



THE UNIVERSITY OF
NEW SOUTH WALES



CENTRE FOR CLINICAL GOVERNANCE RESEARCH

EVALUATION OF THE SAFETY IMPROVEMENT PROGRAM IN NEW SOUTH WALES: STUDY NO 6



REPORT ON PROGRAM OUTCOMES

The Centre for Clinical Governance Research in Health undertakes strategic research, evaluations and research-based projects of national and international standing with a core interest to investigate health sector issues of policy, culture, systems, governance and leadership.

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1 ABBREVIATIONS AND DEFINITIONS

1.1 Abbreviations

AHS	Area Health Service
CCGR	Centre for Clinical Governance Research at University of NSW
CEC	Clinical Excellence Commission
DOH	NSW Department of Health
IIMS	Incident Information Management System
RCA	Root Cause Analysis
RIB	Reportable Incident Brief
SIP	Safety Improvement Program
SAC	Severity Assessment Code

1.2 Definitions

Clinical Practice Improvement	A combination of tools, techniques, skills and attributes designed to enhance care inputs, structures, cultures, processes, outputs or outcomes.
Culture	The configuration of attitudes, values, beliefs, meanings, behaviours and practices which together can be seen to be definitive of 'what people are' or 'where people come from'. Culture can be seen as a 'state' or something people possess, while it appears more fruitful to regard it as performance and also a process.
Ethnography	A research technique used for describing what human beings do in selected settings, usually comprising 'participant observation', field notes, narrative accounts, interviews, and other qualitative research methods.
Evaluation	The systematic examination of a policy, program or project aimed at assessing its merit, value, worth, relevance or contribution.
Formative Evaluation	Evaluation conducted during a course of a policy's, program's or project's life.
Innovation	The rate, propensity, capacity and effectiveness in adopting new ideas, practices or behaviours.
Organisational Culture	The collective set of relationships in organisations that differentiate one group from another in terms of dress, attitudes, values, behaviours, beliefs, language and shared meaning.
Summative Evaluation	Evaluation conducted at the end of a policy's, program's or project's life.
Triangulation	A multi-method research or evaluation design which adduces converging or diverging evidence drawn from pluralist sources to illuminate an object of inquiry.

2 EXECUTIVE SUMMARY

This report presents the results of study 6 in the evaluation of the Safety Improvement Program (SIP) in New South Wales. This study provides an analysis of the outcomes of the Safety Improvement Program (SIP) in NSW. The methods utilised were a combination document analysis, review of existing SIP evaluations, questionnaires to SIP training participants, interviews with DOH and AHS staff and managers and SIP faculty, and observations of DOH procedures and committees.

This study found that SIP has had a significant impact on the NSW health system at each level. The findings demonstrate that there is an identifiable set of positive, and measurable, short and medium term outcomes associated with each of SIP's major objectives as operationalised through SIP's eight key components – identification, notification, investigation, and analysis of incidents, feedback and reporting on incidents, education and training, policy development, and open disclosure. As this is a formative evaluation, we have not been able to judge longer term outcomes.

The findings indicate that there are structural, resource and operational issues which can be addressed in order for SIP to help engender, as identified in its objectives, a *"constantly correcting system"*. Many of these may be addressed with the move from SIP to the broader Patient Safety and Clinical Quality Program.

3 INTRODUCTION

3.1 Overview

The NSW Department of Health (DOH) and the Clinical Excellence Commission (CEC) have commissioned the Centre for Clinical Governance Research (CCGR) at University of New South Wales to conduct a formal evaluation of the Safety Improvement Program (SIP). This is a program to enhance safety in New South Wales. The DOH has commissioned this evaluation as part of its knowledge management program in safety and quality under CCGR’s contract to Develop and Evaluate a Knowledge Management Program for Quality Branch. The CEC is interested in the extent to which the SIP will make health care in NSW safer and better under CCGR’s contract to conduct a Research and Evaluation Program into Safety and Quality.

The Evaluation Protocol for this project noted: “SIP is a comprehensive safety program introduced to the NSW health system in 2002. It aims to improve patient safety by focussing on health care incident management. The objectives of SIP are:

- To make health care safer through constantly correcting system vulnerabilities by understanding why errors occur.
- To develop a culture where health care incidents are identified, reported, investigated, analysed and acted upon in a supported environment.
- To implement an information system that assists health care workers to achieve the first component.”

The overall evaluation of SIP takes the form of 12 inter-related studies (Table 1). This report documents the outcomes of study 6. It focuses on the outcomes associated with the SIP program. This component of the evaluation was conducted by Ms Jo Travaglia, A/Professor Jeffrey Braithwaite, Conjoint A/Professor Mary T. Westbrook, Ms Nadine A. Mallock and Dr Marjorie Pawsey.

TABLE 1: Evaluation Studies

STUDY	TITLE	COMMENTS, ACTIONS AND TIMEFRAMES	LED BY/TEAM
Study #1	Literature Review	<ul style="list-style-type: none"> • National and international literature on patient safety and RCA processes • Appraisal of the evaluation process through the extant literature 	Peter Nugus, Jo Travaglia, Jeffrey Braithwaite
Study #2	Review of education and training program	<ul style="list-style-type: none"> • 2 a) Triangulated review of educational value of RCA program • 2b) Meta-analysis of SIP training program evaluation forms 	Jo Travaglia, Mary Westbrook, Peter Nugus, Rick Iedema, Debbi Long, Nadine Mallock

Study #3	Achievements of aims and objectives and stakeholder satisfaction	<ul style="list-style-type: none"> • Questionnaire to all course participants • Review of course evaluations 	Mary Westbrook, Nadine Mallock
Study #4	Ongoing applicability of training to participants	<ul style="list-style-type: none"> • Questionnaire to all course participants • Survey of international SIP programs to benchmark the current program in an international context 	Nadine Mallock, Mary Westbrook, Jeffrey Braithwaite
Study #5	Satisfaction of Faculty members	<ul style="list-style-type: none"> • Detailed interviews with faculty staff 	Debbi Long
Study #6	Program outcomes at local, area and state levels	<ul style="list-style-type: none"> • Review of RCA data submitted to the DOH • Questionnaire to all course participants • Interviews with key stakeholders 	Jo Travaglia, Jeffrey Braithwaite, Mary Westbrook, Nadine Mallock, Marjorie Pawsey
Study #7	Lessons learnt	<ul style="list-style-type: none"> • 7 a) In-depth observation and review of RCAs in situ • 7 b) Focus groups 	Rick Iedema, Rowena Forsyth, Christine Jorm, Peter Nugus
Study #8	Return on investment	<ul style="list-style-type: none"> • Questionnaire to all course participants • Interviews with key stakeholders 	Jeffrey Braithwaite, Jo Travaglia, Mary Westbrook, Nadine Mallock
Study #9	Effectiveness of SIP Committee	<ul style="list-style-type: none"> • Observation of Steering Committee • Review of outcomes 	Nadine Mallock, Jeffrey Braithwaite
Study #10	Management of RIB process	<ul style="list-style-type: none"> • Focus group • DOH data • Interviews with key stakeholders 	Jeffrey Braithwaite, Jo Travaglia, Nadine Mallock, Marjorie Pawsey
Study #11	Reporting processes	<ul style="list-style-type: none"> • Focus group • DOH data • Interviews with key stakeholders 	Jeffrey Braithwaite, Jo Travaglia, Nadine Mallock, Marjorie Pawsey
Study #12	Branch functions and actions	<ul style="list-style-type: none"> • Focus group • DOH data • Interviews with key stakeholders 	Jeffrey Braithwaite, Jo Travaglia, Nadine Mallock, Marjorie Pawsey

3.2 About this report

This report summarises the main findings in our study of the immediate and longer term outcomes of the NSW Safety Improvement Program (SIP) at local, area and state levels. SIP was implemented in NSW in 2002. The aim of the program is to improve patient safety by focussing on health care incident management. The program's objectives are to: make health care safer through constantly correcting system vulnerabilities by understanding why errors occur; develop a culture where health care incidents are identified, reported, investigated, analysed and acted upon in a supported environment; and implement an information system that assists health care workers to make health care safer.

This study identified the major short and medium term outcomes associated with these objectives, as operationalised through SIP's eight key components – identification, notification, investigation and analysis of incidents, feedback and reporting on incidents, education and training, policy development, and open disclosure. The methods used were a combination document analysis, review of existing SIP evaluations, questionnaires to SIP training participants, interviews with DOH and AHS staff and managers and SIP faculty, and observations of DOH procedures and committees.

4 METHODS

Table 2 below identifies the key task and methods drawn from the *Evaluation Protocol* for study 6. This shows the evaluation methods we used for study 6 and the core questions we sought to answer.

TABLE 2: Key study task, evaluation methods, and core questions

KEY TASKS	EVALUATION METHODS	CORE QUESTIONS
<p>Study 6: Examine the immediate and longer term program outcomes in terms of the number of RCAs undertaken, recommendations and implementation of actions at the local, area and state levels</p>	<p>We:</p> <ul style="list-style-type: none"> • Reviewed documentation about the SACs and RCAs undertaken and recommendations and actions arising from these • Interviewed DOH staff about the process and outcomes SIP • Interviewed a selection of Patient Safety and Clinical Governance Unit staff about the SIP process and outcomes • Assess the impact and outcomes of courses for participants, through quantitative data analysis of selected items in questionnaire distributed to SIP training participants • Reviewed and analysed 18 of 24 DOH SIP training evaluations • Attended SIP Steering Committee Meetings and analysed contents of minutes 	<p>What are the demonstrable outcomes of SIP?</p>

In short, drawing on the other studies in this evaluation (studies 1 – 5 and 7 – 12), and by triangulating findings from document analysis, responses from health services personnel across the state, and interviews with key stakeholder groups, we aimed to develop a map of outcomes currently attributable to SIP in NSW at a state, area and local level. The next section will discuss our findings in relation to each of the key components of SIP. Because of the large number of individual facilities, and the need for confidentiality, examples of local outcomes are presented in conjunction with AHS outcomes.

5 FINDINGS

We summarise the findings in Table 3. It identifies each component of SIP and signals the State level and AHS and local level outcomes we have been able to identify.

TABLE 3: Outcomes of SIP

COMPONENT OF SIP	STATE LEVEL OUTCOMES	AHS/LOCAL OUTCOMES
<ul style="list-style-type: none"> ▪ Incident identification 	<ul style="list-style-type: none"> ▪ <i>Reportable Incident Brief Circular 2003/88</i> released in 2003 to promote a standardised coordinated mechanism for the management of serious adverse events both in an Area and at a state level ▪ Health Services Act of 1997 amended and regulation drafted to protect the RCA team and the RCA processes ▪ Structures established at DOH to gather, review, distribute and action reported incidents on a twice a day basis 	<ul style="list-style-type: none"> ▪ Incident reporting mechanisms introduced, aligned with RIB Circular and operational in all AH and state-wide services ▪ Structures established at all AHS to gather, review, distribute and action reported incidents on a daily basis ▪ Some concern at AHS about the timing of the rollout of the components of SIP
<ul style="list-style-type: none"> ▪ Prioritisation of incidents using the Severity Assessment Code (SAC) matrix 	<ul style="list-style-type: none"> ▪ NSW SAC 1 reportable incidents categorized into 12 major categories in <i>Patient Safety and Clinical Quality Program</i> report 	<ul style="list-style-type: none"> ▪ 452 events were reported as SAC1 state-wide in 2003 – 2004 ▪ Based on a sample of 18 of 24 of the DOH's own training evaluations 35.4% of participants said they were comfortable to "SAC" incidents at their facility ▪ AHS managers report that some staff experience difficulties in designating SACs ▪ There is some evidence that SACS are modified by senior managers after they have been submitted to them ▪ Concerns were raised about un-realised value of SACs 3 and 4, which however, will be addressed through the use of IIMS
<ul style="list-style-type: none"> ▪ Notification of incidents via the Incident Information Management System (IIMS) 	<ul style="list-style-type: none"> ▪ Standardised reporting format established ▪ Phase 1 of IIMS implemented and supporting policy released in December 2004 ▪ Comprehensive training program, including CD-ROM, DVD and video disseminated ▪ Phase 2 of IIMS implementation for completion May 2005 	<ul style="list-style-type: none"> ▪ IIMS implementation underway with varying degrees of satisfaction expressed by users at AHS, although this feedback was made whilst the IIMS was still being piloted

COMPONENT OF SIP	STATE LEVEL OUTCOMES	AHS/LOCAL OUTCOMES
<ul style="list-style-type: none"> ▪ Investigation via various means, in accordance with the severity of the incident 	<ul style="list-style-type: none"> ▪ Changes to the Health Services Act of 1997 and the drafting of regulation to protect the RCA team and the RCA processes ▪ Root Cause Analysis reports of SAC 1s examined by department of health and preliminary breakdown of 7 major causes identified ▪ Knowledge management strategy activated to ensure lessons learnt from RCAs are shared across whole system 	<ul style="list-style-type: none"> ▪ Variety of incident investigation methods continue to be used by AHS – including mortality and morbidity reviews, record audits, CPI etc ▪ Of the respondents to the CCGR questionnaire distributed to all contactable participants of SIP training courses (n = 463), 133 (28.7%) had led an RCA since completing the SIP course. Of these respondents, 15.3% had led one RCA, 7.6% had led two, 1.7% had led three, and 4.1% have led more than three ▪ The average number of RCAs led by an individual, since doing a SIP course was 0.80. The highest number of RCAs led by an individual was 42 ▪ 216 (46.7%) respondents had been involved as an RCA team member, but not team leader, 21.4% had been a team member in one RCA, 11.7% in two RCAs, 6.3% in three RCAs, 1.3% in four, 2.8% in five, and 3.1% in more than five ▪ The average number of RCAs respondents had been involved in since doing a SIP course was 1.2 ▪ Of the respondents this questionnaire: 89.4% agreed or strongly agreed that RCA improves work practices, 89.4% that RCAs increase patient safety, 81.3% that RCAs improve communication about patient care, 79.0% that RCAs improve patient outcomes, and 75.9% that RCAs improve teamwork

COMPONENT OF SIP	STATE LEVEL OUTCOMES	AHS/LOCAL OUTCOMES
<ul style="list-style-type: none"> ▪ Reporting of results internally through functional committee structures and development of state reporting mechanisms, including knowledge management to share lessons learned through investigation and inform about actions taken to minimise clinical risk 	<ul style="list-style-type: none"> ▪ Reportable Incident Review Committee (RIRC) established in December 2003. Committee comprised high level representation of 14 Department of Health Branches ▪ RIRC meets monthly to oversee the management of health care incidents reported to the Department, individual Branch reports on RIBS, and actions arising from SIP 	<ul style="list-style-type: none"> ▪ Quarterly meetings of Patient Safety Managers (PSM) from across the state are sponsored by CEC ▪ Each AHS has an individual approach to the internal reporting of results, including all or any of: CEOs, EDs, senior management, RCA teams, and participants in incidents ▪ Of the respondents to the CCGR questionnaire distributed to all contactable participants of SIP training courses (n = 463), 38.2% stated that lack of feedback was one barrier to being involved in RCAs
<ul style="list-style-type: none"> ▪ Reporting of results internally through functional committee structures and development of state reporting mechanisms, including knowledge management to share lessons learned through investigation and inform about actions taken to minimise clinical risk 	<ul style="list-style-type: none"> ▪ First report on incident management in the NSW public health system 2003-2004 released January 2005 <i>Patient Safety and Clinical Quality Program</i> ▪ Eight issues of the <i>Safety Advocate</i> have been published to date including: sterilisation and disinfection; medications safety; falls in health services; improving the safety of bed rails; the safe use of infusion pumps; self-inflating resuscitation bags; the safe management of breast milk; and eliminating retained instruments – abdominal visceral retractor 	

COMPONENT OF SIP	STATE LEVEL OUTCOMES	AHS/LOCAL OUTCOMES
<ul style="list-style-type: none"> ▪ Education and training around related activities including: Root Cause Analysis, Human Factors, Clinical Practice Improvement 	<ul style="list-style-type: none"> ▪ 2 day SIP training program developed and conducted across 18 AHS, 2 state-wide services, and with 4 mixed groups from across the state ▪ 2,500 staff have been trained ▪ More than 1,000 staff have attended seminars on the principles and core components of SIP ▪ Follow up visits by Quality and Safety Branch were undertaken in each AHS to evaluate the effectiveness of the program ▪ SIP management committee and SIP education working party established to develop ongoing training programs arising from the RCA process. These committees will become committees of the CEC. ▪ Train-the trainer modules for SAC & RCA have been developed and training has begun 	<ul style="list-style-type: none"> ▪ Based on a sample of 18 of 24 of the DOH's own training evaluations 63.1% of participants who attended SIP training courses rated the program as very valuable ▪ Data from the CCGR questionnaire distributed to all contactable participants of SIP training courses, 4 global scores were identified for the outcomes of SIP. These were: <ol style="list-style-type: none"> 1. Satisfaction with SIP course: Global Score 1.64, SD 0.43 (with possible scores raging from 1 very favourable towards course to 4 very unfavourable view of course) 2. Skills acquired score: Global Score 1.91, SD 0.60 (with possible scores raging from 1 high rate of acquisition to 4 very low acquisition) 3. Perceived wider benefits of SIP Score: 1.96, SD 0.56 (with possible scores raging from 1 sees great benefits to 4 sees few benefits) 4. Barriers experienced when doing RCAs score: 3.41, SD 0.85 (with possible scores raging from 1 experienced many barriers to 4 experienced few barriers) ▪ 52.5% of respondents to the same questionnaire indicated that they disagreed or strongly disagreed that an appropriate number of people within their organisation had received SIP training, and a further 38.6% were unsure – leaving only 8.9% of respondents who were sure that the right number of staff were trained at local level ▪ The profile of SIP trainees so far, may be somewhat skewed to senior managers, with limited number of medical practitioners participating

COMPONENT OF SIP	STATE LEVEL OUTCOMES	AHS/LOCAL OUTCOMES
<ul style="list-style-type: none"> ▪ Operation of Quality and Safety Branch in particular policy development derived from the entire incident management process 	<ul style="list-style-type: none"> ▪ <i>Correct Site, Correct Patient, Correct Procedure</i> Policy released and distributed November 2004 and circulated to 1,500 surgeons, 1,200 anaesthetists and 1,000 operating and procedure rooms across the state ▪ <i>Management Policy to Reduce Fall Injury Among Older People 2003 – 2007</i> published in 2004 ▪ <i>Standard Procedures for the Handling of Accountable Items in Operating Suite</i> 	<ul style="list-style-type: none"> ▪ Quality and Safety Branch is noted as having undergone significant changes and loss of staff in recent months, resulting in a perceived reduction in its ability to provide support to AHS
<ul style="list-style-type: none"> ▪ Open Disclosure to promote an open, consistent approach to communicating with patients and their family and carers following an adverse event 	<ul style="list-style-type: none"> ▪ NSW will participate in implementation of national <i>Open Disclosure Standard</i> ▪ Workshop held in August 2004 	<ul style="list-style-type: none"> ▪ 5 pilot sites AHS sites for implementation of national standards identified, but placed on hold while Australian Council for Safety and Quality in Health Care resolves legal and liability issues

6 DISCUSSION

The following is a discussion of the outcomes of the individual components of SIP. It is structured according to the design of Table 3 for ease of reference.

6.1 Incident identification

Notification of rates of incidents historically vary across AHS. These are likely to change further with the implementation of Clinical Governance Units and the adoption of IIMS. Nonetheless the outcome of the implementation of the incident identification process component of SIP appears to be, as expected, a more standardised, co-ordinated mechanism than before for the management of serious adverse events at both AHS and state levels.

6.2 Prioritisation of incidents using Severity Assessment Code (SAC) Matrix

Given the recency of its introduction in Australia, the SAC matrix appears to be being utilised effectively, albeit with some minor difficulties. The reporting of 452 SAC 1 incidents in the first year of the implementation of the SIP would indicate a degree of confidence and support for the process by health services staff (NSW Health, 2005). The analysis of these incidents, in the first publicly released NSW report on the Patient Safety and Clinical Quality Program, provides AHSs and the community at large with a deeper understanding of current patient safety issues, and allows for identification of state-wide strategies (NSW Health, 2005).

Interviews with respondents indicate that health services staff are reasonably comfortable with the SAC process. The small number of respondents who felt uncomfortable with applying SACs after undergoing SIP training are not necessarily a significant concern, as the bulk of participants were trained as SIP processes were being implemented – and therefore had no prior experience or knowledge of the SAC process. It may be useful, however to monitor within AHSs across time the levels of understanding of SAC processes.

Some concerns have arisen from the definition of SAC 1s and 2s and the “absolute nature of SAC 1” as determined by the DOH. Changes to SACs once they are submitted to senior management (a not uncommon event in the experience of respondents) usually upwards (i.e. a SAC 3 becomes as SAC 2, a SAC 2 becomes a SAC 1), may be a reflection of this phenomenon. This however, may not be unusual, as the SAC matrix is a tool, rather than an exact measure.

The collection, analysis and utilisation of SAC 3s and 4s are also an issue. SAC 3s and 4s by consensus are believed to contain rich preventative potential, yet do not require either mandatory reporting or follow up. Only one specialist service, of those participants interviewed, regularly reviewed, evaluated and actioned SAC 3s and 4s.

The majority of respondents cited time limitations and the pressures of responding to SAC 1s and 2s as preventing a more than cursory glance at SAC 3s and 4s. This may result in a situation where useful preventative opportunities are missed. While the main responsibility for the aggregation and analysis of SAC 3s and 4s lies with the AHSs and facilities, the DOH's ability to review these SACs, if it so chooses, will increase with the full implementation of IIMS.

6.3 Notification of incidents via the Incident Information Management System (IIMS)

This component of SIP will be subject to a separate evaluation, and the issues identified here were raised prior to the full rollout of the system. IIMS has been piloted in a number of AHS, and is regarded as potentially solving some of the difficulties currently associated with SIP at state, AHS and local levels. These include: the linking of RIBs with their associated RCAs; and the tracking and monitoring of the recommendations and outcomes of RCAs. It is important to note here, however, that while implementation of IIMS is generally felt to be a positive step forward, there were some concerns raised about its ability to produce useable reports in a format which is appropriate to the needs of AHS managers. It is, however, too early to draw any significant conclusions about the system as a whole.

6.4 Investigation via various means in accordance with the severity of the incident

RCAs lie at the core of NSW SIP. The RCA process has become one of the key mechanisms by which NSW Health identifies and deals with causal patterns of adverse events.

Responses to the use of RCAs have generally been positive, as indicated in the Findings section of this report. RCAs are seen as having contributed positively to a range of safety issues, including work practices, communication, and patient outcomes amongst others. Almost half of all participants (46.7%) who responded to the CCGR questionnaire had, after having undertaken SIP training, been involved in an RCA process, and almost a third (28.7%) had led an RCA team.

Concerns about the intended and unintended outcomes of RCAs have, been raised by respondents. These included the:

- Dominance of the RCA process, which may have tended to marginalise other, existing, investigative processes
- Lack of articulation between existing investigative processes and RCAs
- Inherently retrospective nature of RCAs
- Difficulty in accessing and utilising alternative, and possibly proactive, investigative methods

- Imperative to undertake an RCA when a SAC 1 occurred, even when, as informants put it “it is clear to all involved what happened” e.g. in the case when an individual dies during a procedure which is known to be risky
- Timing of the implementation of the RIB, SIP training, IIMS and legislation. By instigating the RIB and RCA process prior to the protective legislation being enacted, there has been a reticence or anxiety by some staff to participate RCAs.

6.5 Reporting of results

Currently the reporting of results within SIP varies, and has been affected by the lack of a system-wide reporting system. This is an issue which is predicted to be remedied by the implementation of IIMS. At the moment, Quality and Safety Branch is managing the production and co-ordination of state-wide reporting under SIP. This occurs at a variety of levels, and through a number of different mechanisms: reporting at the DOH level occurs on a monthly basis through the Reportable Incident Review Committee; the use of the Branch’s internet and intranet site; the issuing of *Safety Advocates*, special reports on specific issues (such as falls); and the production of the *Patient Safety and Clinical Quality Program* report in January 2005. The Branch is currently working on a Knowledge Management project, examining ways of disseminating, along with AHS Clinical Governance Units, information about lessons learnt at a local level. The Branch also facilitates, in conjunction with the Clinical Excellence Commission, quarterly meetings of Patient Safety Managers.

At an AHS level, each area has its own reporting procedure, managed through PSMs, Quality Managers, and increasingly, Clinical Governance Units. Reports are fed back to senior management, but dissemination to wider staff varies significantly. Almost 40% of respondents to the CCGR questionnaire to participants in SIP training identified that lack of feedback was a barrier to being involved in RCAs.

The lack (at the moment) of a consistent system to track outcomes of RCAs and follow up of recommendation is hindering the ability to effectively gauge the outcomes and impact of SIP or the RCA process.

Outcomes are also affected by:

- Changeover in staff and lack of resources in Quality and Safety Branch resulting in a perceived delay in quantity and timeliness of feedback
- Lack of (as yet) a comprehensive and consistent knowledge management approach to the gathering, analysis and distribution of information across the system
- Currently inadequate databases – in particular for the tracking of recommendations and longer term outcomes of RCAs
- The need for more frequent meetings of, and information exchange between, PSMs, which have universally been acknowledge as an important and useful process

- Dependence on some PSMs to identify, follow up, write and distribute feedback reports across large geographical and organisational areas.

6.6 Education and training

The outcomes of the education and training component were highly regarded, and extensive. The implementation of the SIP training program appears, on all possible measures, and from a variety of sources, to be highly successful.

Two issues of note emerge: whether the appropriate number and types (in terms of seniority, profession etc) of people have been trained, and how the move towards AHS-based SIP training will affect the quality and impact of training. These two issues should be followed up and appropriate action taken.

6.7 Operation of Quality and Safety Branch

Quality and Safety Branch, along with the Clinical Excellence Commission, with support from senior Department officers and senior AHS staff, have driven the SIP process. They have done so at a time of significant internal organisational change and external public and media scrutiny.

Throughout the implementation of SIP the Branch has managed to design, implement and monitor a successful multi-faceted state wide program successfully. Along with the work identified in previous sections, the Branch has also issued a number of state-wide policies and procedures aid in the improvement of patient safety.

The major, recurring and consistent concern about the Branch is the level of turnover in recent months, and the limitations of its resources. AHS and facilities were particularly apprehensive about the Branch's ability to provide timely support, advice and feedback, at its current resource levels.

6.8 Open disclosure

At the time of this evaluation the Open Disclosure pilot, which was to be conducted across Australia, was under review. The sponsoring body of the standard, the Australian Council for Safety and Quality in Health Care, was considering the legal and liability issues associated with the Open Disclosure Standard. NSW Health remains committed to the principles of open disclosure, and AHSs are following those principles wherever possible, while awaiting further developments with the Open Disclosure Standard.

6.9 Patient Safety and Clinical Quality Program

The NSW government established the Patient Safety and Clinical Quality Program in July 2004. This program will build on, and extend, the Safety Improvement Program.

The new program will include five major elements: The first is the creation of the Clinical Excellence Commission, based on the old Institute for Clinical Excellence, which has carriage of the promotion and support of better clinical quality and identification of systemic improvements.

The second is the establishment of Clinical Governance Units in all Area Health Services to oversee patient safety. The third is the maintenance of an incident and risk management system which includes local and state identification, remediation and undertaking of systemic reforms in response to incidents. The fourth is the full implementation of the Incident Information Management System (IIMS) to facilitate centralised reporting and recording. The fifth is the quality assessment programs, undertaken by an external agency to determine if the other four strategies are in place and working well.

7 CONCLUSION

It is clear that SIP has had a significant impact on the NSW health system at each level. These findings document that there are an identifiable set of positive and measurable short and medium term outcomes associated with each of SIP's major objectives.

The number of RIB and RCA reports generated indicates that a culture is being developed "*... where incidents are being identified, reported, investigated, analysed and acted upon*". The SIP training program has proven to be a highly successful educational program by all measures, most importantly with regard to its ongoing and sustained development of a cohort of staff with an understanding of SIP and a capability to conduct RCAs and participate in safety improvement initiatives.

Feedback from participants in SIP training indicates that they are facing few barriers to their involvement in RCAs and therefore that this process is generally occurring "*... in a supported environment*." It is however important to note that difficulties have arisen in the convening of teams in some cases, as a result of the current legislative environment, and in attracting an appropriate range of professionals into teams.

It is also clear that it does seem to be the case that an "*information system that assists health care workers is being implemented*". Broadly, with a few reservations, it is being highly anticipated as being able to provide some answers to the issue of matching, and monitoring of RIBs, RCAs, and their associated outcomes.

Longer term outcomes are difficult to assess at this point. It is not clear if SIP has produced a "*constantly correcting system*" as a number of vital factors, such as the enactment of the legislation, the CEC's monitoring and auditing functions, and the operationalisation of Clinical Governance Units across all AHS, have yet to be fully implemented.

Moreover, while both the DOH and AHS have been able to quantify the number of incidents reported and RCAs undertaken, they are still working through issues associated with monitoring the recommendations and outcomes of these RCAs. Equally, a focus on incident reporting combined with a lack of time and resources has resulted in a reactive, rather than proactive approach.

8 REFERENCES

Centre for Clinical Governance Research in Health (2004). *Protocol: evaluation of the Safety Improvement Program*. Kensington: Centre for Clinical Governance Research, University of NSW.

NSW Health (2004). *Department brief for SIP evaluation*. North Sydney: NSW Department of Health.

NSW Health Quality and Safety Branch (2003). *Reportable Incident Briefs to the NSW Department of Health*. North Sydney: NSW Department of Health. Circular No. 2003/ 88 (File No. 03/ 11299).

NSW Health (2005). *Patient Safety and Clinical Quality Program. First report on incident management in the NSW public health system 2003-2004*. North Sydney: NSW Department of Health.