Health Quality & Safety Commission New Zealand
Kupu Taurangi Hauora o Aotearoa

November 2012

Making Our Hospitals Safer

Serious and Sentinel Events reported by District Health Boards in 2011/12

This report was prepared by the Health Quality & Safety Commission based on data and information provided by District Health Boards.

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Kupu Taurangi Hauora o Aotearoa

Foreword

Professor Alan Merry

This is the Health Quality & Safety Commission's (the Commission's) third report setting out the serious and sentinel events (SSEs) that New Zealand's 20 District Health Boards (DHBs) have reported in the previous year, and the sixth such report overall.

The process of developing SSE reports is about transparency and improving the quality and safety of our health and disability services. Not all the events described in this report were preventable, but many involved errors that should not have happened and that resulted in serious injury and, in some tragic cases, deaths. These reports are a source of data to guide and focus our attempts to reduce the human costs of avoidable harm from health care. We also need to reduce the associated waste of our limited resources for delivering health and disability services in New Zealand. Money spent on picking up the pieces after avoidable adverse events is money that is not available for providing core health care services.

We have been working with DHBs and the wider health and disability sector to strengthen the SSE reporting process to ensure it contributes effectively to building quality and safety in the care of our patients and consumers. This is expected to be the last report describing events involving only DHB inpatients, since other organisations have now started to report SSEs directly to the Commission.

As well, the outcomes of SSE reviews of events that occurred from July 2012 are now being reported to the Commission, allowing us for the first time to share the lessons from the reviews nationally. We are also working with advisors from the mental health sector to develop a more relevant and effective way of reporting, analysing and responding to cases involving the suicide of mental health service users. These cases have been excluded from SSE reports since 2010/11.

Money spent on picking up the pieces after avoidable adverse events is money that is not available for providing core health care services.

In all of this work the emphasis is on improvement, and reducing preventable harm in the future.

In 2011/12, 360 SSEs were reported, slightly fewer than the 370[1] SSEs reported in 2010/11.

Notably, despite more rigorous criteria for reporting SSEs from falls, the number of patients reported as having suffered a serious fall has not increased (there were 13 percent fewer falls reported; from 195 in 2010/11 to 170 in 2011/12).

The number of patients reported as having suffered a fractured neck of femur as a result of a fall in hospital (a serious and potentially life-threatening accident and a measure of our efforts to reduce harm from falls) has also shown a decrease of 13 percent; from 91 in 2010/11 to 79 in 2011/12. These figures probably reflect the time and effort invested by DHBs to reduce harm to patients, and those working in our hospitals should be proud of these achievements.

Conversely, there have been 31 events reported in the last two years (14 in 2010/11, 17 in 2011/12) involving delays in treatment due to breakdowns in hospital systems, that have resulted in serious harm to the patient. In a modern health care system these events quite simply should not

1 377 originally reported. Seven cases were subsequently withdrawn by DHBs following review.

happen, yet DHB reporting suggests they are becoming more frequent. I have written to all DHBs that have reported one or more of this type of event, and requested details of the review findings. This is an area in which there is a need for improvement at a systems level.

This report must be more than an annual list of tragic events. It must be a driver of positive initiatives that make a difference. The Commission's programmes of work in the four priority areas of reducing harm from falls, health care associated infections, surgery and medication are responses to the events reported here. We will continue to work with each DHB to ensure action is taken as a result of this report – whether in response to events that occurred in their own hospitals, or events that happened at other DHBs.

Professor Alan Merry, ONZM
Chair, Health Quality & Safety Commission

The emphasis is on improvement and reducing preventable harm in the future.

Contents

The Commission will be writing to all DHBs during 2012/13 to ask what changes have been made as a result of this report, and will publicly report on the responses provided.

Executive Summary

This is the sixth report releasing SSE information provided by DHBs – the third from the Health Quality & Safety Commission – and covers events reported between 1 July 2011 and 30 June 2012. Because of the expansion of SSE reporting, it is expected this will be the last report that discusses only DHB inpatient events.

The total number of reported SSEs has decreased by 3 percent; from 370 in 2010/11 to 360 in 2011/12. In the 2010/11 report, 377 cases were originally reported, but seven cases were subsequently withdrawn by DHBs after the reviews had been completed, as they no longer fell into the category of 'serious' or 'sentinel'.

The number of SSEs involving patients experiencing serious harm from falls has reduced by 13 percent, to 170 in 2011/12 from 195 in 2010/11. The number of patients who are reported as having suffered a fractured neck of femur as a result of a fall has also decreased 13 percent, to 79 in 2011/12 from 91 in 2010/11.

Cases of suspected inpatient suicide have increased to 17 in 2011/12, from 3 in 2010/11. The Commission has written to DHBs that have reported this type of event, requesting details of the review findings.

Summary of events

- For the 2011/12 year, DHBs reported that 360 people treated in their hospitals were involved in a serious or sentinel event. This compares with 370 people in the 2010/11 year.
- Falls accounted for 47 percent of all serious and sentinel events reported in 2011/12, a decrease of 13 percent from 2010/11.
- Clinical management events (eg, errors of diagnosis and treatment) accounted for 31 percent of events. Of these, 17 cases involved delayed treatment due to failures in patient management systems.
- Inpatient suicides have increased to 17 in 2011/12, from 3 in 2010/11.

There were 17 SSEs reported during 2011/12 involving delayed diagnosis or treatment due to a failure of a patient management system. With 14 similar events occurring in 2010/11, and eight in 2009/10, this type of event appears to be increasing. The Commission has written to DHBs requesting details of the review findings.

During 2011/12, the Commission has made a number of advances in relation to the wider field of reportable events.

- It is working with the mental health sector to develop review processes that are appropriate for the review of incidents involving mental health service users. This will include developing public national reporting that allows lessons to be learnt from the events.
- A national reportable events policy has been adopted by all DHBs.[2] A significant change has been the requirement to report the outcome of reviews to the Commission.
- It has been working with the Accident Compensation Corporation, the Health and Disability Commissioner, and the Ministry of Health to ascertain how the organisations can better work together on serious adverse events.
- Health and disability organisations other than DHBs have started to adopt the national reportable events policy, and have started to report SSEs to the Commission.

2 http://www.hqsc.govt.nz/our-programmes/reportable-events/national-reportable-events-policy/

International literature does not support the use of the number or rate of reported events as a way of judging a hospital's safety, as there is considerable variation in the rates of reporting, not just in the rate of events.

Introduction

The following context is important to understanding and interpreting the data in this report.

- A **serious adverse event** is one that leads to significant additional treatment, but is not life threatening and has not resulted in a major loss of function. A **sentinel adverse event** is life threatening or has led to an unexpected death or major loss of function.

- DHBs are responsible for publicly releasing a summary of each case. As some cases were still under review at the time this report went to publication, the number of cases subsequently reported by individual DHBs may vary slightly from the number in this report. There is a link on the Commission website to DHB websites, where details of individual cases are set out.[3]

- All DHBs have formal systems to identify and review adverse events involving patients, visitors and staff. This report concentrates only on events involving patients whom DHBs have identified as having the most severe outcomes: those identified as serious or sentinel events. The subsequent review performed by the DHB will have identified whether the event was reasonably preventable; however, the event will have been reported to the Commission irrespective of whether it was considered preventable.

- DHBs have been advised to report all SSEs for 2011/12, irrespective of preventability. This is a change from previous years, where some DHBs reported only those SSEs which were considered – following review – to have a preventable element. To give an example of how this has affected reporting, some DHBs have reported more falls SSEs for 2011/12 than in earlier years. However, this is not necessarily because patients of those DHBs have experienced more falls during 2011/12 than in previous years, but because in the past some DHBs had only reported falls which the subsequent review considered could have been prevented.

- International literature does not support the use of the number or rate of reported events as a way of judging a hospital's safety, as there is considerable variation in the rates of reporting, not just in the rate of events. For example, DHBs reporting the most events may have better local systems for reporting and investigating events, and perhaps a superior safety culture. A low rate of events reported by a DHB may indicate under-reporting and under-investigation of matters that go wrong; conversely, it may reflect the outcome of a very successful risk-management programme – or a combination of both.

3 http://www.hqsc.govt.nz/our-programmes/reportable-events/serious-and-sentinel-event-reports/

This report must be more than an annual list of tragic events. It must be a driver of positive initiatives that make a difference.

Changes to SSE Reporting

In the future there will be changes to the reporting of SSEs:

- the outcome of reviews into SSEs will be reported to the Commission
- there will be a new way of reporting serious events involving clients of mental health services
- reporting will be expanded to include the wider health and disability sector.

Reporting the outcome of SSE reviews

A national reportable events policy has introduced a significant change in the way SSEs are reported to the Commission. Previously, there was no requirement for DHBs to report the outcome of a review to the Commission, meaning lessons from events were seldom shared. There is now a requirement for provider organisations to report to the Commission the key findings and recommendations of reviews of events that occurred from 1 July 2012. Future SSE reports will be able to discuss in greater detail issues such as contributory causes, and what has been learnt from the events.

Another important change in the local review of incidents is the requirement for DHB Chief Executives to sign off on the SSE review reports. This is an important step as it ensures senior DHB management are closely involved in the review of SSEs.

Serious events involving users of mental health services

In 2010/11, the Commission stopped reporting on cases involving the suicide of mental health services users within seven days of contact with the service. It is working with the mental health sector to identify the best approach to reviewing and reporting on individual events involving mental health service users. A working party of experts from the mental health sector (including consumer representation) has made recommendations to the Commission, and the Commission is discussing the implementation of these changes with the sector.

In future, there will be a separate report covering serious events involving mental health service users. The first period to be reported will be 2012/13.

Expansion of SSE reporting beyond DHBs

The Commission's responsibility, as set out in the New Zealand Public Health and Disability Act 2000, is to work across the health and disability sector to lead and coordinate work to improve quality and safety, yet only DHBs have reported SSEs to the Commission. During the last year the Commission has been encouraging the wider health and disability sector to report SSEs.

A significant barrier to reporting has been the identification of individual providers in the annual SSE report. In order to encourage reporting for providers other than DHBs, the Commission has agreed to report SSEs by sector in future reports, rather than by individual provider organisation. In the Commission's view, the benefits of collating and sharing lessons from a larger set of SSEs outweighs any benefit from identifying individual providers. DHBs will continue to be identified individually.

Consequently, future reports will include sections relating to SSEs occurring in the wider health and disability sector, such as: primary care, disability services, home and community services, National Screening Unit,[4] hospices, aged residential care, ambulance services, and private surgical hospitals.

To support these providers, the Commission is developing web-based education packages on open disclosure and serious event review.

4 Including BreastScreen Aotearoa, Universal Newborn Hearing Screening and Early Intervention Programme, and the National Cervical Screening Programme.

Serious and Sentinel Events 2011/12

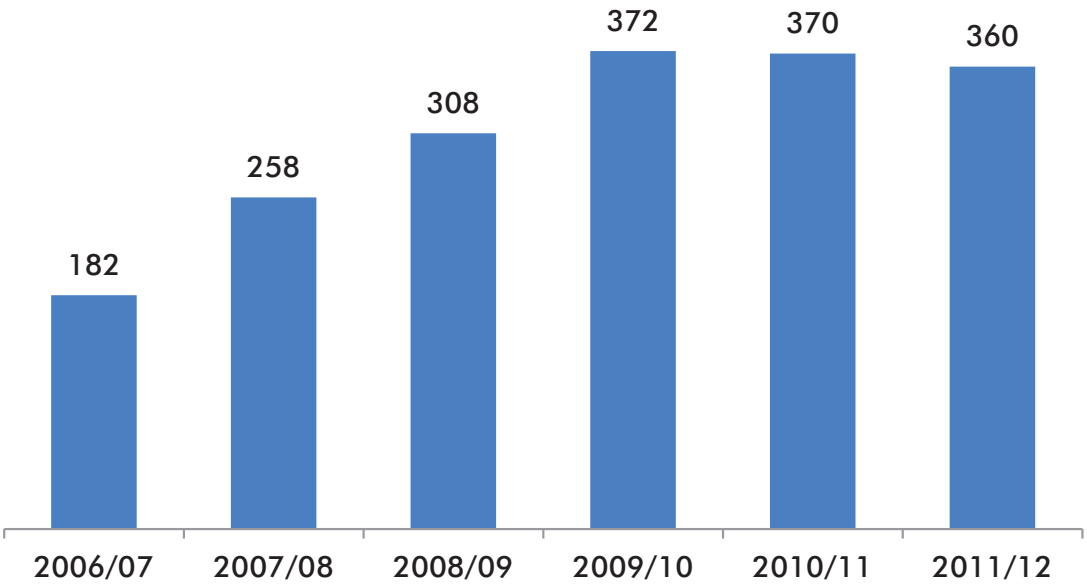
Number of events

DHBs reported 360 SSEs during 2011/12, a decrease of 3 percent from 2010/11, when 370 SSEs were reported.

Figure 1 shows the total number of SSEs reported by DHBs over the past six years.[5]

To develop consistent reporting, DHBs were advised to report all SSEs that occurred during 2011/12, and not to exclude those that had been assessed as unpreventable. It was expected this would result in an increase in SSEs reported. However, this has not been the case, with a slight fall in total SSEs.

Figure 1: Serious and Sentinel Events



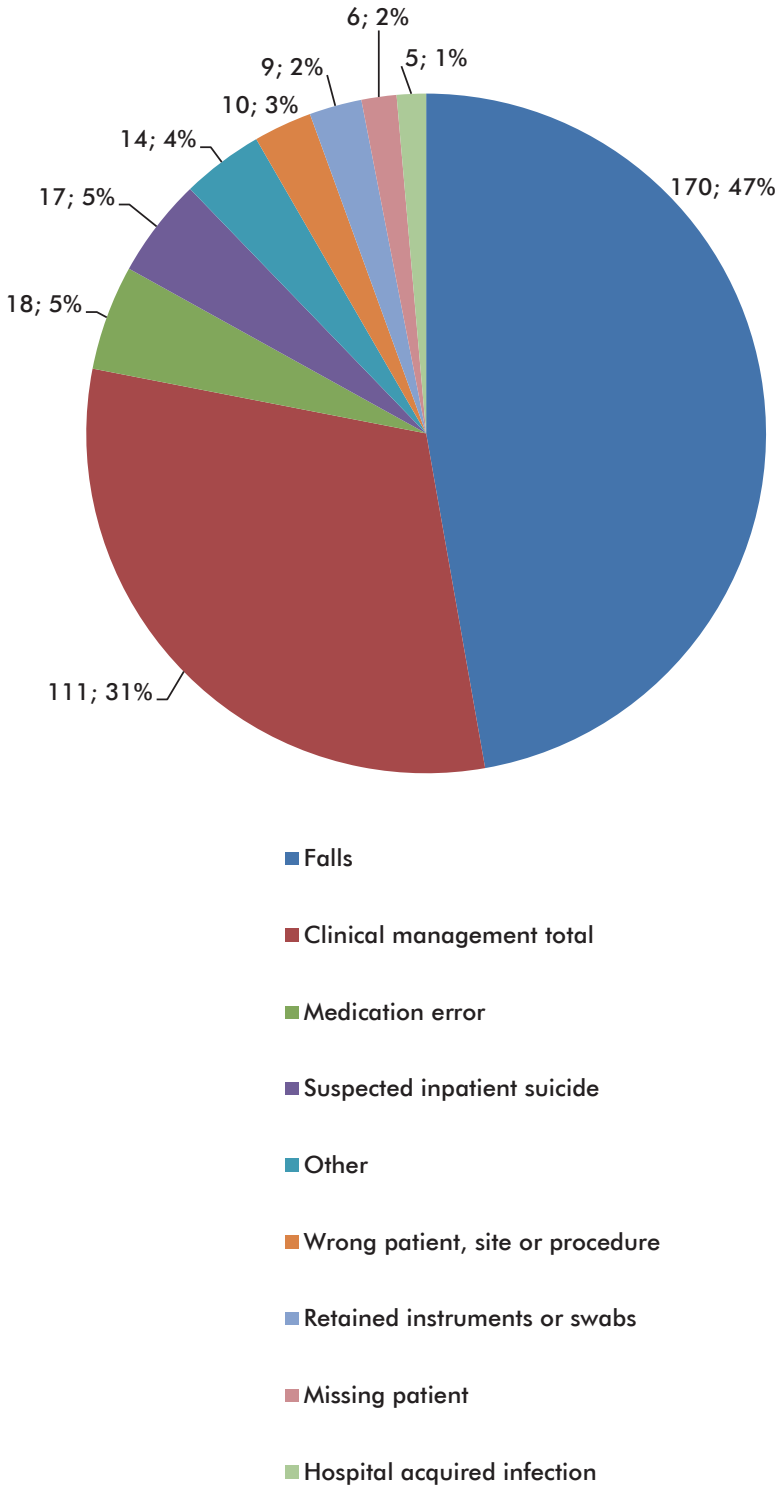
These reports are a source of data to guide and focus our attempts to reduce the human costs of avoidable harm from health care.

5 2010/11 and 2011/12 figures exclude suspected outpatient suicides.

Types of events

Falls (170 events, 47 percent) and clinical management events (111 events, 31 percent) are the most frequently reported SSEs for 2011/12 (see Figure 2 and Appendix 1). Medication events (18 events, 5 percent) and suspected inpatient suicide (17 events, 5 percent) are the next most frequent types of event.

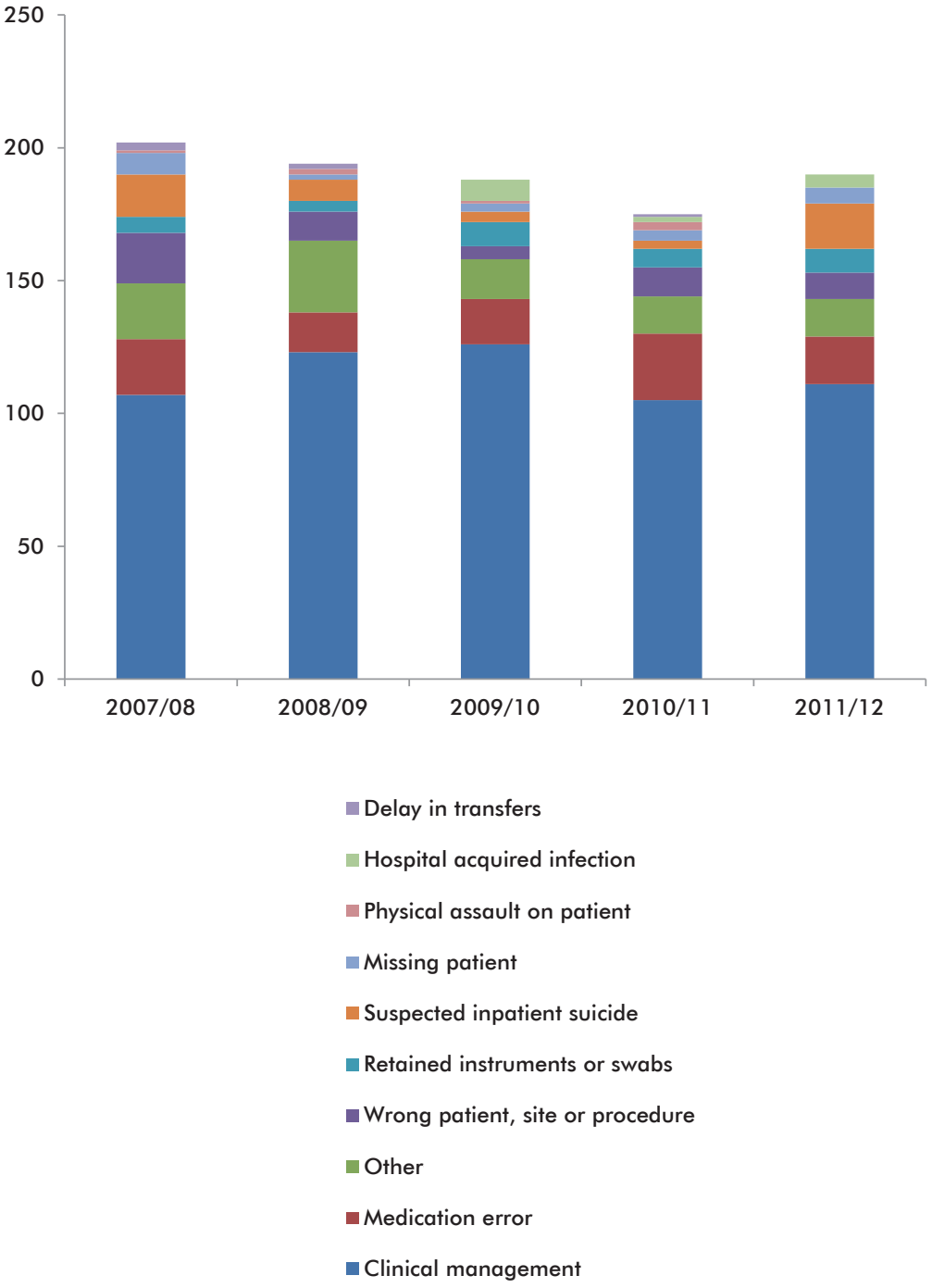
Figure 2: Frequency of SSE type, 2011/12



Main event categories

Once falls have been excluded from the overall figures,[6] the total number of serious and sentinel events reported in 2011/12 has increased nine percent (191 events) from 2010/11 (175 events) (see Figure 3 and Appendix 1). This rise is largely as a result of the increase in the frequency of suspected inpatient suicides and mental health patients who have gone missing from inpatient facilities.

Figure 3: Main event categories (minus falls)

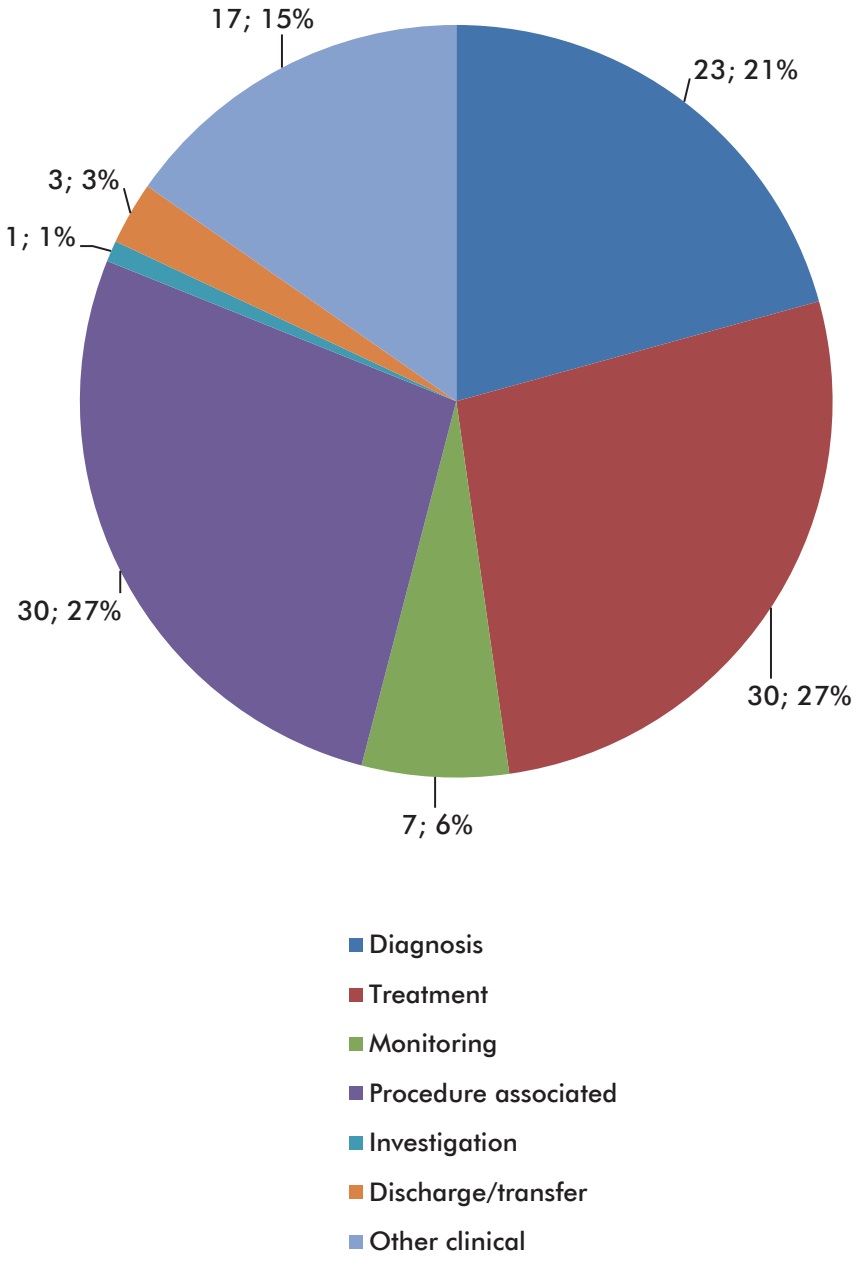


6 As the category of falls dominates the SSE data, accounting for approximately half of all SSEs, falls have been excluded from this section to allow more meaningful analysis of the other types of events.

CLINICAL MANAGEMENT

With 111 events in 2011/12, and 31 percent of all SSEs, clinical management events make up the second largest category of events after falls (see Figure 4 for further breakdown of the SSEs reported in the *Clinical management* category). Of note is the increase in the number of patients who are reported to have experienced a delay in treatment (with serious consequences). These 17 events are included in the total of 111, and fall into the three sub-categories of delays in treatment, diagnosis, and investigation.

Figure 4: Clinical management events 2011/12



Delay in treatment

During 2011/12, 17 cases have been reported to the Commission describing events in which failures resulted in delays in diagnosis of cancer, or similar serious outcomes.

An example of this type of event is as follows: an abnormality is noted on a patient's chest X-ray, and further tests are recommended to confirm the diagnosis and decide on further treatment. However, those recommended investigations or tests are not arranged, and the patient presents some time later, with the previously-detected abnormality being found to be cancer. Another example of this type of event is a delay in the review of a pathology specimen, which is subsequently found to show signs of cancer.

The 2010/11 SSE report identified 13 such events, with a 14th case identified after the report had been published.

It is probable these reported cases of delays in treatment are just a small fraction of all such events. Many other cases would not reach the threshold for reporting as a serious or sentinel event because the outcome for the patient was, fortunately, not serious.

The Commission's view is that these cases illustrate not just weaknesses in patient management and communications systems, but also failings in the extent to which the hospital involved the patients in their own plan of care. Had these patients been full partners in the management of their care, they would have been aware there needed to be a further test, a result from a specimen, or a referral to another specialist.

The Health and Disability Commissioner has investigated a number of cases related to the management of referrals, and made recommendations to DHBs.[7] In one case the Commissioner stated:[8]

> ***"The timely reporting of radiology results and effective handover of patient care are critical systems issues for all hospitals in New Zealand. It is essential that the issues highlighted by [this] case and the lessons learnt are shared nationally."***

A copy of this decision was sent to all DHBs.

The Commission believes DHBs should review patient management systems and inter-departmental communication in light of what appears to be a growing problem. The Commission has written to the DHBs that reported these events in 2011/12, requesting details of the review findings of each case. Recommendations may follow the Commission's review of these findings.

The Commission will continue to monitor this type of event and will share lessons learnt from DHB reviews.

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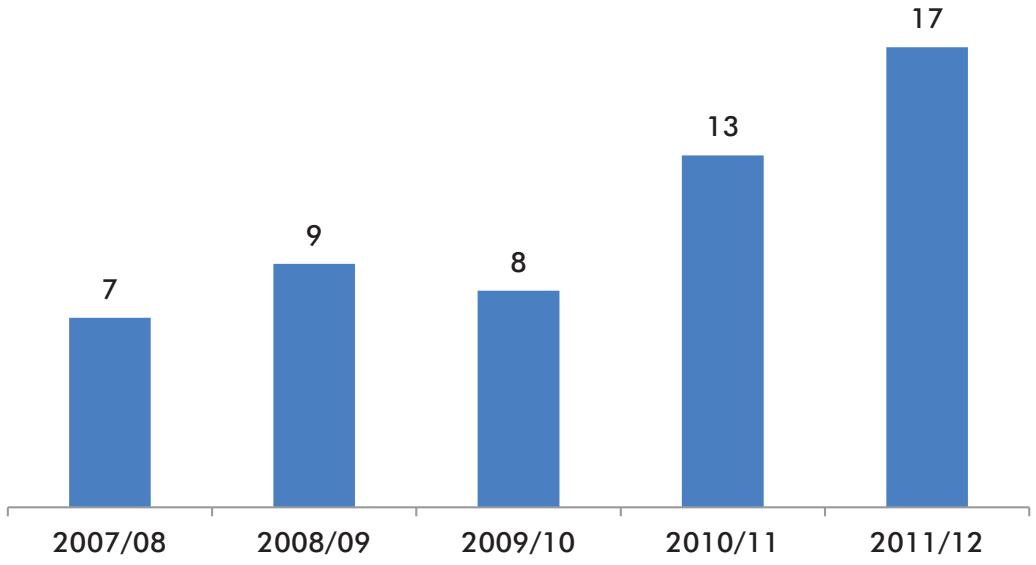
7 HDC cases: 07HDC19869; 09HDC00891; 09HDC01040; 07HDC20199; 08HDC06165.
8 http://www.hdc.org.nz/decisions-case-notes/commissioner's-decisions/2008/07hdc08819

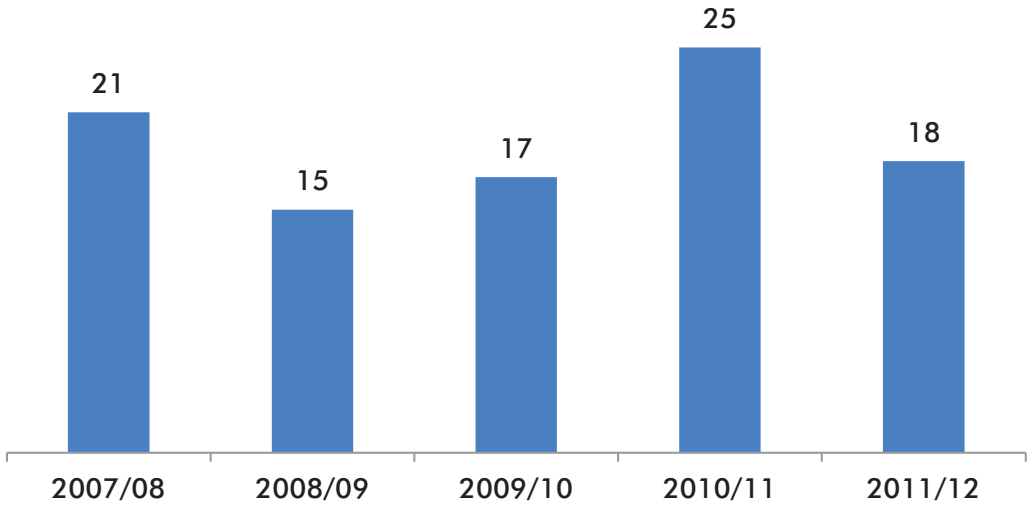
Figure 5: Delay in treatment



MEDICATION EVENTS

Medication events accounted for 18 SSEs in 2011/12 (five percent of the total). While there have been some annual fluctuations, this is in line with SSE reporting since 2007/08 (see Figure 6).

Figure 6: Medication events



The majority of the 18 events in 2011/12 related to simple errors with serious consequences: administering the wrong dose of a drug or the wrong drug, either because it was incorrectly prescribed, or because the staff administering the drug read a correct prescription incorrectly.

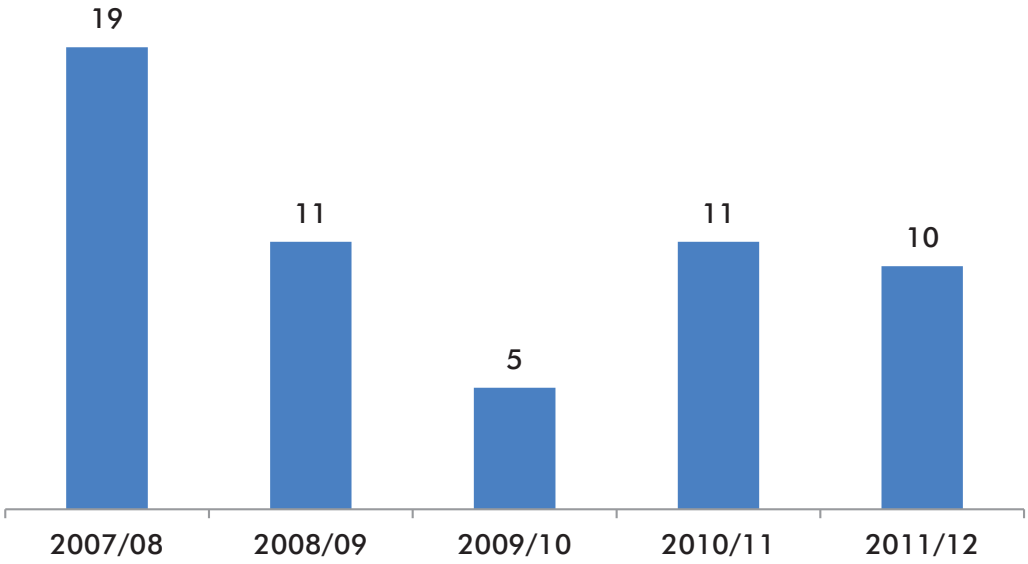
Four of the cases were related to incorrect or inappropriate medications being dispensed when a patient was discharged from hospital. To reduce the frequency of this type of medication error, the Commission's National Medication Safety Programme is helping health care organisations implement medicine reconciliation, which reduces medication errors and medication-related harm. Medicine reconciliation is about obtaining the most accurate list of patient medicines, allergies and adverse drug reactions and comparing this with the prescribed medicines, documented allergies and adverse drug reactions. Any discrepancies are then documented and reconciled.[9]

9 http://www.hqsc.govt.nz/our-programmes/medication-safety/projects/medicine-reconciliation/

WRONG PATIENT, SITE OR PROCEDURE

Events involving the wrong patient, site or procedure accounted for 10 SSEs in 2011/12, broadly in line with reporting over previous years (see Figure 7).[10]

Figure 7: Wrong patient, site or procedure[11]



Of the 10 events that occurred in this category, two were similar – with the wrong patient taken from a hospital ward for a radiology procedure (a CT scan). In both cases the patient had a chemical injected as part of the procedure, further compounding the error. The systems that existed to prevent such an incident failed.

As part of the Commission's work programme to reduce perioperative harm, hospitals are being encouraged to use the Surgical Safety Checklist. The checklist, developed by the World Health Organization (WHO), is a common sense approach to ensuring the correct surgical procedures are carried out on the correct patient, and to improve team communication generally. Part of the checklist includes a section to ensure the correct implants are available for an operation. In the 2011/12 SSE report, 3 of the 10 events related to an incorrect implant being used during an operation (two ophthalmic, one orthopaedic). Consistent use of the checklist can reduce mortality and morbidity by approximately 30 percent, and the Commission is working with all DHBs to integrate the use of the checklist in all surgical procedures.

One SSE from 2011/12 reported by a DHB in this event category was a mastectomy being unnecessarily performed on a patient as a result of a mix-up of slides in a laboratory. The Commission is also aware of other serious events that have been reported by BreastScreen Aotearoa, but which are not included in this report.[12] As discussed elsewhere, the National Screening Unit (which includes BreastScreen Aotearoa) is one of the organisations that has now voluntarily begun reporting SSEs to the Commission.

10 Six events in 2007/08 were from one DHB, with the same cause and outcome. In each case, an incorrect lens was implanted during a cataract operation because of inaccurate equipment settings.
11 ACC advised there were eight accepted claims in 2011/12 for unnecessary, wrong, or wrong site surgery.
12 http://www.health.govt.nz/publication/report-national-panel-review-breast-biopsy-errors

FALLS

The number of falls reported as SSEs has decreased by 13 percent, from 195 in 2010/11 to 170 in 2011/12. The number of these events where the patient fractured his or her neck of femur (broken hip) has also decreased by 13 percent, from 91 in 2010/11 to 79 in 2011/12 (see Figures 8 and 9).

Figure 8: Falls reported as serious and sentinel events

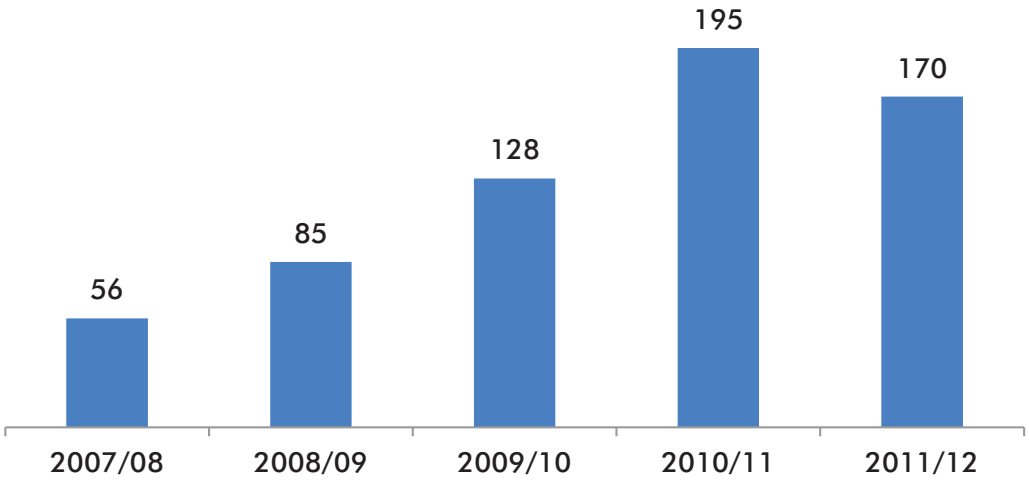
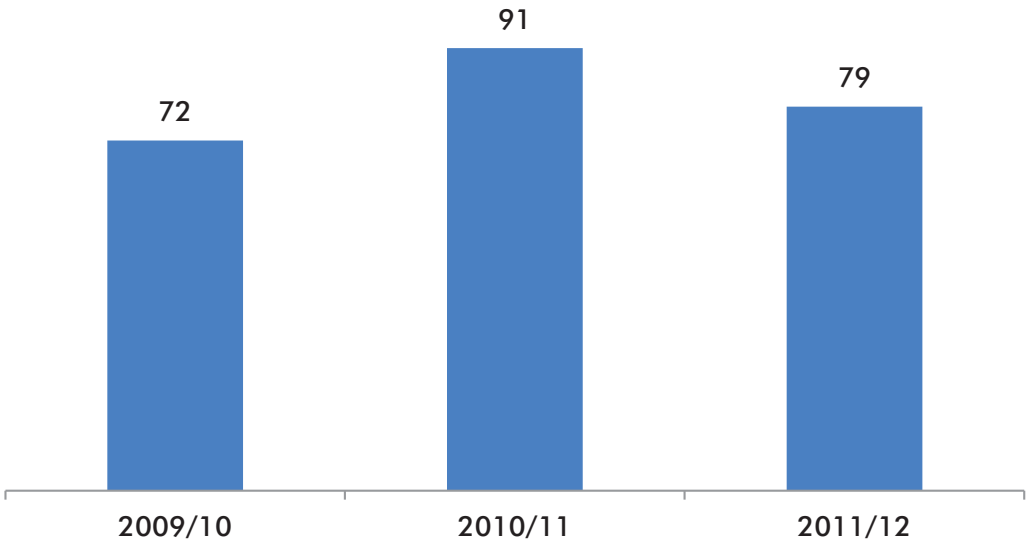


Figure 9: Falls resulting in fractured neck of femur



Reporting of falls

As previously noted and commented on in the 2010/11 SSE report, over time a level of inconsistency had crept into SSE reporting by DHBs, which was particularly evident in the category of falls. Some DHBs only reported preventable events, while others included all SSEs, irrespective of preventability.

To develop consistent reporting for the 2011/12 SSE data, DHBs were asked by the Commission to include all events which resulted in patient harm, and which reached the threshold of a serious or sentinel event. DHBs were specifically advised that the preventability of an event was not relevant to reporting. The Commission expected this requirement to result in an increase in the number of falls reported as SSEs during 2011/12, and most likely an overall increase in all reported SSEs. However, while in a few DHBs the number of reported falls has increased, overall there has been a decrease.

Serious harm from falls remains a significant cost to the health and disability sector, patients and their families (both personal and financial). The Commission is working with the wider sector to help develop strategies to continue to reduce the incidence of serious falls.

SUSPECTED INPATIENT SUICIDE AND MISSING MENTAL HEALTH PATIENTS

The category *Suspected Inpatient Suicide* includes events which fall into three sub-categories, two of which relate to cases outside inpatient facilities. Patients who are suspected of having committed suicide:

1. during admission to an inpatient facility (nine events in 2011/12)
2. while on approved leave from an inpatient facility (five events in 2011/12)
3. having gone missing from an inpatient facility (three events in 2011/12).

Figure 10: Suspected inpatient suicide

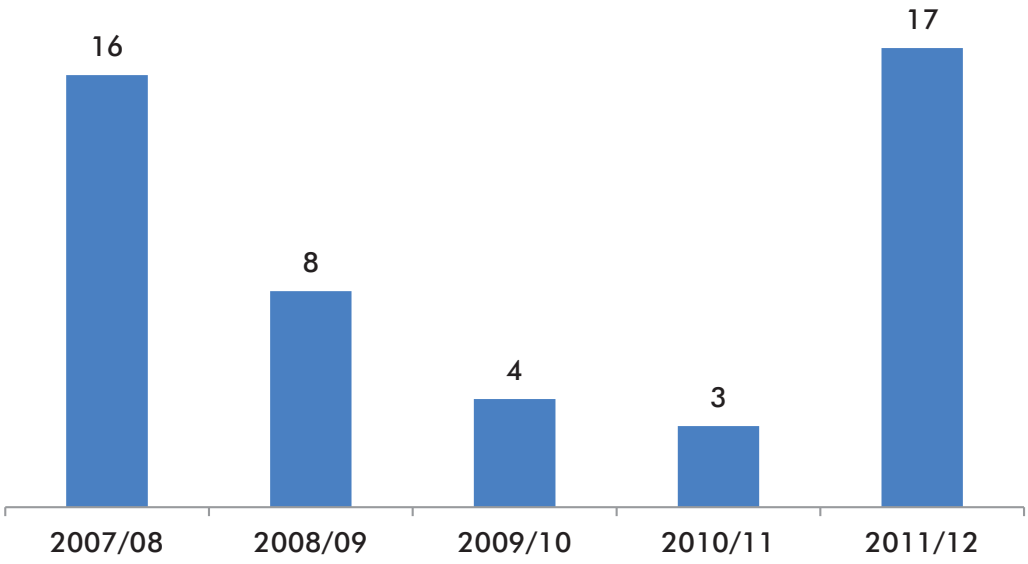
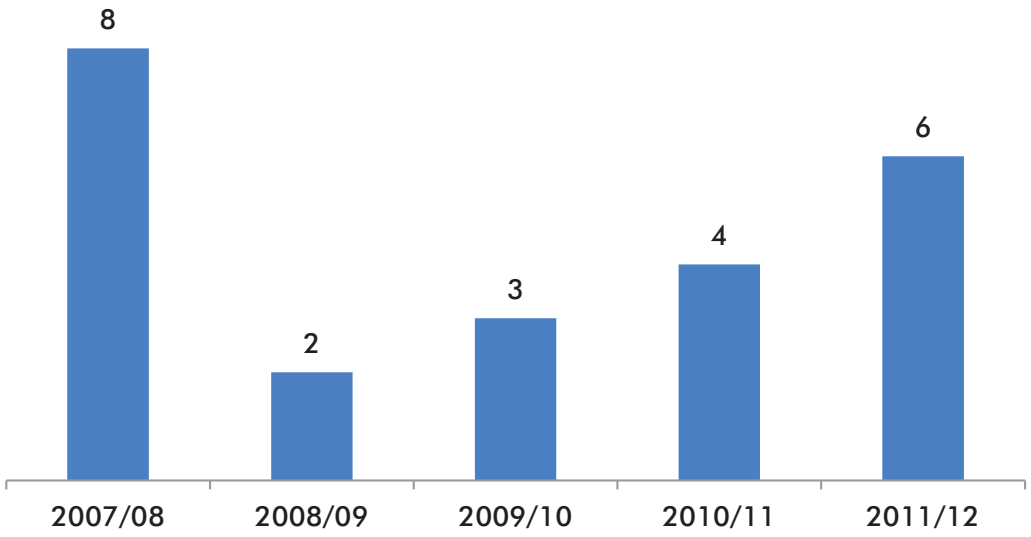


Figure 11: Mental health patients missing from inpatient facilities



Cases of suspected inpatient suicide have increased more than five-fold in the last year, from three in 2010/11 to 17 in 2011/12. This number is spread across ten DHBs which reported one or more of this type of event.[13]

Also noted is a rise in the number of events involving mental health inpatients going missing from inpatient facilities (see Figure 11). It seems possible there is an issue of supervision of patients that needs to be addressed by DHBs.

With limited information available on the specific cases, it is not possible for the Commission to make any informed comment on this pattern of reporting. However, the Commission has written to the DHBs that have reported suspected inpatient suicides in 2011/12, requesting details of the outcome of the reviews. It has also brought the trends to the attention of the Director of Mental Health. The Commission also recommends DHBs take note of the apparent rise in these events, and discuss these national results at an appropriate local forum to consider what action can be taken.

13 Two DHBs with three events; three DHBs with two events; five DHBs with one event.

Quality Improvement at DHBs

Improving incident reporting in Wellington

Capital & Coast DHB has recently put in place a new system to enable primary and community health providers to report incidents involving patients receiving hospital and health service care. It's a simple, inexpensive initiative that improves safety and quality through better communication.

Learning from incidents that may have adversely affected patients' health is a well-established and important part of any DHB's ongoing improvement process. When primary and community care providers in Wellington told Capital & Coast District Health Board (CCDHB) they thought the process for reporting incidents was unclear and inefficient, it was agreed action would be taken to improve things.

CCDHB Patient Safety Officer Kate MacIntyre says the DHB got a small group together and began looking for solutions.

"We would have loved an elaborate online tool that fed directly into our incident system, but unfortunately, there was no allocated budget for anything like that. We work with scarce resources so we always try and look first at ways to make things work without costing money."

Capital & Coast District Health Board Patient Safety Officer Kate MacIntyre

After considering a number of options, a simple system was developed whereby a Microsoft Word form was published and distributed to every primary and community health care provider in the district. They can now use the form to report their concerns about any incident involving the DHB's patients by filling it out and emailing it to the DHB. A flow chart is included to help make sure the system is understandable.

"Once the DHB receives a form, the event or concern is assessed, any questions are resolved and the information is logged into the reportable events database for further action," says Kate MacIntyre, who monitors the emails received.

Set up in August 2011, the system has resulted in a number of incidents being notified to the DHB and, after review, several processes have been improved.

For example, the first report received was from a GP who alerted the DHB of their concern about a patient referred to the hospital for specialist assessment. The patient had cancelled their appointment because their symptoms settled. This happened before the hospital had electronically entered the referral, which meant there was no hospital system record of it and the GP was not advised of the cancellation. Had the GP been aware they would have had the option of contacting the patient to advise them of the value of being assessed by a specialist. The GP became aware of the incident when the patient attended with further symptoms and was diagnosed with cancer a year later.

To address this patient safety risk and communication gap, the DHB now puts referral cancellation information into an existing report provided routinely to GPs so they can be fully aware when their patients decide not to proceed with recommended treatment.

Kate MacIntyre says the DHB is very pleased with how the form has enabled quick communication about GPs' and community providers' concerns.

"By putting in place a simple reporting system from primary and community providers to the DHB, we've been able to identify a number of risks and put in place safety mechanisms to reduce the chances of similar problems occurring again. It's a good example of how initiatives to improve quality of care do not always have to be costly or complicated."

A notable reduction in medication errors at Wairarapa DHB

Improving quality of care doesn't have to be complicated. Sometimes, a few simple, common-sense initiatives can have a significant impact on patient safety.

The 2010/11 serious and sentinel events report included a case study about a simple square of red duct tape on the floor by the controlled drugs cabinet in the Medical and Surgical Ward at Wairarapa Hospital. When nurses are standing inside that square, other staff members know they are concentrating on medication and are not to be disturbed.

"In today's culture, with its cell phones and instant communications, people tend to believe it's okay to interrupt others in the middle of an activity," says Charge Nurse Manager Susan Reeves.

"But inside the red square it's protected time for double-checking and recording the medication required from the controlled drugs cabinet. Removing distractions has had a definite impact on the number of medication errors nurses make."

From left: Claudia Baechle, Associate Charge Nurse Manager Medical Surgical Ward; Dr Fadi Elyas, RMO and Cate Tyrer, Director Quality, Safety and Risk, Wairarapa DHB, checking a medication chart

But the red square is only one of a number of simple initiatives that have contributed to a remarkable reduction in medication errors at Wairarapa Hospital over the last year. In the Medical and Surgical Ward there were eight incidents, related mainly to controlled drugs recording, in the first five months of 2011. During the first five months of 2012 there have been just two.

Another new initiative has been the adoption of the Commission's national medication charts. These are standardised charts for the prescribing and administration of medication. Before their adoption, charts were often completed in handwriting, which could lead to problems with legibility. Doctors moving from hospital to hospital regularly encountered different medication chart formats, and unfamiliarity sometimes led to issues with accurate prescribing.

The national medication charts have standardised information practices and records are now printed, rather than written in cursive. They've led to a much more efficient system, with significantly fewer opportunities for error or omission.

The DHB has also instituted Registered Medical Officer (RMO) audits. Week two and ten of each RMO's rotation sees them performing in-depth checks of medication chart records and auditing them against national medication standards.

Director Quality, Safety and Risk, Cate Tyrer, says the RMO audits encourage doctors to take ownership of their own prescribing and drug management practice as well as that of their peers, and this has also contributed to a ward-wide cultural shift.

"The initiatives we've adopted have helped embed the understanding that accuracy and safety around medication are of paramount importance. It's led to a combined focus across the ward, with doctors and nurses now working together to improve quality of care in this high-risk area.

"It's this culture change and how we've addressed a sizeable problem in manageable pieces that has made all the difference, rather than any one of these initiatives on its own."

The steep downward trend in medication errors equates to a significant improvement in quality of care, and this has been encouraging for staff. But with 38 beds and a high turnover of both doctors and patients, the potential for error is always there.

"It's positive and heartening to know these changes have made a difference," says Susan Reeves.

"However, there's never room for complacency, and medication management will always require constant care and vigilance."

MidCentral DHB's falls card

It's only a small card, but its advice is extremely practical. It has become such an important part of MidCentral DHB's falls reduction programme, that other DHBs are considering its use.

Reducing patients' risk of falling while in hospital is a high priority for MidCentral DHB. The DHB has a falls reduction programme which includes a thorough falls risk assessment upon hospital admission.

Since 2011 an annual 'April Falls Day' has been held to raise awareness among staff as well as patients and their whānau/families about falls and how they can be reduced. In 2012, April Falls Day focussed mainly on staff at Palmerston North Hospital. Seminars were held, and all staff were given a 'Be Alert, Falls Hurt' card.

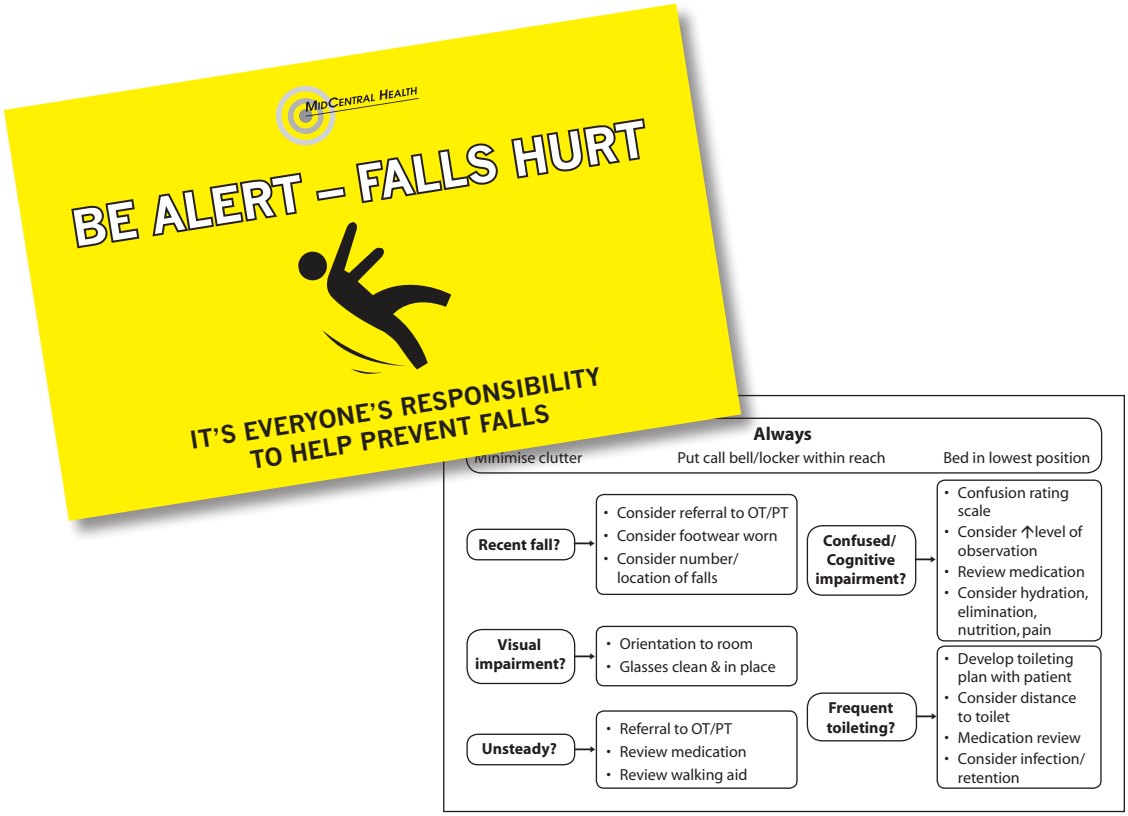
"Our people know falls are one of our top action categories, and they're really good at assessing patients at high risk," says Susan Murphy, Manager Quality and Clinical Risk at MidCentral Health.

"But that's only the first step. We wanted a simple way to inform or remind everyone about the raft of practical, common sense things they can do to help keep a patient safe, once they've been assessed as a high falls risk."

The Falls Card is small and designed to sit at the back of ID tags, so it's something staff can always have with them. Simple reminders include removing clutter, keeping beds in a low position and putting call buttons within easy reach. If visual impairment is an issue, the card suggests room orientation take place, and that a patient's glasses are always kept clean. It reminds about such things as toileting plans, walking aids, footwear, reviewing medication and the importance of continued observation.

Susan Murphy says the Falls Card is another tool that supports staff to be active in the management of reducing falls at MidCentral Health.

"In 2011 we recorded 12 serious falls at Palmerston North Hospital, but this year we've had only nine. Twenty-five percent fewer falls has meant lower associated costs to the hospital and, most importantly, greatly reduced patient suffering."



Canterbury DHB's falls reduction programme

Canterbury DHB reduced serious and sentinel fall events by 40 percent in the first 12 months as part of a new system-wide falls initiative in 2011/12. That means 16 fewer people were harmed due to a fall in the DHB's care in 2011/12 compared to the previous year. This reduction in hospital falls has significantly reduced the personal costs from falling for these patients, as well as the emotional impact upon their families and DHB staff.

The Canterbury DHB Clinical Board has focussed on establishing a culture of 'zero harm from falls'.

"We are determined to reduce the harm to our patients from falls in our hospitals and in our communities and have been working with groups in primary and secondary care, and engaging with the community and providers to achieve our goals," says Ken Stewart, Clinical Board Lead for Falls Prevention.

"It has been inspiring to see the efforts made by staff to reduce patient falls and to manage hazards and patient risk in a range of hospital settings. Our staff continue to demonstrate compassion for patients and have acted to prevent harm from falls for patients in their care."

About forty people aged over 75 are seen at the Christchurch Hospital emergency department each week because they have had a fall. A large number of these are among the frail elderly who are admitted and are at significant risk of falling again while in hospital. In some case, these people will not return to independent living in their own homes and may instead go on to aged residential care.

A community falls prevention strategy has been established to reduce the number of elderly people presenting to the ED for falls-related injuries. This is based on a modified version of the Otago Exercise Programme. Training packages for primary care clinicians have been developed to improve service integration and clinical pathways have been designed to inform and streamline referrals to the new community service. There have been 800 referrals into this programme in the first six months.

The Canterbury DHB Clinical Board set out with a vision of 'zero harm from falls', reviewed the current situation and recognised there was good evidence for effective falls prevention in hospitals, aged residential care and for older people living in the community. A coordinated systematic approach across hospital divisions, primary and secondary care and the wider community is being established.

"We are now closing the gap between research and clinical practice," says Ken Stewart.

This reduction in hospital falls has significantly reduced the personal costs from falling for these patients, as well as the emotional impact upon their families and DHB staff.

Falls study highlights important nursing leadership role

In February 2012, a four-month falls study was undertaken at The Princess Margaret Hospital in Christchurch where every fall in eight participating wards was reviewed. The review involved falls study nurses speaking with the patient, family and their nurse about the fall and the events leading up to it.

Study nurses were well-placed to transfer knowledge to their colleagues about falls-management best practice in their working environment at the time it was needed. They quickly took on the role of 'falls champions' on the study wards. This study is part of Canterbury DHB's wider health system initiative and will help inform the future strategy, management and prevention of harm from falls in hospitals.

"The study was really comprehensive and we got absolutely heaps out of it," says study nurse Nichola Loose.

"We looked at falls prevention at every step of the way, from the community through to hospital and after care, and I think the study itself even helped improve awareness and communication across the whole system."

Study nurse Pauline Chingwe assists a patient using a walking aid designed to help prevent falls.

Study nurse Pauline Chingwe says that since the study, nurses are much more aware of the seriousness of falls, how they can occur and what they need to do to prevent them. They are always on the lookout for falls hazards such as poorly stored equipment, and make sure patients have safe well-fitting footwear and can reach their bells.

"There's a real emphasis on teamwork, so when a patient rings a bell, we make sure we attend to them promptly, no matter which nurse they have been assigned to," she says.

"We all feel really bad when a patient falls in our care," Nichola says, "but the study has helped emphasise that not all falls are the same and I am now more aware of the many factors that can cause falls."

The study has also made her more aware of the importance of gathering a complete patient falls history, involving the family, working collaboratively with the interdisciplinary team on falls prevention and the importance of clearly documenting the essential elements of each patient's specific falls prevention strategy in the clinical record.

Appendix 1: Serious and Sentinel Events by DHB and Event Type[14]

Figure 12: SSEs by DHB 2006/07 to 2011/12

DHB	2006/07	2007/08	2008/09	2009/10	2010/11[15]	2011/12
Northland	6	5	7	4	4	10[16]
Waitemata	22	11	20	17	29	29
Auckland	26	30	31	32	54[17]	62
Counties Manukau	7	23	29	38	35	24
Waikato	24	36	60	52	51	26
Bay of Plenty	1	5	5	13	14	10
Lakes	1	6	3	7	4	7
Tairawhiti	1	3	7	3	5	5
Taranaki	5	7	2	7	3	18[18]
Whanganui	3	4	7	9	9	4
Hawke's Bay	12	7	5	9	7	11
MidCentral	4	2	8	18	22	15
Hutt Valley	2	7	10	10[19]	4	10
Wairarapa	1	2	2	4	2	4
Capital and Coast	14	16	22	18	16	19
Nelson Marlborough	7	5	6	1	8	6
West Coast	5	11	2	4	4	4
Canterbury	22	41	44	69	49	49
South Canterbury	3	12	7	9	10	17
Otago	3	7	20	39		
Southland	13	18	11	9		
Southern					40[20]	30

14 2010/11 and 2011/12 figures exclude suspected outpatient suicides.
15 Seven cases withdrawn from 2010/11 report (377 originally reported) subsequent to completion of DHB review: 2 Auckland DHB; 2 Waikato DHB; 1 West Coast DHB; 1 Taranaki DHB; 1 Tairawhiti DHB.
16 Northland DHB advised that it had reviewed the reporting of falls resulting in harm during 2011/12, which has resulted in more events being reported as serious events (SAC2).
17 Auckland DHB advised that a change in how serious falls were recorded during 2010/11 resulted in a rise in reported SSEs during that and subsequent years.
18 Taranaki DHB advised that, prior to 2011/12, it only reported those SAC 1 and 2 events which were considered preventable.
19 Hutt Valley DHB advised that there were 10 SSEs in 2009/10, not 12 as published.
20 Otago and Southland DHBs combined on 1 January 2011 to form Southern DHB.

Figure 13.1 and 13.2: SSEs per 10,000 case-weighted discharges 2011/12 (source Ministry of Health)

Below, SSEs are presented as a rate of SSEs per 10,000 case-weighted discharges (CWD – a measure of how many patients a hospital actually sees). We have presented these in what is known as a 'funnel plot'. Each numbered dot represents a DHB, with the smallest (West Coast) being furthest to the left and the largest (Auckland) being furthest to the right. The national average rate of SSEs for 2011/12 (just under 5 per 10,000 patients) is represented by the straight horizontal line. The curved lines, or the 'funnel', shows the point where a given SSE rate differs from the average by more than can be explained by chance alone. The funnel is so shaped because, as the number of patients increases, the amount of variation that can be explained by chance decreases.

In other words, differences between DHBs within the funnel can be explained by chance, but any DHB which lies outside the funnel is far enough away from the average that the difference can't be explained by chance alone.

Figure 13.1: Total reported SSEs

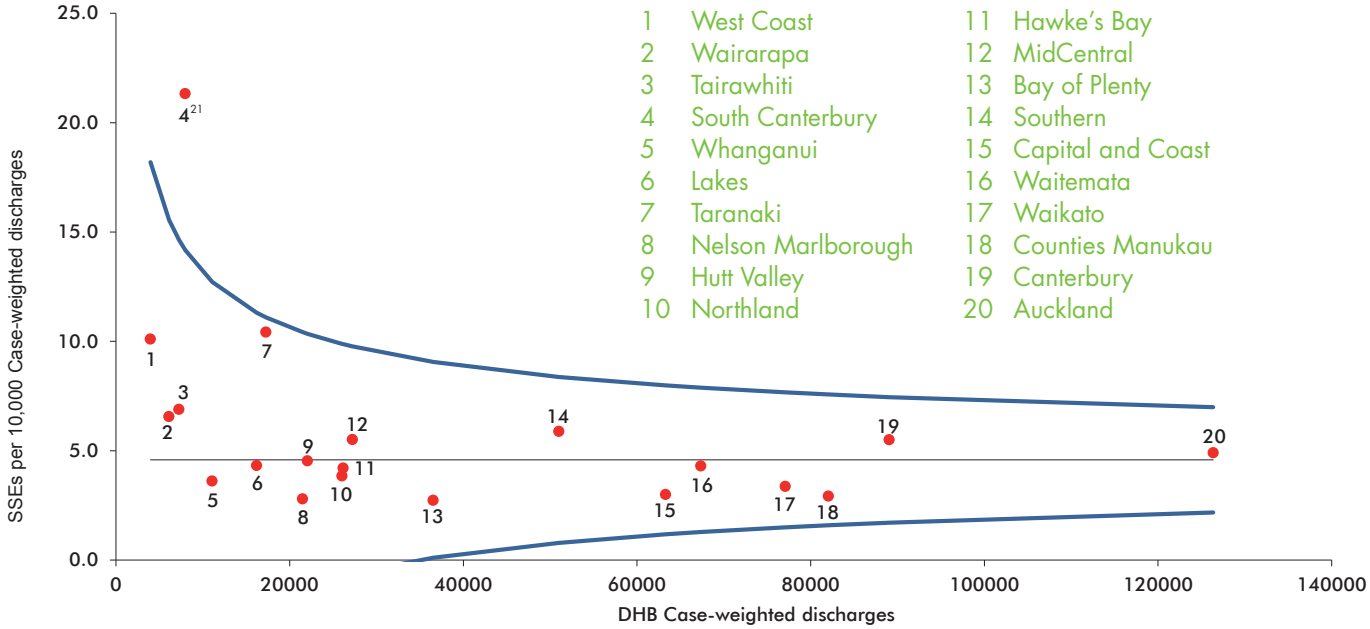
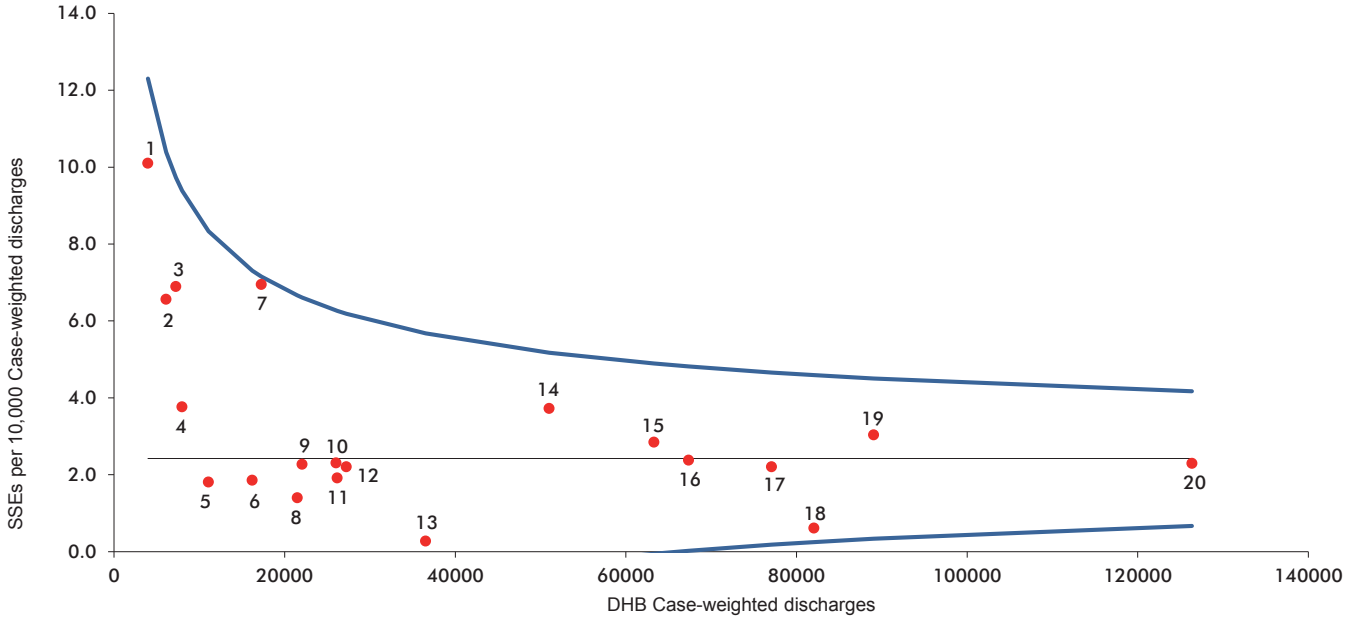


Figure 13.2: Total reported SSEs excluding falls



21 Fourteen of the 17 SSEs reported by South Canterbury DHB were patient falls. With the falls extracted from the overall number, South Canterbury DHB is within the norm for SSEs/patient numbers. South Canterbury DHB says the number of patient falls is affected by the DHB owning and operating an 80-bed aged residential care facility, as well as having the highest proportion of older people (both over 65 & 85) in the country. The DHB advises a review of its falls management strategy is presently underway.

Figure 14: SSEs by event category 2007/08 to 2011/12[22]

	2007/08	2008/09	2009/10	2010/11	2011/12
Clinical management	107	123	126	105	111
Medication error	21	15	17	25	18
Other	21	27	15	14	14
Wrong patient, site or procedure	19	11	5	11	10
Retained instruments or swabs	6	4	9	7	9
Suspected inpatient suicide	16	8	4	3	17
Missing patient	8	2	3	4	6
Physical assault on patient	1	2	1	3	0
Hospital-acquired infection[23]	n/a	n/a	8	2	5
Delay in transfers[24]	3	2	0	1	n/a
Falls	56	85	130	195	170

22 SSEs were not separated into categories in 2006/07.
23 Not collected as a separate category prior to 2009/10.
24 Category not used for 2011/12; Clinical Management category 'Discharge/transfer' used instead.

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