 2000.)
- 6 At the Crown Prosecutor's request, M made another statement, dated 8 August 2000, in which he asserted he was frightened and did not wish to give evidence. He declined to say of whom or what he was frightened. Later that day, M made a further statement, describing three separate incidents: a threat he had received from B, a threat from his father (B's brother) and an assault upon him committed by five men. According to M, these incidents were attempts to stop him giving evidence against B.
- 7 According to the Crown Prosecutor, the investigating officer was asked to leave the room while these issues were discussed with M. The Crown Prosecutor asked M whether he had been threatened or pressured in any way to sign the first statement. M denied that he had.
- 8 During the trial, M's sister gave evidence on behalf of the defence. She said that M had told her that the investigating officer had assaulted him by pushing him around. (She also said that B could not have made the admission because he was in jail at the time he was alleged to have made it.) When he was interviewed by Commission investigators, M claimed that the investigating officer had threatened to 'set him up' with drugs (cannabis) if he did not supply the statement. (This was the first occasion this allegation had been made.) M also said that when the statement was being read to him by the JP, he had repeatedly said 'bullshit', but that the JP had ignored him. This allegation was put to the JP, and was denied by him.
- 9 When giving evidence, M's sister said that B could not have made the admission to M because B had been in custody at the relevant time and so was not able to be in 'a park', as suggested by M. (M initially said that the admission had been made during a conversation he had with B in a park shortly after B had been charged. The record reveals that B was taken into custody upon being charged and spent a lengthy period in custody before his trial. The possibility remains, however, that M was merely mistaken, and that the conversation — accepting it occurred — took place before B was charged. In any event, the issue was canvassed during the District Court trial and is not one that assists in determining whether or not the investigating officer acted improperly in his dealings with M.)

Legend

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W: Woman who had allegedly seen 'love bites' on the neck of S the day after the rape.

- 10 Defence Counsel told the Commission that he interviewed M before he gave evidence. At that time, M made no mention of the investigating officer threatening to set him up with drugs. Had the allegations been made at that time, they would have been raised by Defence Counsel in cross-examination of the officer during the trial.
- 11 The investigating officer denies intimidating or threatening M in any way.

The allegation that M was intimidated into providing his original statement cannot be substantiated. M advanced many contradictory statements about the nature and extent of the alleged intimidation, and made no complaint of intimidation (against the police officer) either to the Crown Prosecutor or the Defence Counsel prior to trial. The Justice of the Peace who read the statement before M signed it denied that M had said that the original statement was false. There is no reasonable suspicion of official misconduct on the part of the investigating officer (or anyone else) over the circumstances in which M made his statement.

Attitude of the investigating officer

The observations of the Court of Appeal as to the investigating officer's conduct (in apparently ignoring the possibility that the offender could be someone other than B) must be considered in the context that the complainant had identified B as the offender and has not resiled from that identification.

In the absence of scientific evidence positively linking B to the offence, the only evidence identifying B came from the complainant (whose identification was belated), and from M (whose account of an admission was unsupported).

The fact that the complainant's identification of B was belated, and that the totality of evidence identifying B was not strong, might have prompted an investigator to pursue all reasonable lines of inquiry in an attempt to confirm the identity of the offender. On the other hand, there were no obvious and productive further lines of inquiry. Furthermore, it has not been suggested that the investigating officer targeted B as the offender when he knew, or ought to have known, that B was not the offender. In the absence of such evidence, it cannot reasonably be said that the investigating officer's actions (or inaction) amounted to official misconduct.

Issue 2: The conduct of the forensic scientist

G conducted the forensic examination of the relevant exhibits. He prepared two written statements and gave evidence at B's trial. G told the Court how he had tested a number of vaginal swabs and had located the presence of spermatozoa. He attempted to match the spermatozoa to B's DNA, but was unable to profile any DNA apart from that of the complainant. This result was not unexpected because a higher proportion of female cells will often mask the DNA profile of the donor of the spermatozoa.

G did not examine the complainant's bedsheet and pillow case. He explained that he did not do so because the suspect, B, had ready access to the house, and 'even if I'd found a seminal stain, that could have been due to activity completely unrelated to the case at hand'. In cross-examination, G conceded that a test of the bedsheet may have discovered a 'foreign' DNA profile, which might have indicated the offender was someone other than B.

After B's conviction, his legal representatives asked G to do further testing. G tested samples taken from the complainant's fingernails, her outer clothing, and her bedsheet and pillow case. He also conducted further tests on the vaginal swabs. For the purpose of the proceedings before the Court of Appeal, G prepared a further statement detailing his additional testing. He was not called to give oral evidence.

G's post-trial testing found seminal stains on the bedsheet. He identified and tested spermatozoa in the seminal stains, finding a mixture of male and female DNA. He succeeded in profiling the male DNA.

Legend

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Further tests were then conducted on the vaginal swabs. This exercise involved no more than the persistent application and reapplication of tests on various areas of the swab sample in the hope that a DNA profile might emerge. The process eventually succeeded in identifying a male DNA profile on a low vulval swab (which had, on previous testing, revealed only a mixture of male and female DNA). The DNA profile matched that found on the bedsheet. The profile belonged to a man, 'S', whose details were recorded on a database of known offenders. G was then able to conclude that B had not been the donor of the seminal stains found on the bedsheet.

The Commission had to consider whether G's conduct in not examining the bedsheet (or in not initially persisting with tests on the vaginal swabs) amounted to 'official misconduct', within the meaning applied to that term by the Criminal Justice Act.

To constitute official misconduct, G's conduct had to amount to either a criminal offence or a disciplinary breach serious enough to justify dismissal. To be guilty of a criminal offence (e.g. attempting to pervert the course of justice), it would need to be established that G wilfully tried to suppress evidence of B's innocence, or that he wilfully attempted to manufacture evidence to implicate B.

G's explanation

In the statement provided for the proceedings before the Court of Appeal, G asserted that the seminal stains could not be dated — that is, that it was not possible to say whether the deposit had been made at the same time as the rape. Additionally, he asserted that the bedsheet showed signs of infrequent washing (i.e. it was dirty). G claimed that 'for these reasons the sheet was not tested before the trial.' (G had explained in his evidence at the trial that B's otherwise legitimate access to the complainant's house meant that the presence of a seminal stain belonging to B '... could have been due to activity completely unrelated to the case at hand'.)

In brief, it was G's position that, in light of the dirty state of the bedsheet and the fact that B resided in the same house, even if bodily secretions belonging to B could be found on the sheet, such evidence, on its own, could be met by an innocent explanation. G reasoned that the presence of DNA belonging to B would not have proven B's guilt,³ but it would undoubtedly have been used by the Crown to bolster the reliability of the complainant's identification of him as the offender.

After the Court of Appeal's judgment, G prepared a further statement (dated 26 July 2001), in which he referred to the inferences able to be drawn from the degenerated state of the sperm that he ultimately identified upon the bedsheet:

Sperm on the sheet were 'old' and degenerate. I cannot state exactly when they were deposited, but it was certainly not in close proximity to 18 February 1999 (the date of the offence). In my experience and opinion, they could have been on the sheet for some weeks (since last the sheet was washed). There was ample evidence the sheet was infrequently laundered. There is no evidence the degeneration of the sperm occurred whilst the items were in the care of the police or at the John Tonge Centre. In my experience, such degeneration would be exceptional and a rare event. It would only occur if the items were damp and there is no evidence of this.

G's statement also takes issue with the view that the Court of Appeal had apparently been encouraged to accept, namely that the DNA findings exonerated B:

Again, I cannot say if the deposition of (the sperm on the complainant's vulva) were the result of a consensual or non-consensual act.

None of this exonerates [B], nor any other male present, of rape on the night in question. Penetration without ejaculation may still have occurred; or penetration with ejaculation, if we accept the hypothesis sperm on the high vagina came from a male other than [S — the donor of the sperm ultimately identified by G].

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³ In other words, it does not discount the possibility (improbable though it may be) that the complainant had sexual relations with the donor of the sperm and had still been raped by B in the circumstances alleged.

The possibility of penetration without ejaculation by [B] was mentioned in my report of 9 April 2001, as was the possibility that the sex [between the complainant and S] may have been consensual. In the event, this seems not to have been taken into account by the Justices of the Court of Appeal.

G reiterated this view when interviewed by Commission investigators:

So the point is — the sheet never ever had the ability to implicate B or anyone else. The sheet only ever had the ability to say, ‘Hey, some sort of sex ... has taken place on my surface’. And because of difficulties in timing things exactly from the sheet ... it was never ever ... like its all right for the defence to say, ‘Oh, you should’ve done this, should’ve done that, should’ve done the other.’ But quite often, even if I had done all those other things, it wouldn’t have altered the bottom line. It wouldn’t have proven or disproven the case against B. It wouldn’t have proven or disproven the case against someone else.

Expert opinion suggests that a seminal stain cannot be ‘aged’ (or dated as to its likely date of deposit). The Commission sought the advice of the Victoria Forensic Science Centre, as expressed by Professor John Scheffer, BSc. MSc., Assistant Director (Biology):

I do not agree with the suggestion that seminal stains can be aged, although G does not actually state this in any evidence.⁴

The Commission also interviewed Mr Leo Freney, Supervising Forensic Scientist in the Forensic Biology Section at the John Tonge Centre, who said:

I’ve always said that it’s not possible to age a biological stain. You can age it in terms of other evidence, for instance in the Brampton Island case, the towel that was covering the body on the ... body was found was known to have been bought — there’s good evidence to say it had been bought the previous day in Mackay. And, therefore, I knew that the sperm or the semen present on the towel over the body was very fresh at the time. Okay, so you can age it like that but there’s no scientific test that will successfully age biological stains ... you can’t.

Like G, Mr Freney told the Commission that the results of the subsequent testing were not as significant as the Court of Appeal had been given to believe:

We know who the guy is that put the semen there, but we don’t know if that was a crime. We don’t know if that had any relationship to the charge concerned. All it really matters is the vaginal swab that’s all that matters.

... [G’s decision not to test the sheet] was a professional decision and in my mind the only thing that is really of high importance is the genital swabs, because that tells the story.

Mr Ken Cox, Forensic Pathologist, State Health Department, expressed a similar opinion.

G’s work generally

In determining whether G’s conduct in this matter could constitute official misconduct, two threshold issues required consideration, namely:

- 1 G’s decision not to test the bedsheet
- 2 G’s initial testing process (in light of the subsequent successful identification of a DNA profile by means of the application of further persistent testing).

To be official misconduct, it would have to be established that G’s decisions and actions were dishonest or partial.

Mr Freney describes the dilemma facing scientists when deciding what items to test:

[G] decided not to do it initially and his decision was based on the fact that it was old and dirty and you couldn’t rely on when it got there or anything about it. It

Legend

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W: Woman who had allegedly seen ‘love bites’ on the neck of S the day after the rape.

⁴ In his statement of 26 July 2001, G asserted: ‘I cannot state exactly when they were deposited, but it was certainly not in close proximity to 18 February 1999.’

couldn't possibly have anything to do in the real terms with proper scientific evidence, okay, that's why he didn't do it. But you can also have the other argument that says you should do everything and let the court decide. But if we did that I'd need about 200 scientists if we did every item, in every case and we did them in turn. You'd need a huge number. I don't say 200 seriously, but you'd need a huge number of scientists to do that sort of work. They must have professional judgement, that's what I'm saying.

Asked whether G should have tested the bedsheet when he could not get a positive result from the vaginal swabs, Mr Freney said:

There's no rule that says, 'yes, you should,' but he could have asked his colleagues for advice. He could have come to me. But anyway [I] tell you that he's done a lot of cases and this one wouldn't have stood out particularly ever from the others. These cases can become famous after the event, but you don't know any one of them can. You don't know that when you're doing it. I don't think [G]'s done anything particularly bad. My opinion is that when the court knew that there was a problem with the sample ... then the defence or the Crown or the Judge could have stopped it, and could have said, 'go home, have a final go.' They didn't. They continued on. I mean that's not our call, we've got no influence on them.

Mr Freney believed that G had acted reasonably in the circumstances:

But I think it was a perfectly reasonable way for [G] to act in that case and I tell you, he's an excellent case scientist. To ignore the sheets ... what does it mean? You know because it's so old and so dirty how could it relate to anything, but then again when you, in hindsight, you can see how it's done.

Mr Freney also believed that the initial number of tests conducted by G could not be the subject of criticism.

The Commission interviewed three other senior departmental officers, none of whom took issue with either the failure to test the bedsheet or G's methodology for the initial testing. Professor Scheffer, Director (Biology), Victoria Forensic Science Centre, said:

In general terms I am of the opinion that the case was handled adequately although I question the issue of not examining the sheet as [G] was in possession of the following information:

- he knew that the complainant was mentally disabled
- the medical notes [taken at the time of the medical examination] indicated that the complainant had not previously had sex
- he did not initially obtain any DNA results from the swabs,
- he had not received any information suggesting that the bed was used by anyone other than the complainant (only by inference that the suspect shared the house)

I do not agree with the suggestion that seminal stains can be aged, although [G] does not actually state this in any evidence.

On a positive note, it must be applauded that [G] pursued the DNA evidence on the swabs with such vigour. It is unlikely that the same number of repeat tests would have been attempted in most other laboratories. It was his persistence that ultimately led to the DNA result on the vulval swab that proved so important to the final outcome.

It is possible that some of the decisions made are as a consequence of under resourcing the John Tonge Centre. Attempting to meet short deadlines whilst handling multiple cases may lead to some testing not being performed. **Whilst I do not fully agree with [G]'s assumptions relating to the sheet I do understand his questioning as to the relevance of such testing.**

(Emphasis added)

On a full understanding of the evidence, it is clear that the presence of any seminal stain — whether or not the donor could be identified — on the bedsheet might have had some relevance to the issue at trial of B's guilt for the offence with which he had been charged. However, in determining whether G was guilty of official misconduct, it must be shown that his actions were not honest or not impartial.

Legend

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M: Prosecution witness and nephew of B, who at first said B had admitted to the crime, then recanted, claiming he had been intimidated by police into making the statement.

S: Man shown by DNA evidence to have had sex with complainant.

W: Woman who had allegedly seen 'love bites' on the neck of S the day after the rape.

Differences of professional opinion regarding G's decisions do not mean that he acted dishonestly or with partiality. As noted by Professor Scheffer, G went to great lengths to obtain the results that led to the quashing of B's conviction. Those efforts are, as a matter of logic, inconsistent with any notion that G had earlier acted dishonestly or with partiality, nor are they consistent with any notion that G was attempting to cover-up perceived inadequacy in his work.

The evidence fails to give rise to a suspicion of official misconduct on the part of the forensic scientist G.

OTHER ISSUES EXAMINED

In addition to the above allegations (which were distilled from the information provided by the Director of Public Prosecutions), representations made by B and his legal advisers not only referred to the same matters but also raised various further specific allegations. Some of those allegations touched upon issues involving evidence given at the trial by particular witnesses, as well as observations said to have been made during the trial by the trial judge. Issues of that type would not normally (and do not in this case) give rise to a reasonable suspicion of official misconduct. However, the following specific issues are (conceivably at least) capable of amounting to official misconduct and were, therefore, considered by the Commission. Those issues are set out below.

Release of information to the press

The Commission was told that an unknown person (presumably a police officer) had improperly released information to a newspaper suggesting that B was suspected of committing an unrelated offence involving indecent dealings with a child. It is true that a newspaper article (published after the Court of Appeal's judgment) suggested B may have been a suspect in an alleged sexual assault of a female. The possibility that the investigating police officer had improperly passed on this information to the newspaper was canvassed with the officer when he was interviewed by the Commission. He denied doing so.

Allegations of this type are notoriously difficult to investigate productively, and the information in question may have had one or more sources. Having considered the available evidence, the Commission has determined that the allegation is not one that is capable of productive investigation.

The intimidation of M by a police liaison officer

A police liaison officer allegedly intimidated the witness, M, in order to convince him to provide a statement falsely incriminating B. In light of the evidence as to M's statement to police, there can be no substance to the suggestion that M was intimidated by a police liaison officer. Indeed, when M was interviewed by the Commission, he made no such allegation.

(A related complaint was made to the Commission concerning the 'lateness' of the statement from the particular police liaison officer. The statement was obtained from him on 8 August 2000. There was no requirement for such a statement to be obtained any earlier.)

Role played by the complainant's aunts

The evidence disclosed that police officers had left the complainant for an extended period in the company of her two aunts after she had made the initial complaint in which she said she could not identify her assailant and before she made the statement identifying B as her assailant. It was therefore contended that the aunts may have suggested (deliberately or inadvertently) to the complainant that her assailant had been B, thus influencing and/or encouraging her to identify B. This issue was explored during the District Court trial, and was also as part of the Commission's investigation.

Legend

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W: Woman who had allegedly seen 'love bites' on the neck of S the day after the rape.

There is no reasonable evidence upon which to suspect that any person suggested to the complainant that B was the person who had assaulted her, nor that she should falsely identify B as her assailant.

Suggestion of a sexually transmitted disease

In the course of making her complaint to police, the complainant said that she had been a virgin at the time of the rape. This fact was reiterated in a written witness statement prepared as part of the police investigation. Although not admissible in the proceedings against B, the issue of the complainant's sexual history became relevant to post-trial events.

An unidentified employee of the John Tonge Centre had, it was suggested, concealed evidence that the complainant was infected with either gonorrhoea or syphilis — such evidence being contrary to the complainant's statement that she had been a virgin at the time of the alleged rape.

When interviewed as part of the Commission's investigation, G, who has previous experience in the science of sexually transmitted diseases, categorically denied the allegation that he had found evidence that the complainant had been suffering from a sexually transmitted disease (STD) at the time of the alleged rape.

G told the Commission that the vaginal swabs he had examined revealed evidence of a naturally occurring fungal infection — not an STD. G also asserted that, on the basis of the testing he had performed, it was simply not possible for him to say whether or not the complainant was suffering from an STD.

Shortly after she had complained to police, the complainant was taken to a local hospital, and was examined by a general medical practitioner.⁵ As is usual in matters of this kind, the medical practitioner took from the complainant a number of bodily samples (including the vaginal swabs that were later delivered to G at the John Tonge Centre). Details of the samples were recorded in a booklet called the *Sexual Offences Examination Protocol*, which formed part of the standard *Sexual Assault Investigation Kit* used by police when investigating suspected sexual offences. The medical practitioner's notes record that two samples of the complainant's blood had been prepared: one for 'forensic biology' and the other to enable testing for 'syphilis, HIV, hepatitis etc.'

Inquiries with Queensland Health revealed that the second blood sample had been sent to the Royal Brisbane Hospital, where it had been tested. The tests had returned a negative result for gonorrhoea and syphilis. Accordingly, there can be no substance to the allegations that the complainant was suffering from an STD, much less that evidence of such an infection had been suppressed.

Basis for B's arrest

The investigating officer, it was alleged, had charged B because of (or as retribution for) adverse dealings police had had with other members of B's family, and because, coincidentally, B had been seen by the investigating officer to be wearing a shirt similar to that described by the complainant as having been worn by her assailant.

The officer's sworn evidence at the District Court trial was that he arrested B on the basis of the information provided by the complainant, together with the evidence of her recent complaint and medical evidence confirming that a sexual assault had occurred. When interviewed by the Commission, the officer acknowledged that he knew B's family, and was aware that police officers had previously had dealings with B's brother. He said he had only ever seen B on one prior (unrelated) occasion, and that he had had no personal contact with B at that time. So far as the issue of the shirt was concerned, the officer said that, while he had noticed that B's shirt was similar to a shirt described by the complainant (as being worn by her assailant), the shirt was of a

Legend

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⁵ The medical practitioner in question was a foreign national who has since left Australia. The Commission was unable to contact him.

common design. The allegation that B had been charged for the reasons suggested amounts to no more than speculation. Furthermore, the issue was one that might properly have been raised and tested during the District Court trial or the appeal.

Failure to interview S and W

The suggestion was raised that police officers had failed to interview S (the donor of the sperm ultimately identified by G), or W, a woman who had allegedly seen 'love bites' on the neck of S on the day after the rape. According to the account provided by the investigating officer to Commission investigators, S did not fit the description given by the complainant of her attacker (and he was not regarded as a suspect). Nevertheless, because S had been present at the complainant's house on the evening of the offence, police made several attempts to interview him (albeit with a view to having him provide a witness statement in the case against B). Attempts to find S failed, and police were informed that S was evading them because of a fear that outstanding warrants for his arrest would be executed. A statement was eventually taken from S, prior to the District Court trial.

As far as the existence of 'love bites' is concerned, the investigating officer told the Commission he was not aware (at the time of his investigation) of a suggestion that S had been seen with 'love bites'. In fact, the woman who had supposedly seen the love bites was called as a witness during the committal proceedings. Her evidence was that she had not seen any 'love bite' on either B or S. The evidence fails to give rise to any reasonable suspicion of official misconduct on the part of the investigating officer or any other police officer.

Suggestion of perjury

The Commission was referred to evidence of a conversation between the investigating officer and the clerk assisting the Crown Prosecutor. This conversation occurred in the precincts of the courtroom during B's trial, and was said to have been audible to the witness, M. The conversation related to the maximum punishment applicable for the offence of perjury. It was contended that the conversation had been intended to intimidate M.

This issue was canvassed during the course of the officer's cross-examination at the District Court trial. His evidence (subsequently confirmed by the prosecutor's clerk during the Commission investigation) was that the conversation involved a self-effacing joke by the investigating officer against himself, and was borne of the various allegations of wrongdoing suggested of the officer during cross-examination. In the circumstances, the conversation between the officer and the clerk cannot be said to give rise to a reasonable suspicion of official misconduct.

Under-resourcing of the Queensland Police Service

The investigating police officers were said to have been prompted to act improperly in their investigation of the matter because the QPS is under-resourced and over-worked. As no reasonable suspicion of official misconduct on the part of the investigating police was found, the level of resourcing enjoyed by the QPS is irrelevant to the question of whether anyone had been guilty of official misconduct.

(The sufficiency of funding or resourcing involves government and departmental policy, and will rarely, if ever, give rise to a reasonable suspicion of official misconduct on the part of an individual.)

Legend

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OUTCOME OF INVESTIGATION

The Commission's investigation found there was no basis for criminal or disciplinary proceedings against any person. On 29 January 2002, the targets of complaints, the Director of Public Prosecutions and the solicitor acting for B were informed by letter of this result and further advised that the Commission had completed its investigation. The Queensland Police Service was similarly advised on 11 February 2002. A media release was also issued.

FORENSIC SCIENCE IN THE QUEENSLAND CRIMINAL JUSTICE SYSTEM

EXTENT OF THE COMMISSION'S INVESTIGATION

The Commission's investigation of this matter — the conviction of a man for rape that was proved to be flawed when further forensic evidence became available after his trial — was primarily directed at whether there was evidence of criminal conduct or other official misconduct on the part of any individual. Although the examination found that there was no basis for criminal or disciplinary proceedings against anyone, it nevertheless highlighted opportunities for preventive action to minimise the possibility of future miscarriages of justice arising from inadequacies in forensic evidence.

To avoid similar miscarriages, it is fitting to examine the procedures by which police and forensic science staff in Queensland decide what items will be subjected to scientific examination and how those examinations will be conducted. The accuracy, comprehensiveness and reliability of forensic science opinions provided to the courts depend on the quality and effectiveness of these procedures, and on how well the major players communicate with each other.

The Commission took the view that some issues arising from this case warranted further consideration. Those issues, which involve the assessment of possible improvement to systemic regimes, are as follow.⁶

- 1 The adequacy of:
 - police procedures for the collection and forwarding of items for scientific examination
 - information and/or instructions given by police to officers of Queensland Health Scientific Services (QHSS) about items provided for scientific and forensic examination.
- 2 Whether additional or specialist training would make it easier for police investigators to gather evidence pertaining, and to what extent QHSS staff, or staff from elsewhere, could assist with such training.
- 3 Clarification of the roles and responsibilities of police investigators and QHSS staff over the process of deciding what scientific testing of exhibits gathered in the course of investigations is conducted. Associated issues are whether there should be a review mechanism, and when and to what extent an accused's legal representatives should have input into the process and/or any review mechanism.

To conduct a comprehensive assessment of the issues involved, the Commission invited submissions from the following entities:

Aboriginal and Torres Strait Islanders Corporation for Legal Services
 Bar Association of Queensland
 Criminal Law Association of Queensland
 Director of Public Prosecutions

⁶ The Commission did not examine the adequacy of funding by the State Government to the QPS and Queensland Health for the provision of forensic science services.

Law Society of Queensland Incorporated
Legal Aid Queensland
Prisoners' Legal Service
Queensland Council for Civil Liberties
Queensland Health
Queensland Police Service

The remainder of this report:

- 1 describes the major systems in Queensland for delivering forensic science services — that is, the Queensland Police Service and Queensland Health
- 2 describes the dominant service delivery models in existence in Queensland, elsewhere in Australia and overseas
- 3 discusses some of the general and specific challenges affecting the delivery of forensic science services in Queensland.

DELIVERING FORENSIC SCIENCE SERVICES IN QUEENSLAND

In Queensland, forensic science services are delivered using the resources of the Queensland Police Service and Queensland Health. Each agency has a clearly defined role, with coordination provided by a committee of senior staff from the QPS, the Department of Justice and Attorney-General, Queensland Health, the Office of the Director of Public Prosecutions and Legal Aid Queensland. This body — the Interdepartmental Committee for Forensic Sciences — can develop combined approaches to important policy issues, negotiate changes to procedure and discuss issues of significance. Queensland Health intends to create various subcommittees to support the activities of this group.

Further coordination of forensic science services is provided by a Coronial Service Group comprising the Chief Magistrate and representatives from the Department of Justice and Attorney-General, Queensland Health Scientific Services and the QPS. This group pays particular attention to the scientific support provided to the Coroner's Court, addresses procedural and policy matters, and can act as a forum to discuss legislation and policy. The introduction of the post of State Coroner is likely to increase demands for coordination in this area of activity. All oversight bodies are advisory and consultative only and have no authority to enforce requirements or policies across agencies.

The structures, resources and responsibilities of the two major providers of forensic science services in Queensland — the Queensland Police Service and Queensland Health — are briefly described below. Figure 1 gives an overview of the steps involved in providing forensic science services by both these agencies.

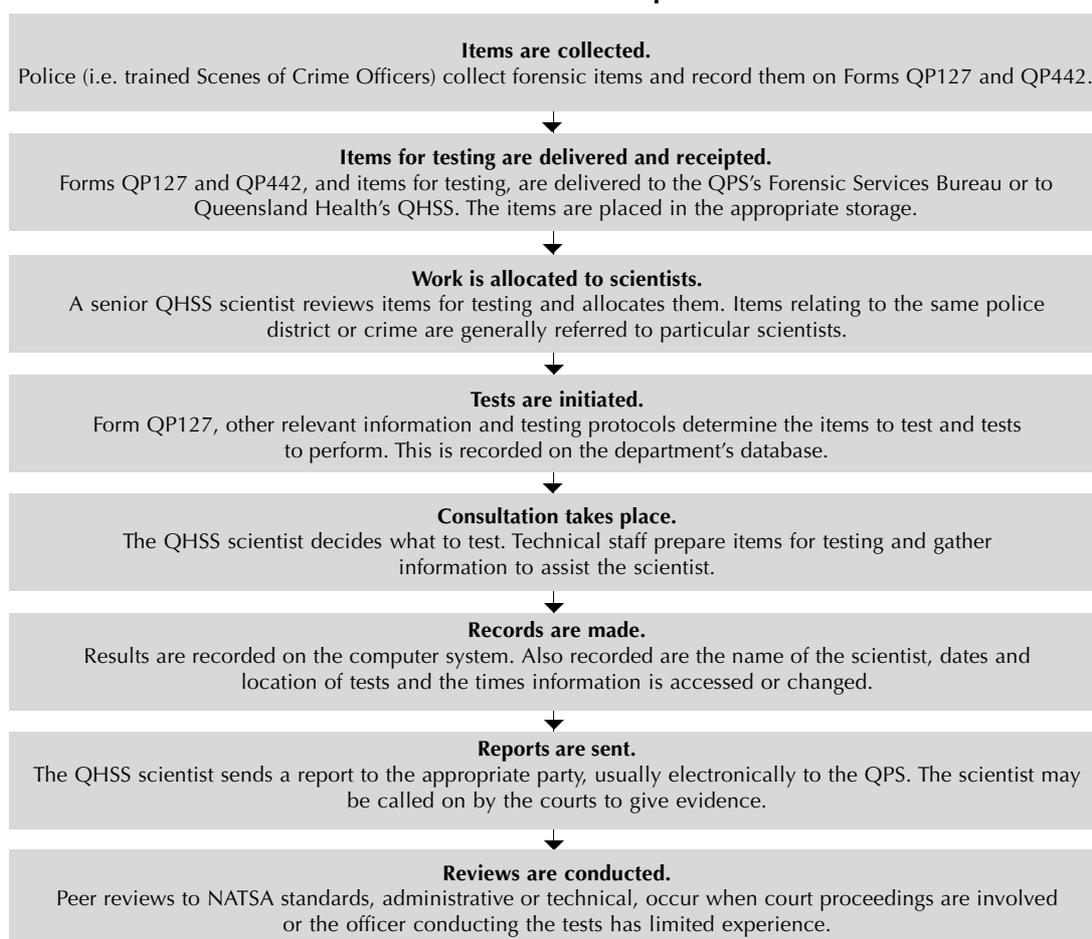
Queensland Police Service

The QPS has responsibilities for forensic services related to:

- crime-scene activity
- photographic and electronic recordings
- fingerprints
- scientific services (including analytical services, ballistics, document examination, physical evidence and major-crime-scene coordination)
- maintenance of the DNA database
- the recently established Standards Development Unit.

The Forensic Services Branch (FSB) carries out these functions and is responsible for crime-scene and laboratory examinations. (The organisational structure of the FSB is reported in Figures 2 and 3, p. 14.) Biological samples, fibres and soils are not examined by the QPS. Such materials are almost exclusively sent to QHSS for testing and analysis.

FIGURE 1. The forensics process



Organisational arrangements within the QPS

This section describes the various organisational arrangements in the QPS for the provision of forensic science services.

Deployment of staff

The QPS currently has 296 regional and FSB staff devoted to the delivery of forensic services. Forensic Officer staffing is determined according to projected workloads and planning, whereas Scenes of Crime Officers are deployed according to crime statistics, as well as projected workloads and planning.⁷ See Table 1 below for regional allocation of Scenes of Crime Officers.

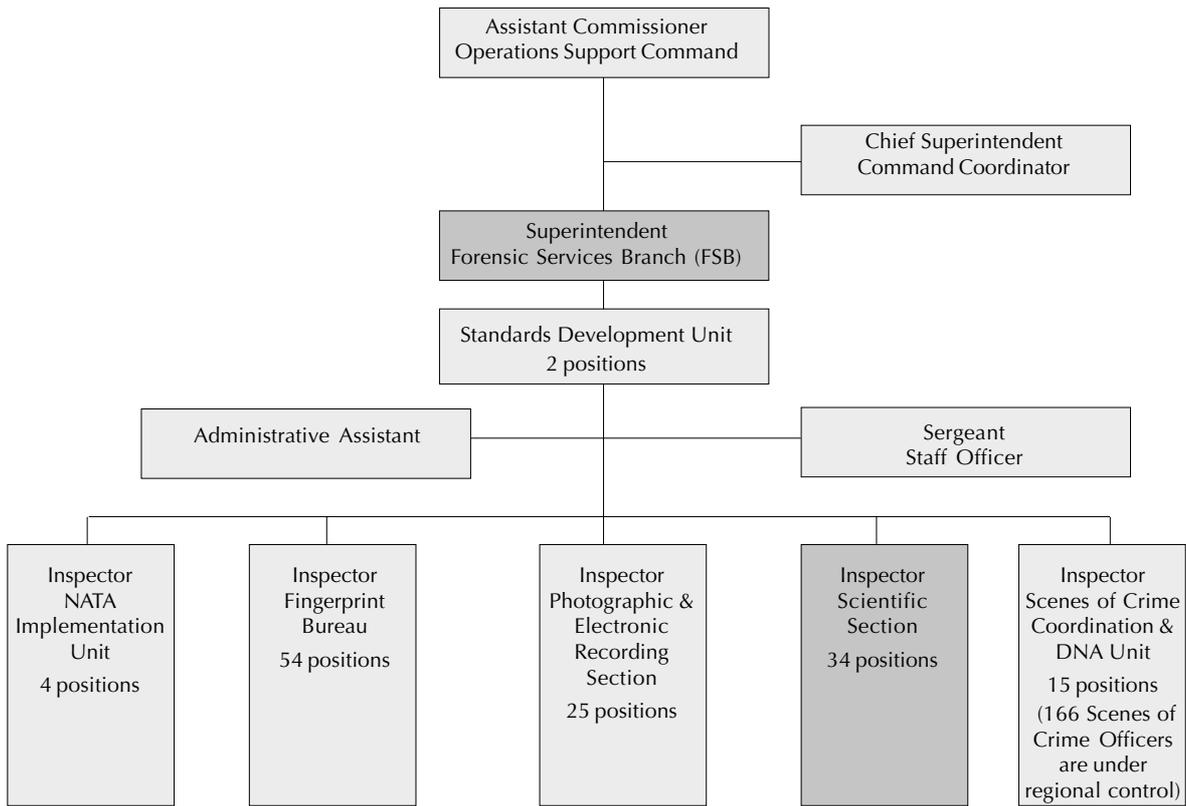
TABLE 1. Regional allocation of Scenes of Crime Officers, QPS

Far North Region	16
Northern Region	15
Central Region	15
North Coast Region	26
Metropolitan North Region	22
Metropolitan South Region	29
Southern Region	16
South East Region	27
Total	166

Source: QPS advice of 24 June 2002.

⁷ QPS advice of 24 June 2002.

FIGURE 2. Structure of the QPS Forensic Services Branch

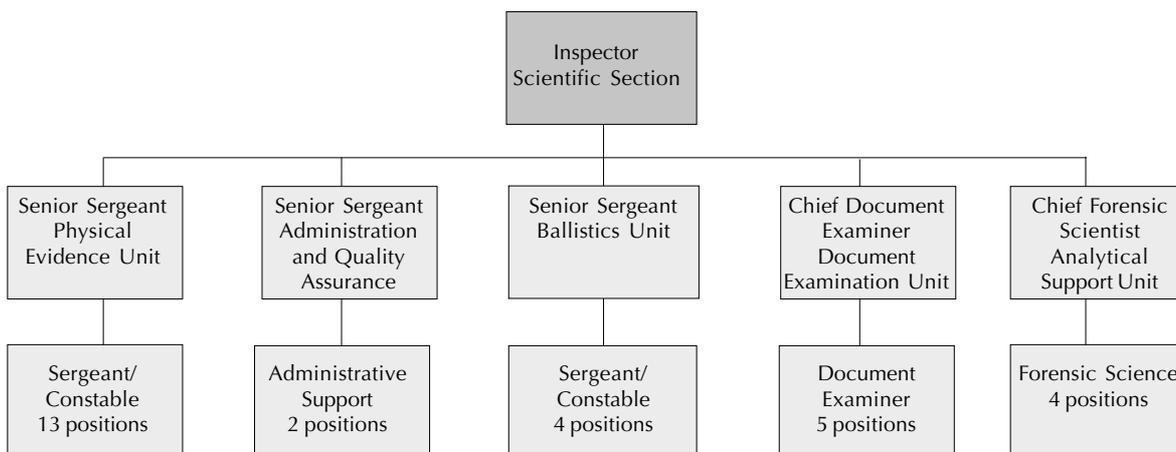


Source: QPS Bulletin Board, accessed 27 May 2002.

Notes:

- 1 The FSB has 130 staff.
- 2 Non-salaried funding for the FSB in 2001–02 was \$2.663 million.

FIGURE 3. Structure of the Scientific Section within the Forensic Services Branch



Source: QPS Bulletin Board, accessed 27 May 2002.

Note: FSB scientific and technical staff, except those in the Document Examination Unit and the Analytical Support Unit, are trained sworn officers.

When a major incident occurs in an isolated area, forensic staff (with the exception of ballistics staff) are first deployed from the region, with any shortfall in expertise being met from neighbouring regions. The FSB will provide support when other sources of forensic assistance are not available. All ballistics staff are based in the FSB in Brisbane and respond to requests for ballistic examinations throughout the State. The cost of their services is met by the FSB.

Accreditation

The FSB is presently seeking quality assurance accreditation from the National Association of Testing Authorities (NATA). NATA has defined the operating standards that a facility must meet to obtain and maintain accreditation.

Coordination and communication

The DNA Coordination Unit manages communication with Queensland Health Scientific Services and CrimTrac (CrimTrac maintains the national DNA database) over DNA matters. In a recent QPS Information Bulletin,⁸ officers were reminded to avoid overburdening QHSS and to consider the nature of the investigation in order to manage workloads, and to use restraint in deciding the number of items to be submitted for DNA testing.

Communication between the DNA Coordination Unit and investigators is paper-based via Form QP442. When DNA tests are required, investigators complete Form QP442, which is sent to the DNA Coordination Unit and then onto the QHSS. Samples not specifically requiring DNA tests are sent directly to QHSS or the FSB by the investigator. Form QP127, recently revised by the QPS, is required to be used by all officers submitting articles for forensic examination or testing. Officers requesting information must advise of the potential offence as well as the tests required (e.g. chemical testing, scientific analysis, ballistics, document examination, fingerprint, photographic examination). Lengthy separate attachments are sometimes required.

Other communication between external forensic laboratories, including QHSS, is usually by e-mail, and is used to update the Crime Reporting Information System for the police (CRISP) database.

Information technology and records

The CRISP database holds all relevant details under a unique number. In the case of DNA, electronic reports from QHSS are checked, matched with the DNA database and entered into the CRISP database. The DNA report recorded on CRISP may identify an individual or, where the offender is unknown, be registered as a scene match.

Training

Initial training for Scenes of Crime Officers (i.e. first-response forensic officers being sworn police whose task is to attend and examine crime scenes requiring fingerprint, photographic or scientific services) spans 20 weeks. The initial training curriculum includes fingerprint theory and practice, crime-scene examinations, evidence recording, photography and videography, scientific examinations, evidence preparation, court work, laboratory support work, administration, research, computer-database recording, and introductions to forensic pathology, forensic biology, facial reconstruction, computer imaging, forensic chemistry, odontology, osteology, skeletal recovery, forensic entomology and archaeology.

Training is also offered to other police officers in crime-scene-preservation techniques, fingerprint taking, watchhouse photography, interactive crime-scene recording and computerised facial identification (COMFIT).

All operational staff within the Scientific Section possess relevant tertiary qualifications in science. All staff appointed to operational posts within the Scientific Section are required by the QPS to obtain a Master of Science (Forensic Science), currently offered

8 Information Bulletin No 1: *DNA and Crime Scenes* (accessed 9 May 2002).

by Griffith University, Queensland.⁹ This course includes topics relating to the investigation of crime scenes, the provision of expert evidence, court protocols in respect of evidence, the examination of vehicles, microscopic techniques, the interpretation of blood splatter patterns, the evaluation of impression evidence, the investigation of fire scenes, and the evaluation of ballistic evidence.

Challenges

This section describes some ongoing challenges for police organisations in providing reliable and effective forensic science services. Research indicates that some areas of specific concern for police agencies are as follows.

Training and resources

The effectiveness of forensic science services can be compromised by budgetary constraints, poor communication between forensic experts and untrained officers, and an inadequate understanding among officers of the value of forensics (Police Review 1996).

Competing forensic science requirements

Applying traditional forensic-testing techniques has the potential to preclude further testing. Stefanovic (2000) reported that DNA was unable to be extracted from blood splatters because, during fingerprinting procedures, the fingerprint brush removed all useable blood.

Competing perspectives

Cox (1999), a forensic scientist, asserts that forensic analysis could provide more effective results if fewer exhibits were received. This position appears to conflict with detective work, which involves discovery and establishing proof. Detectives do not always know what they are looking for until facts emerge. Also, the requirements for forensic scientists may vary according to whether they are searching for clues or attempting a reconstruction.

A major challenge in this area relates to the competing and often conflicting aims within police organisations. Given that the support structure for the delivery of forensic services is often managed separately and is at odds with the goals and objectives of the investigative process, problems can emerge (Tilley & Ford 1996).

Applying forensic science at the crime scene

Salsbury, Hibberd and Irving (1994) reported that police forensic experts were not called to crime scenes primarily because police believed there was a lack of 'forensic suitable' material. Police officers may underestimate the value of certain evidence, which can significantly diminish the likelihood of successful prosecutions, as reflected in the testimony of a forensic scientist:

I don't think the police always use the correct parameters to make a decision on whether or not to call out a scientist to the scene. One of my cases at the moment would have benefited from my attendance ... The interpretation I can give now will not be the best evidence. (Tilley & Ford 1996, p. 15)

Charging for forensic services

In the UK, cost was the most common reason given for not submitting items for forensic examination. Cost may account for why forensic scientists are not regularly called to crime scenes (Salsbury, Hibberd & Irving 1994; Tilley & Ford 1996).

Comprehension of forensic reports

Ramsay (1987) found that two-thirds of police staff interviewed believed reports from forensic scientists were vague or obscure. The suggestion is that forensic scientists have a scientific and not a police or investigative perspective.

9 QPS Bulletin Board (accessed 22 May 2002).

Summary

The QPS plays a significant role in the provision of forensic science services in Queensland and has well-established procedures to ensure its forensic staff are adequately trained and qualified. Unlike the QHSS, which is a dedicated scientific establishment, the QPS performs this function in an organisation with diverse operational requirements.

The effective delivery of forensic science services clearly depends on police investigators understanding the scope, value and limitations of forensic science. To support investigators, jurisdictions need to have legislation, policies, structures and operations that allow forensic science services to be managed in a way that ensures public confidence in the court system.

Queensland Health

Queensland Health has forensic responsibilities for:

- biology (largely DNA testing)
- chemistry (often related to clandestine drug laboratories, illicit drugs and physical evidence)
- toxicology (largely related to identifying chemicals inside the body)
- pathology (focusing on Coroners' autopsies and related services).

It has facilities and staff at Queensland Health Scientific Services (QHSS) dedicated to delivering forensic science services for the courts. QHSS is independent of the QPS and provides specialised facilities and equipment. The structure of QHSS, which incorporates forensic science services, is reported in Figure 4 (next page).

The establishment of the office of State Coroner is likely to result in staffing and organisational change for QHSS, especially in areas under the control of the Chief Forensic Pathologist. A recent staff establishment matrix for forensic operations (under Queensland Health Pathology and Scientific Services) is reported in Table 2 (next page).

Although Queensland Health has laboratories across the State, specialised forensic laboratories and forensic pathologists are located only at the QHSS, where forensic science is one of a number of scientific activities undertaken. It also has a teaching facility for the University of Queensland and the National Research Centre for Environmental Toxicology. The John Tonge building on the QHSS site houses forensic pathology and biology laboratories.

The estimated operating cost for QHSS in 2002–03 is \$21.3 million, including \$6.2 million for forensic science services.

Queensland Health Scientific Services

Queensland Health states that the mission of its forensic science activity is 'to maximise the benefits of forensic science to the justice system of Queensland'. QHSS provides a range of expert forensic services including forensic chemistry, forensic biology, forensic toxicology and forensic pathology. Most of the chemistry work is conducted under the *Drugs Misuse Act 1986*, but QHSS may also undertake activities related to:

- post-blast explosive analysis
- soil profiling
- fibre analysis and comparison
- polymer analysis
- hydrocarbon profiling
- poisons analysis
- exploring causes of fibre failure such as webbing belt and strap failures
- general chemical analysis and profiling.

FIGURE 4. Structure of Queensland Health Scientific Services

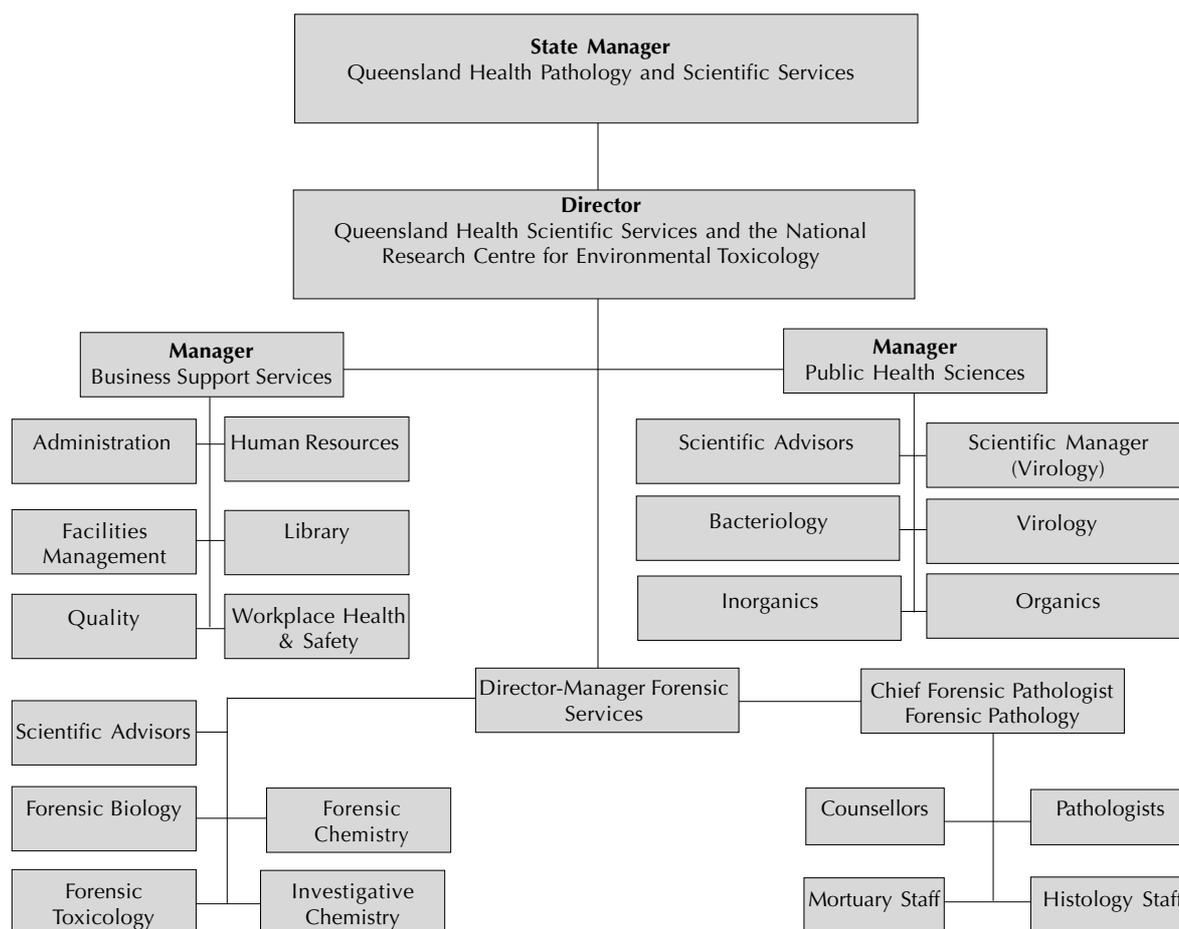


TABLE 2. QHPSS forensic science and pathology sections — staff establishment (as at 16 August 2002)

	Forensic Management	Forensic Pathology	Forensic Toxicology	Forensic Chemistry	Forensic Biology
Acting Director-Manager	Acting Chief Forensic Pathologist				
Admin. AO2	1				
Project Officer	1	1			
Chief Forensic Pathologist	0	1	0	0	0
Specialist Pathologists	0	3 est. 1.7 FTE filled	0	0	0
Path registrars (trainees)	0	2 est. 1.5 FTE filled	0	0	0
Supervising Scientists/Chemists PO5	0	1	1	1	1
Scientists & Chemists PO2-4	0	1	13 est. 11 filled	19 est. 17 filled	17 est. 16 filled
Counsellors PO3-4	0	2 established (+2 new)	0	0	0
Technicians TO2/3	0	2	5	2	9
Scientific Assistants 003/4	0	5 (Mortuary Supervisor & 4 Assistants)	1	1 est. (now vacant)	0
Admin. Officers AO2/3	0	3	0	3	2

In terms of providing forensic biology services, QHSS staff analyse bodily samples to produce DNA reports with the principal purpose of assisting investigators and the courts to understand the significance of evidence or the identity of an individual. Additionally, staff from QHSS help with forensic toxicology services. This includes analysing biological samples to screen for alcohol, drugs and poisons. Finally, in providing forensic pathology services, staff from QHSS generate reports into the causes of death when requested by a Coroner. Specifically, these services include reports into Coroners' autopsies and examination of skeletal remains, as well as forensic odontology, medical training for registrars and grief counselling.

Forensic testing and accreditation

Queensland Health regards accreditation as important for ensuring that identical tests performed in laboratories throughout the State produce similar results. Queensland Health Pathology and Scientific Services (QHPSS) laboratories were progressively accredited by the National Association of Testing Authorities (NATA) up to 1998. In 1998, all its laboratories met the association's accreditation requirements and became subject to its monitoring.

Scientists are expected to comply with NATA standards and generally-accepted research protocols. A protocol may suggest, for example, the appropriate number of tests to follow an initial negative result. The requirements of NATA, where they exist, will prevail over other requirements. Policy and procedures developed and followed within the laboratory comply with the international standards required for NATA accreditation and scientifically accepted protocols.

NATA's monitoring of laboratories is intended to ensure 'continuous quality improvement'. In cases where a detailed examination of the facility and its operations reveals departures from an established standard, NATA provides managers with an opportunity to explain the departures or correct them. Peer assessors are selected from equivalent laboratories across Australia, ensuring that communication on 'best practice' within the scientific community is achieved.

In its most recent audit of QHSS forensic science laboratories in July 2001, NATA recommended action for one management requirement out of 14. This recommendation was related to the control of records and was reported to have been corrected by 15 September 2001. NATA also called for action on 7 of 10 technical requirements. All requirements were met by 15 September 2001.

In June 2002, Queensland Health audited forensic science operations within QHSS and acknowledged the technical competence of the group. It noted, however, that staff morale was being undermined by workloads, adverse publicity and a perceived lack of support from management. To address these issues, the audit report recommended that changes were necessary in the areas of management, items received, case management, peer review and training. Some suggested changes require collaboration with other agencies.

In response to the audit report, Queensland Health changed the management structure of QHSS and established an action plan. The action plan identifies the importance of subcommittees to support the Interdepartmental Committee for Forensic Science in, for example, information technology and capital works requirements.

Summary

Queensland Health plays a significant role in the provision of forensic science services in Queensland. At present, a range of services is available from Queensland Health Scientific Services — from toxicology services to forensic pathology services. With its dedication to the accreditation and monitoring process, a key mechanism exists for providing QHSS with feedback about the appropriateness of its procedures and practices. Consequently, QHSS can respond and modify procedures when change is necessary to meet required standards.

MODELS FOR DELIVERING FORENSIC SCIENCE SERVICES

The preceding material reveals that arrangements for the delivery of forensic science services in Queensland involve resources from two large agencies with well-defined areas of responsibility. Each agency separately manages its forensic science functions. Queensland Health has its operations accredited by an independent body (NATA), and has regular external evaluation of its adherence to objective standards. The QPS is presently seeking such accreditation. Coordination of forensic science services occurs at a high managerial level by way of committees having advisory authority only.

Queensland's system of forensic science administration represents but one of many models available in Australasia and internationally. Models adopted have evolved according to resources, local requirements, efficiency, economy and the degree of separation desired between investigators and scientific staff. Moreover, models appear to differ in terms of whether services are managed by the police or other key stakeholders, such as government health agencies.

While various models exist for the delivery of forensic science services, it is important to recognise that specific models in any one jurisdiction often reflect local conditions. In deciding on an appropriate model, therefore, the range of necessary services, the available resources and the capacity to deliver such services need to be considered, as well as the historical organisation and delivery of criminal justice system services more generally, and the various fiscal and political circumstances in any particular jurisdiction.

A sample of each model is briefly described below.

Health-governed models

These are popular in countries such as New Zealand and Canada. In New Zealand, Environmental Science and Research Ltd (ESR), a Crown Research Institute, operates as a commercial entity under an independent board of directors. ESR operates under three-year contracts to provide police with one-stop forensic services. Under this arrangement, ESR charges police districts for services dependant on the fees associated with different types of testing. Following annual negotiations with ESR, Police National Headquarters determines its budget for forensic services and allocates funds to individual police districts accordingly. The government has authority to seek a return on its investment from ESR; however, is yet to do so, preferring to allow ESR to reinvest surpluses into its business.

While this model has the benefit of operational independence and clearly defined management, the funding may be uncertain, especially in circumstances where the forensic science service provider is small or operates in a competitive market. There is also the potential for scientists to distance themselves from the investigation, becoming more committed to their science than to outcomes. This could stand in the way of scientists and investigators developing a common approach to forensic science.

Police-governed models

These exist in several countries and parts of the USA. Certain aspects also exist in Victoria, the Northern Territory, Tasmania and the ACT. In Tasmania, three tiers of forensic science service delivery are available within the Department of Police and Public Safety (DPPS). Crime Response Units provide the first response. Forensic Services provides a higher-level crime-scene-examination function whereas Forensic Science Services Tasmania (FSST) provides biological and chemical analysis. The FSST is reported to be autonomous and provides impartial reporting to a Secretary, which in Tasmania is the Commissioner of Police. The model allows for close liaison between scientists and investigators, but the independence of scientists may be open to question.

Mixed models

As well as in Queensland, these models can be found in Western Australia and New South Wales. Mixed models (i.e. models governed by both the police and health) often appear in populous jurisdictions having well-developed public service structures. In Western Australia, the police DNA & Exhibits Coordination Unit (DECU) assesses, prioritises and categorises crime-scene exhibits according to the offence. DNA testing is done on a limited basis by the government's PathCentre. Police are currently developing a computer system to record and track DNA samples throughout Western Australia, with a link to the PathCentre. Laboratory staff will then electronically acknowledge the receipt of DECU samples and provide reports on DNA profile matches to the DECU.

Having forensic science services shared between agencies allows for the division of effort, specialisation and the placement of specialist staff in organisations able to support their professional needs. To be successful, the model requires well-developed systems of communication and a means of coordinating activity.

Board-governed models

These remove responsibility for the provision of forensic science services from the police and government departments to a single-purpose organisation. South Australia and the United Kingdom (excluding Scotland) use a board model.

In England and Wales, the Forensic Science Service (FSS) supplies services to police. The FSS is a non-profit organisation that has developed commercially to offer training, consultancy and scientific support to other agencies. The FSS has trading fund status, allowing it to retain surplus cash at the end of each financial year and carry it over to the next. In 1991, the FSS received permission to charge fees and, at that time, came under the jurisdiction of the Home Office. In 1996, the FSS merged with the Metropolitan Police Forensic Science Laboratory to become the largest agency of its type in the UK.

Board-governed models have perceived independence, but, being separate entities, may not have the financial security of forensic science units located in larger, more highly funded government departments. There is the possibility, too, that they may be relatively small and somewhat isolated. A major benefit is that successful models could become independent areas of excellence in forensic science.

CHALLENGES IN DELIVERING FORENSIC SCIENCE SERVICES IN QUEENSLAND

Material collected through a review of the literature, as well as the submissions received, revealed a range of matters that could be improved in the interest of a more efficient forensic science service in Queensland. These matters are raised here to foster discussion and resolution among the key parties responsible for providing forensic science services in the State. Continued inattention to some of these matters has the potential to perpetuate the challenges for individuals and courts dependant on forensic science services.

Police procedures for passing on items for scientific testing

Police procedures for identifying, collecting and passing on items for scientific testing are important in that they directly affect the quality and transparency of transactions and, ultimately, the reliability of evidence. Some specific aspects of this issue are as follows.

Collecting items

The effective deployment of Scenes of Crime Officers assists scientific staff in their work because scientists know that the items have been collected by people with appropriate and specialist training. For example, Scenes of Crime Officers can more readily identify forensically valuable evidence and can help investigators decide what samples to test and the scientific tests to request.

Evidence from the QPS suggests that they have a complement of qualified officers performing this crime-scene task. It is evident, nonetheless, that QHSS can be overloaded with items from a particular crime scene in cases where there has been only limited assessment of the forensic value of items submitted for testing. Thoroughness and discrimination at the crime scene have the potential to increase the efficient use of resources by reducing workloads and allowing for speedier results.

Information and instructions from police officers to Queensland Health scientists

Communication between police and Queensland Health scientists is particularly critical at the point of handover of items for testing. The Bar Association of Queensland agrees that communication is indeed crucial at this stage; however, it warns that there is a need to ensure that the communication is objective:

... care must be taken to ensure that QPS officers do not communicate the desired results. Communication of this sort must be documented and available for scrutiny by the Crown and Defence.¹⁰

There are no procedures for documenting communication between QPS officers and scientific staff *at the point of handover*. Critical communication could include the relevance of items submitted for testing, possible tests to consider, the significance of the forensic evidence for the court case, the time frames for testing and the value of other non-forensic evidence. The lack of space for comment on QPS forms might be one factor working against fuller communication.

In the interests of efficiency and the appropriate use of resources, scientific staff need information from police officers to remain up-to-date on specific investigations to minimise unnecessary work being conducted.

To remain aware of the information and current developments in any particular case, inter-agency communication is crucial. Additionally, more generic inter-agency communication is required so that senior officers can appreciate unique organisational time constraints, can be alerted to the interpretations of test results and can assist in guiding efforts to satisfy court-reporting requirements.

Queensland Health has proposed that the transfer of information could be improved if, while retaining their separate commands, police and QHSS scientists were co-located. This proposition was strongly resisted by the Bar Association of Queensland, which states 'it is absolutely essential that the QPS and QHSS remain completely separate in their operations' and the Queensland Law Society, which cautions that co-location could 'potentially jeopardise the independence of QHSS scientists'.¹¹ Other parties suggest co-location might be possible if it occurred in ways that protected the actual and perceived operational independence of the QPS and QHSS.

Further training for police investigators and senior crime staff

Training of police investigators and senior crime staff is critical to the effectiveness of forensic science. QHSS has not fully used its capacity to provide specialist forensic training to the QPS. Moreover, current QPS policy on staff rotation, which is a necessary strategy to develop and protect staff, hinders efforts to establish ongoing relationships with relevant police officers.

Defence Counsel do not have access to the training QHSS offers the DPP and the QPS. It could be valuable for this to be rectified to ensure the courts and parties involved in their proceedings are adequately represented, advised and supported.

Additional problems with providing appropriate training relate to priority and cost. QPS training requirements cannot be fully addressed by QHSS scientists alone because of their already heavy workloads and resource constraints.

10 QPS Bulletin Board (accessed 22 May 2002).

11 Letter of 2 August 2002 from the Bar Association to the Commission and letter of 18 September 2002 from the Queensland Law Society to the Commission.

Roles of the QPS and QHSS in deciding what gets tested

The existing forensic science roles of the QPS and the QHSS have not been an issue with those parties providing submissions. It is evident, however, that their roles could change should a different model for the delivery of forensic science be adopted or either party lose its monopoly of the services it provides.

It is creditable that the current system operates as well as it does, given that Queensland has no organisation able to compel the adoption of common procedures across forensic science agencies. As a result, matters have tended to be resolved informally with coordination achieved through senior managers communicating with one another. The following issues, however, have been raised.

Testing and review processes

The mechanisms by which priority is assigned for testing evidence may be clear to scientists but not to others, especially with cases of sexual assault. There are several benefits in fostering a more transparent decision-making process for prioritising forensic testing of evidence. A more transparent process would demystify the process and encourage understanding. Additionally, the possibility for criticism would be reduced if the means by which priority is assigned reflected a more open process.

Concerns have also been raised relating to the importance of agreeing to the scientific tests needed, the timely exchange of information about court sitting dates, coordination of scientific evidence and related matters. To be effective, discussions at the operational level need to occur as early as possible. Discussion should address matters bearing on the comprehensiveness and relevance of tests and the understanding of scientific results. Two suggestions have been put forward:

- The Office of the Director of Public Prosecutions has offered to provide advice to parties should disagreements arise over which tests are necessary.
- Queensland Health suggests that disagreements over scientific testing could be reduced if all items requiring testing by QHSS were relayed by QPS officers through the Forensic Services Branch, as occurs with DNA testing.

Alternatively, the judiciary, prior to a criminal trial, could be empowered to rule on irreconcilable differences between the defence and prosecution. The Bar Association of Queensland notes that criminal courts have the power to bring the parties together before trial to resolve differences about scientific evidence.¹² It advises

... s. 592A of the Criminal Code already allows for a direction ruling to be given by a judge in relation to:

(c) the provision of a statement, report, proof of evidence or other information ...

On a related matter, the Prisoners' Legal Service suggests that, prior to court proceedings, scientific advice on the accuracy of tests should be provided to Defence Counsel, especially in relation to DNA. In the case of DNA, it was suggested that, where an individual belongs to an isolated or 'biologically distinct group', information should be provided on whether testing of the particular population was undertaken to assess the estimated accuracy of a test.¹³

Involvement of Defence Counsel

One of the more important issues to be discussed, and which perhaps requires a wider discussion elsewhere, concerns the appropriate role of Defence Counsel in accessing forensic science services. Defence Counsel, the DPP and the QPS appear to have similar concerns regarding their involvement with forensic science. Collectively, a number of suggestions appear salient. For example, Defence Counsel, like the DPP, could be given access to relevant information within Queensland Health's laboratory/testing database (as suggested by Queensland Health). The Queensland Law Society

¹² Letter of 2 August 2002 to the Commission.

¹³ Letter of 2 August 2002 to the Commission.

states that it is important for the role of Defence Counsel to be recognised because the matter of expert evidence ‘should be at arm’s length from the Prosecution’.¹⁴ Additionally, access to forensic staff (through electronic, telephone and face-to-face meetings) could be formalised for Defence Counsel on a similar basis to that afforded and proposed for the DPP and others.

Further suggestions include Defence Counsel being party to discussions between the DPP and forensic scientist prior to court proceedings, as well as the possibility of separate discussions between Defence Counsel and forensic scientists.

The Prisoners’ Legal Service suggested that time savings could be realised if Defence Counsel had access to information, especially that bearing on the interpretation of scientific data, prior to committal or trial.¹⁵ Queensland Health embraced the view that greater involvement of Defence Counsel will require the creation of rules to ensure its scientific staff are not put in difficulty. At present, scientific staff involvement with the DPP is greater than that with Defence Counsel, and they are accustomed to receiving guidance from the DPP or the courts on the distribution of their samples and scientific information. In short, new procedures or rules would need to be established.

Other significant issues

The need to make better use of information technology for record keeping and information sharing

The system used by Queensland Health records and disseminates information electronically. This system has the capacity to be accessed by other parties while maintaining security; however, such access rarely happens. Apart from e-mail and telephone contact, information sharing between Queensland Health scientists, QPS investigators and the Department of Justice and Attorney-General (in which the DPP is housed) is limited. Each organisation has different information requirements and priorities, which diminish system compatibility. To illustrate, at the operational level the QPS relies on the QP127 paper form when an electronic version of this form would allow for quicker transmission and more efficient access.

Another challenge comes from agencies using different electronic case identifiers. Queensland Health uses the victim’s name, the DPP relies on the name of the offender, and the QPS uses a CRISP number. Using a common electronic identifier could facilitate information sharing and greater systems access. Queensland Health scientists could then track investigations, court dates, and be aware of critical time frames. Defence Counsel and the DPP could track tests and results, and the QPS could be made aware of items staff were testing and redirect investigations accordingly.

A possible solution could be all key agencies adopting a generic computer-based exhibit-tracking system. This could be accomplished by making adjustments to Queensland Health’s AUSLAB system, which is currently used to track items submitted for testing but is not accessible to other agencies.

Increasing workloads

The growing demand for forensic services, the incremental increase in resourcing, court-imposed time frames, and the high cost of forensic technology are all placing pressures on forensic science delivery. For example, if resource constraints lead to delays in providing a forensic science service — and the court strikes out a matter because the evidence is not available — then there is a danger of an injustice occurring. Increased reliance on forensic science services is placing a strain on a system of justice that is accustomed to benchmarks established long before forensic services, such as DNA testing, existed. This is illustrated by the number of detainees spending extended periods in custody, and others feeling aggrieved by the slowness of the process.

14 Letter of 18 September 2002 to the Commission.

15 Letter of 7 August 2002 to the Commission.

QHSS points out there have been delays arising from an upsurge of work related to clandestine drug laboratories.¹⁶ This extra work can result in delays in processing evidence related to other cases, even cases of serious offending such as murder, rape and the supply of dangerous drugs. Sometimes these delays have been long enough for courts to propose charges be struck out should necessary scientific results not be produced by a set time.

Overcoming delays involves QHSS, the QPS, the DPP and, perhaps, Defence Counsel working in concert. Possible initiatives to reduce delays may relate to resourcing, charging arrangements, work planning, consultation, information sharing and the location of functions. For example, DNA and chemical testing could be performed in any laboratory, public or private, that has appropriate accreditation, facilities and staff. Moreover, delays may be reduced if QPS and QHSS scientists were co-located.

Established practice in other jurisdictions suggests it may be worthwhile exploring other structural models to deliver forensic science services. There is evidence suggesting, for example, that the UK and New Zealand models operate effectively. The Prisoners' Legal Service asserts that a forensic service delivery model needs to ensure the independence of providers, best practice, and the security of scientific procedures against error or tampering. They argue that such matters require appropriate training and resources, and warn that giving cost considerations a higher priority than service considerations 'has the potential to result in grave injustice'.¹⁷

Reviewing scientists' decisions

Procedures exist to review the technical work of scientists and the administration of scientific records, but there is no mechanism to review decisions made by scientists that are not strictly scientific. For example, the reason a scientist tests certain items and not others is not subject to supervisory review or NATA consideration.

A comprehensive review mechanism to evaluate nonprofessional decision-making could increase public confidence in the process and reduce unnecessary criticism of key stakeholders. Such a system would promote transparency in the process and increase opportunities for consultation, including the scope for alternative interpretations. It could also foster professional development and prevent errors being repeated.

The Prisoners' Legal Service supports the introduction of procedures to review scientific judgments. It suggests that the transparency of procedures could be increased and the potential for error reduced if reviews were conducted by external parties.¹⁸ However, scientists could regard this as unnecessarily invasive, despite the protections it would afford them.

An external review mechanism could be invasive were it to expose the work of scientists to constant and detailed examination and act to distract them from their day-to-day work, lead to the inefficient use of resources or constrain scientific endeavour. But the benefits to scientists arising from a well-managed external review mechanism could include the earlier detection of problems or errors, fewer criticisms of their actions in the courts and the ability to develop a history of favourable reports.

Summary

Unquestionably, forensic science services present many important opportunities for shaping court outcomes, but, at the same time, the rapid development of these technologies and related services, as well as the rapid increase in their demand, has potentially outstripped the capacity of established systems to ensure effective court outcomes.

16 When a clandestine drug laboratory is discovered by police, QHSS scientists must test the material produced in the laboratory to ascertain whether illegal drugs were indeed involved. Because of a recent upsurge in the number of these laboratories being discovered by police, this work has greatly increased with no commensurate increase in resources.

17 Letter of 7 August 2002 to the Commission.

18 Letter of 7 August 2002 to the Commission.

This discussion has illuminated the tension between the role of contemporary technologies and their potential to shape investigative processes, the management of forensic science, legal procedures and the criminal justice system more generally. All involved parties have established procedures and general work patterns that are not easily modified. The police employ investigative practices that focus on individuals, the public health system has a commitment to hospitals and non-crime-related health care, while the courts rely on their own unique processes related to timely and informed decision-making. That these three vital organisations do not necessarily share the same strategic outcomes illustrates the challenges facing the development of an integrated forensic science service for the courts.

RECOMMENDATIONS

Providing forensic science services for the courts highlights a series of complex managerial and systemic issues that, in Queensland, is compounded by the involvement of several bodies — the QPS, Queensland Health, and the Department of Justice and Attorney-General — as well as the representatives of the defendant. In the first instance, it is perhaps appropriate to assess whether the present mixed model of forensic science service delivery is preferable, and, if so, to take appropriate steps to improve its operations, reduce opportunities for administrative errors and enhance the services provided to the courts. Toward this end, the following recommendations have been developed for forensic science stakeholders.

Recommendation 1: That the QPS and QHSS collaborate on the preparation of protocols and guidelines to ensure the most prompt, transparent and effective means of relaying requests from the QPS to QHSS, and to develop strategies that will make the number of items submitted for forensic testing more manageable.

Open communication between the QPS and QHSS will raise awareness of organisational demands, increase understanding of the reason for certain testing requests, and lead to protocols and guidelines for determining appropriate levels of testing requests and tests.

Recommendation 2: That the QPS and QHSS collaborate on developing a coordinated and ongoing training program for key agencies involved in the delivery of forensic science services.

The best available training and training providers need to be used. There may be value in involving specialist groups outside QHSS. As well, training could be extended to include the defendant's representatives.

Recommendation 3: That an inter-agency working party, responsible to the Interdepartmental Coordinating Committee, be established to explore efficient work practices within and between all agencies involved in the delivery of forensic science services, and to consider other issues raised in this report.

Structured communication between the key agencies — including the QPS, Queensland Health and the DPP — along with consultation with all key stakeholders would lead to a coordinated forensic science service. Formalising inter-agency communication would improve planning, help identify overlapping and agency-specific goals and objectives, and develop a means for enforcing requirements between agencies. The working party could also look at increasing the usefulness of existing electronic database and communication systems. Reforms in this area will depend on the parties acknowledging:

- the importance of the security and integrity of information and data-management systems
- the need for appropriate access by the defendant's representatives
- the uneven levels of technological capital (in terms of existing hardware as well as experienced personnel) existing between agencies.

CONCLUSION

The issues identified in this chapter clearly require further examination and discussion. They should not be regarded as exhaustive. Many of these issues were consistently raised in the submissions received from concerned stakeholders. Fortunately, the key stakeholders in Queensland are committed to improving established protocols in order to ensure that forensic science services are managed properly and fairly for the benefit of the court system across the State.

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