

Research Insights of Regional Mental Health Care London and St. Thomas is a peer-reviewed journal designed to publish reviews, case studies and articles as they pique the interests of our clinicians and emerge from reflections on daily clinical work. The purpose is to encourage local scholarly endeavours and provide an initial forum of presentation. The papers may later be submitted to other journals for publication.

Research conducted at Regional Mental Health Care London and St. Thomas, St. Joseph's Health Care, London is part of Lawson Health Research Institute.

Research INSIGHTS

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ADVANCING CLINICAL PRACTICE IN PATIENT SAFETY:
Linking Incident Reporting to Proactive Practices in a Geriatric Psychiatry Program

Ed Black, Lisa VanBussel, Tom Ross, Jennifer Speziale

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Manuscripts submitted for publication should not exceed 4000 words and follow the style of the Canadian Journal of Psychiatry. The manuscript should be arranged in the following order: 1) Title page 2) Structured Abstract, Clinical Implications and Limitations, and Key Words 3) Body Text 4) Funding Support and Acknowledgements 5) References 6) Tables and Figures. The Managing Editor may be approached for any unique stylistic variations required by the subject matter.

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Advancing Clinical Practice in Patient Safety: Linking Incident Reporting to Proactive Practices in a Geriatric Psychiatry Program

by



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KEY WORDS

Incident reporting systems, geriatric psychiatry, risk management, falls, physical aggression, patient safety, and responsive behaviours

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Abstract

Objective: *To evaluate the impact of an incident reporting system on clinical practices in a geriatric psychiatry population over an eight year period.*

Method: *An interdisciplinary team met monthly to review risk data and discuss alternative interventions for managing disruptive behavior. Patient database information revealed risk and non-risk group demographics, event characteristics, and trends related to program changes and outcomes.*

Results: *Over an 8 year period, 5,614 events involving 684 individuals (the 'risk' group) were recorded. Patients belonging to risk and non-risk groups (n = 1,149) varied in sex, psychiatric diagnosis and average number of medical conditions. Physical aggression and falls were the most common types of events, followed by miscellaneous events and property destruction. The majority of events occurred in dayrooms/lounge and resulted in no harm. Mental state was the most frequently identified contributory factor. Non-pharmacological intervention strategies were applied most frequently. Falls and acts of physical aggression were most common amongst men aged 75 to 79. Men with dementia most often belong to a fall or fall and aggression group, while women aged 62 to 93 with affective disorders are most likely to be associated with a fall group only. No difference was found in the prevalence of medical conditions between risk and non-risk groups.*

Implications: *Such incident reporting has led to crafting individualized care plans and eventually new practice policies. In turn, these policies have assisted in the transition of patients to long term care, which has improved access to beds and flow of patients to discharge destinations in a more timely fashion.*

Introduction

The maintenance of patient and staff safety is a major public concern for healthcare systems (Evans, Berry, Smith, & Esterman, 2004). Quality and safety organizations from around the world have endorsed the use of incident reporting to more effectively monitor risk events and system errors (Australian Council for Safety and Quality in Health Care, 2001; Department of Health, 2000; Kohn, Corrigan, & Donaldson, 2000; Haines et al., 2008). Historically, the health care system has fallen behind other industries in developing and implementing incident reporting and other safety measures. The aviation industry has been utilizing an anonymous, voluntary reporting system for over 30 years, and the data collected has led to system changes in aircraft design, air-traffic control and employee training (Billings, 2008; Wagner, Capezuti, Taylor, Satin, & Ouslander, 2005). However, the past decade has brought about increased attention to the idea of designing a culture of safety. In 2000, the United States' Institute of Medicine published *To Err is Human: Building a Safer Health System*, which estimated that 44,000 to 98,000 deaths were caused by medical mishaps each year (Kohn et al., 2000; Tsilimingras, Rosen, & Berlowitz, 2003). This document has led to the development of new safety measures and regulatory initiatives, including ways to

monitor and review safety events ("Making health care safer: a critical analysis of patient safety practices," 2001). In November of 2003, the United Kingdom's National Patient Safety Agency implemented an incident reporting system. Approximately 30,000 reports are received each month, and data is used to identify trends, provide guidance and alerts, and create topic reports for the National Health Service (Thomas, 2008). Locally, St. Joseph's Health Care Toronto implemented the Think Pink campaign in 2006. The campaign used pink stickers and communication charts to easily identify patients at risk of falling and to promote awareness and compliance of the system. (Ontario Hospital Association Patient Safety Support Service, 2006). More recently, a standardized patient safety monitoring system has been developed across hospitals in London, Ontario.

Research has demonstrated the effectiveness of incident reporting systems on medical units, (Staender, Davies, Helmreich, Sexton, & Kaufmann, 1997; Beckmann, Baldwin, Hart, & Runciman, 1996; Fernald et al., 2004; Battles, Kaplan, Van der Schaaf, & Shea, 1998; Wolff, Bourke, Campbell, & Leembruggen, 2001; Lee, Liu, Kuo, Mills, Fong & Hung, 2011; Yates & Tart, 2010) but less information is available on the use

of incident reporting for a geriatric psychiatry population. Of the studies that do exist, many have used incident reporting to specifically analyze one type of event, such as falls (Wagner et al., 2005; de Carle & Kohn, 2001; Lim, Ng, Ng, & Ng, 2001; Detweiler, Kim, & Taylor, 2005; Yates & Tart, 2010; Lee, Liu, Kuo, Mills, Fong & Hung, 2011), or incidents of aggression (Gifford & Anderson, 2010; Crocker, Braithwaite, Laferriere, Gagnon, Venegas & Jenkins, 2011), rather than emphasize analysis of program implications, trends and patient characteristics common to all events.

Geriatric psychiatry patients bring a unique history and treatment profile, which often requires individualized care. Studies have shown that approximately 90 % of long-term care residents display agitated behaviors (Cohen-Mansfield, Marx, & Rosenthal, 1989), 86% display aggressive behaviors (Ryden, Bossenmaier, & McLachlan, 1991) and 60 % experience a fall event each year (Lim et al., 2001). Traditionally, chart review has been used to monitor such incidents, usually limited to severe events and, hence, not always able to uncover underlining causes (“Making health care safer: a critical analysis of patient safety practices,” 2001). Furthermore, events that result in no harm may go completely unnoticed. In order to reduce the frequency

of events, incident reporting can be employed “to identify distinct risk groups within a total population and provide differentiated clinical information on the basis of which services can be developed or targeted more specifically and decisions made more rationally” (Abraham, Currie, Neese, Yi, & Thompson-Heisterman, 1994).

In an effort to improve event monitoring for the Geriatric Psychiatry Program (GPP) at Regional Mental Health Care London, an incident profiling system was established in 2001 to discover risk management issues as part of a quality assurance and research initiative. A multidisciplinary planning team with members from medicine, occupational therapy, nursing, psychology and recreation, developed the data set using expert consensus guidelines.

The ultimate purpose of this specific method of incident reporting and safety management was to enhance evidence-based care practices and reduce harm through improved detection and prevention. In this study, risk events encompass falls, verbal and physical acts of aggression - assaults (responsive behavior), absence-without-leave and any other incidents that have the potential to compromise patient and staff safety. Our aim for this paper is to demonstrate the effectiveness of the method.

Method

Incident Reporting

Reporting all risk situations, including those that do not result in injury, is the first step toward achieving the objective of the GPP interdisciplinary team. Clinical staff members (i.e. nursing, psychology, occupational therapy, physiotherapy, therapeutic recreation and social work) were trained to utilize the computer-based incident reporting system. An example of the incident reporting form can be seen in Figure 1.

Figure 1. A copy of the incident reporting form completed by staff following a risk event

The screenshot shows a 'Risk Assessment' window with the following data:

- Site Information:** Choose a site: 14H, Date: 10/19/2001, Time: 00:00, Ward: H1, Location: Event: bedroom.
- Person at Risk:** Case Book Number: 03993, Age: 93, Diagnosis: Obsessive Disorder, Medical Diagnosis: COPD.
- Source of Risk:** Staff at risk: Yes, Third party at risk: No, Conk: No.
- Type of Event:** Choose Event: Fall, Risk Note: pt fell out of bed, Disrupted behavior: Physical aggression, Check any that apply: AllwOL, Property Destruction, Fire Hazard.

Risk events were evaluated in the context of the nature of the events (i.e. physical aggression, falls, medication errors, self-injury and absence without leave), patient characteristics (i.e. medical and psychiatric diagnosis) and where and when the incidents occur. The system considers the type of intervention used by the treatment team, those notified of the event, contributory

factors, event severity, workload measurement, patient to staff ratio at the time of the incident, and occupancy rates. Staff members were also required to record a brief description of the event. *Only patient-related risk events were dealt with in this paper* – falls, aggression or damage. Other events detrimental to patient safety, such as third party incidents, AWOLs, medication error, self-inflicted injury, equipment failures, environmental factors, unexpected medical incident, inappropriate sexual behaviors, choking, or seizures, are not dealt with in our results or discussion.

Harm refers to actual event severity. Events are ranked on a four point scale; 1 – no harm, 2 – slight harm, 3 – moderate harm, 4 – severe harm or death. *Damage* refers to physical damage not towards individuals, e.g., ward furniture. *Assaults* refer only to physical aggression towards fellow patients; physical aggression towards staff is recorded through the Occupational Health and Safety Recording System, which was not considered in the present study. Fall plus assault does not necessarily mean that the events occurred simultaneously.

The risk group (n=684) included individuals who had a recorded risk event, and the non-risk group (n=1149) included individuals who did not have a recorded risk event. Risk event data was analyzed on a monthly

basis by an interdisciplinary team, and results were presented to senior program staff (i.e. the corporate quality assurance group, program director and lead psychiatrist), while ward-specific results were reported to nursing and other clinical staff. Monthly reports included frequencies of the categories of location and event type for each ward. Monthly patterns were compared to yearly trends to determine sources of variability. A related report provided the written description of events by ward, casebook number and severity. Clinical records also provided monthly bed days and occupancy rates. The data quality was reviewed on a monthly basis to identify and correct coding errors.

The interdisciplinary team makes recommendations about ways to reduce the likelihood of similar incidents from recurring and identifies those who are repeatedly involved in events. The team assesses trends over time, identifies high-risk patients and develops nursing care plans and behavioral and environmental interventions strategies. Serious incidents are thoroughly analyzed from a clinical perspective to examine contributory factors and develop adequate intervention strategies.

Facility

The GPP provides tertiary treatment

for older adults with serious mental illness. In 2000, the program was a two site program with 143 beds distributed over five wards. In 2003, the program was relocated to one site with 130 beds distributed over four wards. In 2004, a Discharge Liaison Team (support for difficult transitions into long term care) was established and one ward closed, leaving 94 beds distributed over three wards. These wards are organized according to complexity of care and mental health needs.

Patient Population

Over the eight year period, the average age of the population was 75 years old, with age ranging from 49 to 96, and men comprising approximately 56 % of the population. The GPP treats people who experience: behavioral and mental health problems associated with cognitive impairment; late onset psychiatric illness; and chronic psychiatric disorders with medical and functional complications. On average, 47% of the population had been diagnosed with an affective disorder, 29% had been diagnosed with psychosis and 24% had been diagnosed with dementia.

Data Collection and Analysis

Data was extracted from the MS Access database to reveal risk and non-risk group demographic characteristics, as well as event characteristics. Figures were designed using

the database information and MS Excel spreadsheets.

Results

Demographic Data

Data collection has resulted in the recording of 5,614 events involving 684 individuals over an eight year period. During this time, a total of 1,833 patients were admitted to the GPP. Of this population, 37.3% were involved in events. A minority (7.5%) were involved in a majority of events (70%).

Table 1 lists key demographic characteristics of inpatients belonging to the risk and non-risk groups. These populations varied in sex (48.3% males and 51.7% females versus 40.0% males and 60.0% females), psychiatric diagnosis (53.5% dementia and 23.6% affective disorders versus 31.2% dementia and 42.8% affective disorders) and average number of medical conditions (4.8 versus 3.0), but were similar in average age (75.19 versus 75.60).

Table 1. A profile of risk and non-risk group geriatric psychiatry inpatients between 2000 to 2008

Patient Characteristics (n=684)	Risk Group Average or Number	Non-Risk Group Average or Number
Sex		
Male	48.3%	40.0%
Female	51.7%	60.0%
Age (yrs)		
Average (SD)	75.19 (7.8)	75.60 (7.9)
Range	49-96	40-97
Psychiatric Diagnosis		
Dementia	53.5%	31.2%
Affective Disorder	23.6%	42.8%
Psychosis	19.9%	23.0%
Other	3.0%	3.0%
Number of Medical Conditions	4.8	3.0

Risk Events

The characteristics of events are shown in Table 2. Physical aggression (53.3%) and falls (27.5%) were the most common types of events, followed by miscellaneous events (15.6%) and property destruction (3.6%). Incidents most often occurred in the dayrooms (38%) and bedrooms (27.7%), and usually resulted in no harm and damage (65.3%) or slight harm and damage (28.4%). Staff identified a patient’s mental health condition as being the major contributory factor leading to an incident (71.4%), followed by the physical condition (17.6%) and environmental factors (8.3%).

Table 2 also lists the intervention strategies employed by the treatment team directly after an event occurred. Non-pharmacological interventions (52.3%) were usually favoured, and included steps to calm, redirect and assist in care. Medication use (28.8%), including the administration of oral and intramuscular medications, as well as the assessment of vital signs (19.5%), application of first aid (10.9%) and admission to a general hospital (2.9%) were employed less frequently. Seclusion was used 11 times during the eight year period.

Table 2. Characteristics and outcomes of risk events between 2000 to 2008			
Risk Event Characteristics (N=5614)	Frequency	Percent	Chi-Square
Type of Event			3039 (df=3)
Fall	1,543	27.5%	
Physical Aggression	2,992	53.3%	
Property Destruction	202	3.6%	
Other	876	15.6%	
Location			1692 (df=4)
Dayroom	2,133	38.0%	
Bedroom	1,555	27.7%	
Hallway	668	11.9%	
Bathroom	584	10.4%	
Other	679	12.1%	
Harm/Damage Caused			5827 (df=3)
No Harm/Damage	3,665	65.3%	
Slight Harm/Damage	1,594	28.4%	
Moderate Harm/Damage	258	4.6%	
Severe Harm/Damage	95	1.7%	
Contributory Factors			4040 (df=2)
Mental Condition	4,008	71.4%	
Physical Condition	988	17.6%	
Environmental Factors	466	8.3%	
Intervention Strategy			4651 (df=5)
Non-pharmacological	2,936	52.3%	
Oral PRN	1,213	21.6%	
Check Vital Signs	1,905	19.5%	
First Aid	612	10.9%	
IM PRN	404	7.2%	
Hospital Admission	163	2.9%	

Note: $p < .0001$.

Other risk events include third party incidents, AWOLs, medication error, self-inflicted injury, equipment failures, environmental factors, unexpected medical incident, inappropriate sexual behaviors, choking, or seizures

Creating a Risk Profile

The data collected has been used to compare specific events with patient demographic variables. For example, an analysis of sex differences found that men were responsible for 63.3% of property destruction, 65.3% of assaults, 71.1% of verbal threats and 92.5% of the sexually inappropriate behaviours. Falls and miscellaneous events were distributed equally amongst the sexes.

Figure 2 is a bar graph displaying the incidence of falls and assaults by age and sex. The graph reveals that both falls and assaults occur most frequently amongst men aged 75-79. Figure 3 compares psychiatric diagnosis and sex with the likelihood of belonging to a fall group, assault group or a mixed fall and assault group. Men with dementia are most likely to be members of the assault or mixed group, while women

with affective disorders are most likely to belong to the fall group. Odds ratio analysis also supported an increased association of risk when there is a diagnosis of dementia, as compared to affective disorder with an odds ratio of 5.73 (95% confidence interval 3.07 – 10.70). Sex and incident severity were positively correlated, $r(5612) = .29$, $p < 0.05$ - men were more likely to be involved in a severe incident than women.

The most frequent medical conditions of the entire geriatric psychiatry population are hypertension (43.8%), diabetes (17.5%) and COPD (10.4%). Correlations between medical diagnosis and risk were examined. However, no difference between risk and non-risk groups was found in the prevalence of diabetes, hypertension, COPD, stroke, cancer, myocardial infarction and Parkinson's disease.

Figure 2. The number of geriatric psychiatry patients experiencing falls and assaults by age and sex between 2000 and 2008

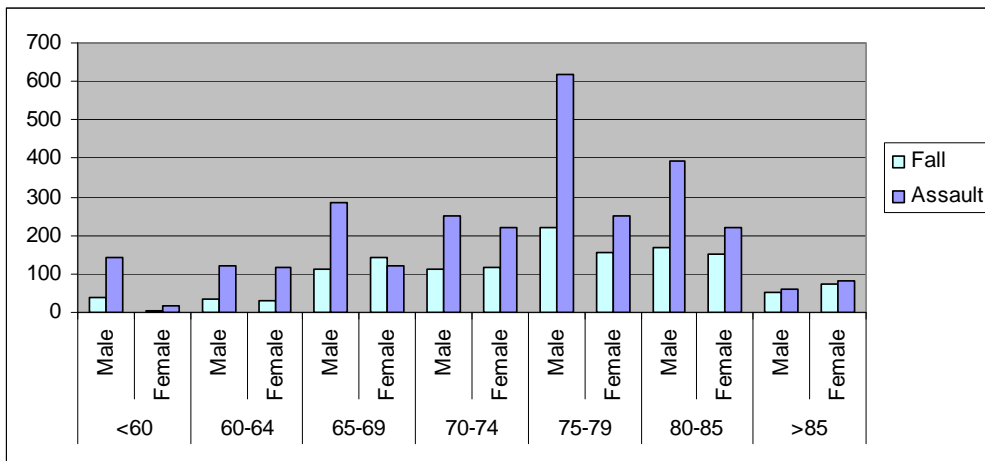
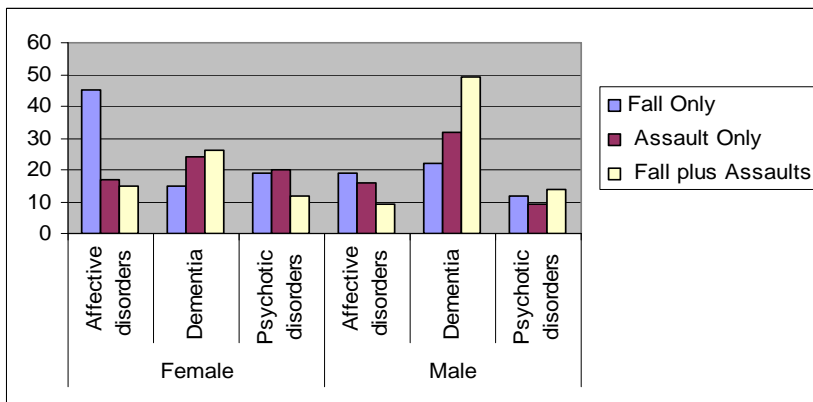


Figure 3. The number of geriatric psychiatry patients belonging to a fall group, assault group or fall and assault group according to sex and psychiatric diagnosis between 2000 and 2008



Bed Days & Occupancy Rates

Table 3 reflects the bed days and occupancy rates over the last three years (2007 to 2010). The data suggests that when there are sudden increases in occupancy rates, there is an initial rise in physical aggression rates. However, the milieu tends to adjust a few months after and physical aggression rates subside to an intermediate rate. Factors related to these changes may be associated with a decrease in personal space and an increase in the density of personal assistive devices. The ward adjusts by removing furniture to increase personal space as patients also adapt to the new milieu.

Table 3. Risk Events and Bed Days from 2007 – 2010		
	Average	Range
Bed Days	2161	1782 - 2567
Falls	22	2 - 69
Physical Aggression	10	3 - 17
Other Risk Events	41	15 – 88
<i>Note:</i> Falls, physical aggression, other risk events are per 1,000 bed days. Other risk events include property destruction		

Discussion

Incident reporting has promoted the growth of a patient safety culture in the GPP by encouraging a more thorough evaluation of

direct care practices and the implementation of individualized plans for event prevention. Specific examples of these are given below. In each case, the data collected has been used to identify specific individuals who are repeatedly involved in events and the contributory factors leading to these incidents.

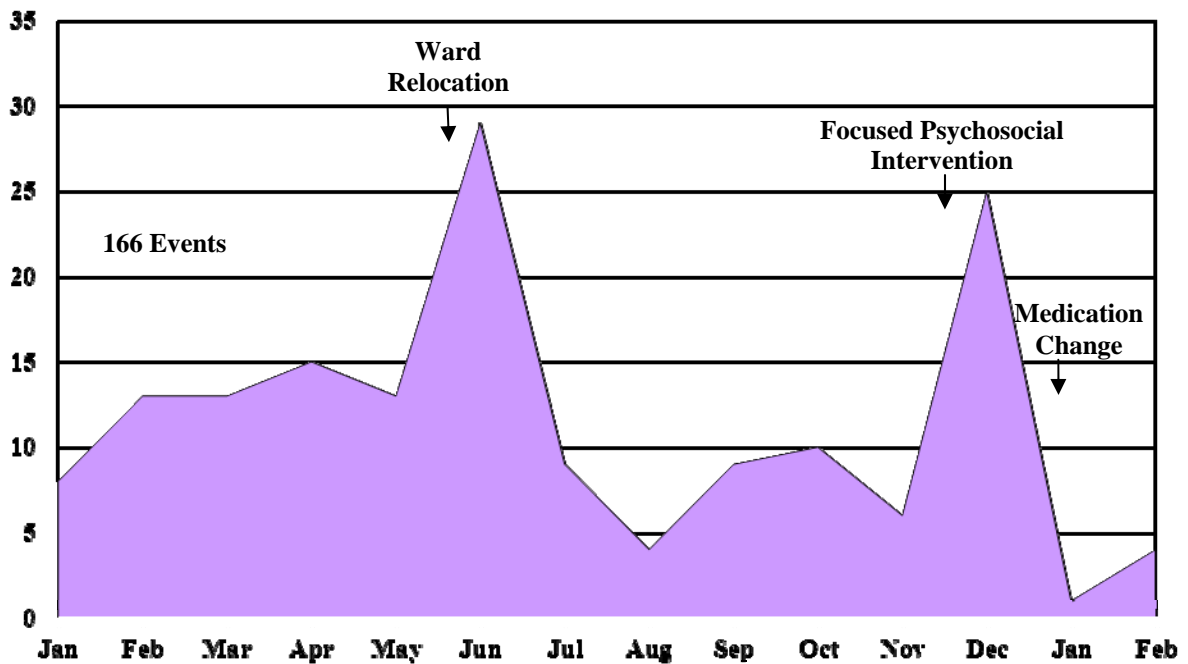
Example of an Individualized Treatment Plan

The interdisciplinary team has been able to make individualized care and treatment recommendations to clinical staff and/or arrange special treatment planning reviews that allow all stakeholders (i.e. family members, clinicians and other staff members) to offer ideas and techniques that aim to improve the quality of care. This has been the most optimal use of the system. Once identified, the patient's progress can be monitored and reassessed after various interventions are employed. For example, in Figure 4, a patient's behavior deteriorated (even after medication changes and increased recreation involvement) to the point where it became necessary to move the patient to a lower functioning ward. Although the patient's behavior improved, it then became increasingly troublesome over time to the point that an all stakeholders' review care planning meeting (including family) attempted to address the care needs.

The new plan included increased one-to-one recreation involvement, psychological assessment, medication change – addition of an anti-depressant, and change of environment that included the use of a horseshoe-shaped table. Such a table is effective because the horseshoe shape maintains an interpersonal space of three feet from other patients, which then reduced aggression (responsive behavior) of the client, kept other clients from interfering and

reduced resistance to care. Such interventions continued to work and the result was a dramatic reduction in physical aggression so that this patient was successfully placed in a long-term care home. Discharge care planning has been a benefit of the system. Through the use of individual incident reporting, we have been able to show behavioral stability of previously aggressive patients prior to long term care placement.

Figure 4. High Risk Individual with Verbal and Physical Aggression



Dementia-Frontal Lobe Type with Behavioural Issues -CT-Scan Multi-infarct & moderate cerebral atrophy, limited mobility, involved family- Hx of CVA & Diabetes, RAI-CMI 1.58, CAPS100% for IADLs, ADLs, Decisional Integrity & Acute Medication Control

Impact on Policy and Practice

Environmental factors that contribute to risk have also led to program changes, which are described in Table 4. For example, the data from the incident reporting system allowed us to detect an increase in physical aggression and fall rates in bedrooms after a daytime, locked-door policy was revoked. The team was able to monitor and report these changes to clinical staff, which resulted in the development of new practice strategies, including: increased monitoring, creating a secure place for patients' valuable items, personal identifiers on bedroom doors, more frequent bedroom checks, and the use of psychosocial intervention techniques to divert patients away from higher risk areas. Similarly, the data allowed staff to monitor the impact of a non-restraint policy implemented for nighttime care. The data recorded during this time revealed an increase in fall events and has led to a number of program changes, including the installation of bed alarms, the use of hi-low beds and increased frequency of bed checks. During the summer months, increases in heat related medical conditions and aggression were identified in the bedroom areas that were not air conditioned. Using this information, the decision for the addition of an air conditioning system was justified.

The system has also been utilized to determine the effects that policy changes have on patients and incident rates. When a no indoor smoking policy was instituted, the system allowed staff to better monitor the negative and positive effects of the new policy. An increase of aggressive incidents was predicted; however the result suggested no measurable increase in smoking related incidents.

Table 4. Incident Patterns and Subsequent Policy or Practice Change			
Event Type	Incident	Existing Policy/practice	Change in Practice Strategy
Falls	Increased falls in bedroom areas.	Non-restraint policy for nighttime care.	Installation of bed alarms, use of hi-lo beds, increased frequency of bed checks.
Aggression	Aggression in bedroom areas.	No air conditioning	Addition of air-conditioning system in the bedrooms.
Aggression	Patients in other patients' rooms, missing valuables.	Daytime, locked-door policy revoked.	Increased monitoring, more frequent bedroom checks, use of psychosocial intervention techniques to divert patients away from higher risk areas, creating a secure place for valuable items, name tags on doors.
Falls and Aggression	Medication cause.	Vital signs monitored depending on patient status and incident.	Monitoring of patients' vital signs after each recorded incident, particularly blood pressure, range of motion, blood sugar levels.
Falls and Aggression	PRN medication use.	Nursing staff had access to multiple medications for the patients to treat agitation.	Psychiatrists could quickly intervene in medication treatment.
Aggression	Pre- and post-measure of incidents.	No-indoor smoking policy implemented.	No increase in aggression detected – no change in practice.
Falls	Unsafe footwear.	Some patients would be wearing unsafe/inappropriate footwear. No systematic process to obtain safe footwear.	A systematic process of footwear safety assessment upon admission to reduce prevalence of falls, and improve mobility.

Impact of Educational Training on Aggression/Responsive Behaviors

Geriatric program and nursing staff were trained to implement the Gentle Persuasive Approaches (GPA) curriculum, which emphasizes person-centered care and teaches interpersonal, environmental, and communication strategies for responding to escalating behavior. A pre- and post-intervention approach was used to evaluate the effectiveness of the GPA curriculum.

Staff surveys revealed that the GPA curriculum helped their understanding of the impact of brain changes on patient behavior and strategies suited to challenging behavior and thereby improved their response to behavioral crises. The data collected from the patient safety reporting system reflected a decline in physical aggression rates by a significant 50% three months post-GPA training. This decline did not appear to reflect patient care acuity levels, and

therefore suggested the success of the program. (Speziale, Black, Coatsworth-Puspoky, Ross, & O'Regan, 2009).

The Falls Risk Assessment Tool (FRAT) was developed to more effectively measure the risk factors associated with falls in a geriatric psychiatry program. Data from the incident reporting system was used to develop and validate the tool. It is also used in conjunction with the tool; if a patient is labeled high risk, they are placed in the high risk protocol and their fall pattern is closely monitored. When used along with the cognitive function and daily living domains of the Resident Assessment Instrument-Mental Health (RAI-MH, Hirdes et al,2002) the FRAT demonstrated a good ability to predict patients at risk of experiencing multiple falls (Harris, Black, Ross, O'Regan, & Harloff, 2009).

A footwear screening tool was also incorporated into the FRAT. The screen involved a dichotomous checklist to check the safety of the patient's footwear. Items included appropriate fit, low heel height, slip-resistant sole and fastening mechanism. If all aspects of the patient's footwear were appropriate, the score was 0 – 'footwear not likely contributing to increased risk of falling'. If not, the score was 1-7 – 'footwear likely contributing to increased risk of falling' and the family/legal guardian of the

patient would be contacted in an effort to obtain safer footwear for the patient. Although challenging to analyze, the process helps to promote stable mobility and safety (O'Regan, Frizzell, & Jibb, 2010).

Medication Intervention

Although there were no differences in medical diagnoses between risk and non-risk groups, the data has also been used to develop medical intervention strategies following an event. For example, a large proportion of high risk individuals have diabetes, stroke or COPD. This information has led to the clinical practice of assessing vital signs and blood sugar levels shortly after an incident to rule out the possibility of medical contributory factors.

Incident data was also used to examine patient responses to PRN medication administration practices. For example, one individual, who was exhibiting high levels of agitation in conjunction with falls, had the PRN medication reviewed by the psychiatrist, who in turn simplified the medication regime with one medication for agitation (Olanzapine). As a result of this change, his rates of agitation and falls subsequently declined. This system allowed psychiatrists to be more aware that PRN medication administration was increasing agitation and falls in some patients. (Black, Ross, Toogood, & Laporte, 2008).

Other Projects in Incident Reporting

From a research and program evaluation perspective, the risk team has been involved in a number of projects related to the incident reporting system, including: A Five Year Review Of Mortality and its Relationship to Risk Event Profiling (Oates, VanBussel, Ross & Black, 2007); Restraint and Safety Device and Clinical Training Program Evaluation (Speziale, Black, Coatsworth-Puspoky, Ross, & O'Regan, 2009); Impact of Smoking Cessation Policy in a Geriatric Psychiatry Population (St. Joseph's Health Care London, 2004); Effects of Program Consolidation to One Site with Respect to Risk Event Planning, Mood and Ward Observations; A Yearly Comparison of Fall and Assault Trends and its Relationship to Restraint Policy Change (O'Regan, Frizzell & Gibb, 2011); and A Systematic Replication Evaluation of Gentle Persuasive Approaches in Dementia Care (GPA; Speziale, Black, Coatsworth-Puspoky, Ross & Regan, 2009). The risk management practices of the GPP team have also earned recognition in an annual report published by the Canadian Council on Health Services Accreditation (CCHSA) for being an innovative and leading practice that other programs can replicate (CCHSA Patient Safety Strategy, 2007).

Overall, the profiling system and the interdisciplinary risk team has become an

invaluable adjunct to quality centered care in the program. Risk event analysis has led to strategic planning of future needs and serves to focus resources on clients with special requirements. Event review has allowed for the evaluation of current direct care practices, the impact of policy and environmental changes, and has resulted in steps to reduce identified risks.

Limitations & Future Directions

The incident reporting system provides an approximate representation of the actual number of events occurring in the program. The team has attempted to maximize incident reporting usage by responding to staff feedback, gaining the support of program coordinators and ensuring that individual clinicians are not held responsible for recorded incidents. Staff participation and consistency has been a persistent limitation in similar programs (Yates & Tart, 2010; Crocker, Braithwaite, Laferriere, Gagnon, Venegas & Jenkins, 2011; Ontario Hospital Association Patient Safety Support Service, 2006). Welcoming feedback and opinions from staff is essential for participation; if staff are not given this opportunity, the responsibility of event reporting may feel imposed upon them. Consistency can be maintained by periodically reviewing original guidelines (Wright & Webster, 2011).

Redefining risk management means recognizing that program success is dependent upon proactive incident reduction. Identifying and reporting all unsafe situations, including those that did not result in injury, is the first step toward achieving that objective. The system will be improved for future use by including categories that incorporate additional factors, such as emotional harm. Feedback will also be given faster by alerting appropriate staff members to risk events via an automatic emailing system. Documentation of follow-up review initiatives will also be implemented. Other future developments involve integrating risk data with other program information, including; PRN medication usage; techniques to manage aggressive behaviors; occupational injury rates; and minimum data set of RAI-MH scales. RAI-MH2 scales convey standardized, uniform and comprehensive assessments of patients, the primary purpose of which is to identify resident care problems that are addressed in an individualized care plan. It contains items that reflect the acuity level of patients, including diagnosis, treatment and an evaluation of the residents' functional status. It is primarily used to monitor the quality of care in psychiatric settings. This data will be used to investigate the impact of strategies designed to minimize falls, as well as the effectiveness of ongoing staff training

programs for improving the quality of care. Comparing events with other hospitals would involve the development of a standardized index, such as a ratio of risk events per 1,000 bed days. This would allow a community of hospitals to compare risk rates, identify centers of positive deviance and successful intervention strategies and thereby improve safety.

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