



**2010 Annual Report
Of the
Geriatric and Long-Term Care
Review Committee**

**Office of the Chief Coroner
Province of Ontario**

November 2011

Table of Contents

Executive Summary	
Committee Membership	1
Introduction	2
2010 Case Review Summary	5
 Case Reviews	
2010-01	7
2010-02	9
2010-03	11
2010-04	14
2010-05	20
2010-06	23
2010-07	25
2010-08	27
2010-09	29
2010-10	30
2010-11	34
 Appendix A	
Analysis of Recommendations 2004-2010	36
 Appendix B	
Recommendations - 2010 Cases	37

This report was prepared by Dr. Roger Skinner, Chairperson of the
Geriatric and Long-Term Care Review Committee and
Ms. Kathy Kerr, Executive Lead – Committee Management.

Executive Summary

- The Geriatric and Long-Term Care Review Committee (GLTCRC) was established in 1989 and consists of members who are respected practitioners in the fields of geriatrics, gerontology, family medicine, emergency medicine and services to seniors.
- In 2010, the GLTCRC reviewed 11 cases and generated 22 recommendations directed toward the prevention of future deaths.
- In 2010, common issues that the GLTCRC dealt with were:
 - Medical and nursing management;
 - Use of drugs in the elderly;
 - Communication between healthcare practitioners regarding the elderly;
 - The use of restraints in the elderly; and
 - Medical/nursing documentation.
- Of the 11 cases reviewed, only two resulted in no recommendations.

Glossary of Terms

ADL	activities of daily living
BPSD	behavioural and psychological symptoms of dementia
CCAC	Community Care Access Centre
DNR	do not resuscitate
EMS	emergency medical services
ER	emergency room
GLTCRC	Geriatric and Long-Term Care Review Committee
HINF	High Intensity Needs Funding
ICU	intensive care unit
LTCH	Long-term care home
MMSE	Mini Mental Status Exam
MOHLTC	Ministry of Health and Long-Term Care
MRSA	Methicillin-resistant Staphylococcus aureus
RH	rest home
RN/RPN	Registered Nurse / Registered Practical Nurse
SDM	substitute decision maker

Committee Membership (2010)

Dr. Peter Clark	Regional Supervising Coroner, Committee Chair (January – June, 2010)
Dr. Roger Skinner	Regional Supervising Coroner, Committee Chair (July-December 2010)
Ms. Kathy Kerr	Executive Lead
Ms. Elaine Akers	Pharmacist
Dr. Barbara Clive	Geriatrician
Ms. Sheila Driscoll	Ministry of Health and Long- Term Care, Performance Improvement and Compliance Branch
Dr. Sid Feldman	Family Physician
Dr. Margaret Found	Family Physician/Coroner
Dr. Heather Gilley	Geriatrician
Dr. Barry Goldlist	Geriatrician
Dr. Michael Gordon	Geriatrician
Dr. Jennifer Ingram	Geriatrician
Ms. Margaret Leaver-Power	Registered Dietician

Introduction

Purpose

The purpose of the Geriatric and Long-Term Care Review Committee (GLTCRC) is to assist the Office of the Chief Coroner in the investigation, review and development of recommendations towards the prevention of future similar deaths relating to the provision of services to elderly individuals and/or individuals receiving geriatric and/or long-term care within the province.

The GLTCRC was established in 1989.

Aims and Objectives

The aims and objectives of the Geriatric and Long-Term Care Review Committee are:

1. To assist coroners in the Province of Ontario with the investigation of deaths involving geriatric and elderly individuals and/or individuals receiving services within long-term care facilities and to make recommendations that would prevent future similar deaths.
2. To provide expert review of the care provided to elderly individuals and/or individuals receiving geriatric and/or long-term care within the province.
3. To produce an annual report that is available to doctors, nurses, healthcare providers and social service agencies, etc. for the purpose of preventing future deaths.
4. To help identify the presence or absence of systemic issues, problems, gaps, or shortcomings of each case to facilitate appropriate recommendations for prevention.
5. To help identify trends, risk factors, and patterns from the cases reviewed to make recommendations for effective intervention and prevention strategies.
6. To conduct and promote research where appropriate.
7. To stimulate educational activities through the recognition of systemic issues or problems and/or:
 - referral to appropriate agencies for action;
 - where appropriate, assist in the development of protocols with a view to prevention;
 - where appropriate, disseminate educational information.

Note: All of the above described objectives and attendant committee activities are subject to the limitations imposed by the Coroners Act of Ontario Section 18(2) and the Freedom of Information and Protection of Privacy Act.

Structure and Size

The Committee membership consists of respected practitioners in the fields of geriatrics, gerontology, pharmacology, family medicine, emergency medicine, and services to seniors. The membership is balanced to reflect wide and practical geographical representation and representation from all levels of institutions providing geriatric and long-term care, including teaching centres to the extent possible.

The Chairperson of the GLTCRC is a Regional Supervising Coroner. Executive support is provided by the Executive Lead, Committee Management, Office of the Chief Coroner.

Other individuals may be invited to Committee meetings as necessary on a case by case basis (e.g. investigating coroners, Regional Supervising Coroners, other specialty practitioners relevant to the facts of the case, etc.).

The Committee membership and its balance is reviewed regularly by the Chairperson of the Committee and by the Chief Coroner as requested.

Methodology

Regional Supervising Coroners refer cases to the Committee for review. At least one member of the Committee reviews the information submitted by the coroner and then presents the case to the other members. Following discussion by the Committee, a final case report that includes a summary of events, discussion and recommendations (if any) intended to prevent deaths in similar circumstances, is produced. The report is sent to the referring Regional Supervising Coroner who may conduct further investigation (if necessary). In 2010, reports and recommendations made by the Committee were distributed by the Chief Coroner to agencies and organizations who were in a position to effect the implementation of such recommendations.

Where a case presents a potential or real conflict of interest for a Committee member, a temporary member may be asked to participate in the review. Alternatively, the Committee will review the case in the absence of the member with the conflict of interest.

When a case requires expertise from another discipline, an external expert may be asked to review the case and may attend the meeting and participate in the discussion and drafting of recommendations, if necessary.

Limitations

This Committee is advisory in nature and will make recommendations to the Chief Coroner through the Chairperson.

The consensus report of the Committee is limited by the data provided and efforts are made to obtain all relevant data available.

The Geriatric and Long-Term Care Review Committee case reports are prepared for the Office of the Chief Coroner and are therefore governed by the provisions of the *Coroners Act*, the *Vital Statistics Act*, the *Freedom of Information and Protection of Privacy Act* and the *Personal Health Information and Protection of Privacy Act*. As a result, each case review included in the annual report is a summary without identifying details. The recommendations made to the Regional Supervising Coroner and relevant organizations and agencies are included with each case.

Members of the Committee do not give opinions outside the coroners' system about cases reviewed. In particular, members do not act as experts at civil trials for cases that have been reviewed by the Committee.

Members do not participate in discussions or prepare reports of clinical cases where they have (or may have) a conflict of interest, or perceived conflict of interest, whether personal or professional.

Medical records, draft and consensus reports and the minutes of Committee meetings are confidential documents.

This annual report of the activities and recommendations of the Geriatric and Long-Term Care Review Committee is intended to provoke thought and stimulate discussion about geriatric and long-term care deaths in the Province of Ontario.

Questions and comments regarding this report may be directed to:

Ms. Kathy Kerr
Executive Lead – Committee Management
Office of the Chief Coroner
26 Grenville Street
Toronto, Ontario
M7A 2G9
Kathy.M.Kerr@Ontario.ca

2010 Case Review Summary

In 2010, the Geriatric and Long-Term Care Review Committee reviewed a total of 11 coroners' cases that were referred to them involving residents of long-term care facilities and the elderly. Upon reviewing the cases, the committee generated a total of 22 recommendations aimed at preventing future similar deaths. These recommendations focused on issues and concerns relating to:

- Medical and nursing management
- Communication and documentation
- Use of drugs in the elderly
- Use of restraints
- The acute care and long-term care industry in Ontario, including the Ministry of Health and Long-Term Care

Recommendations generated from the reviews were distributed to relevant individuals, facilities, ministries, agencies, special interest groups, health care professionals (and their licensing bodies) and coroners. Agencies and organizations in a position to effect implementation of recommendations were asked to respond back to the Office of the Chief Coroner within one year. These organizations were encouraged to self-evaluate the status of implementation of recommendations assigned to them.

Recommendations were also shared with Chief Coroners and Medical Examiners in other Canadian provinces and territories and were available to others upon request.

Summary of Cases Reviewed - 2010

Major Issue/Theme	Number of Cases (n=11)	Number of recommendations (n=22)
Medical / nursing management	7 (64%)	12 (54%)
Communication and documentation	3 (27%)	3 (14%)
Use of drugs in the elderly	1 (9%)	4 (18%)
Use of restraints	1 (9%)	1 (5%)
Acute care and long-term care industry, including the Ministry of Health and Long-Term Care	2 (18%)	2 (9%)

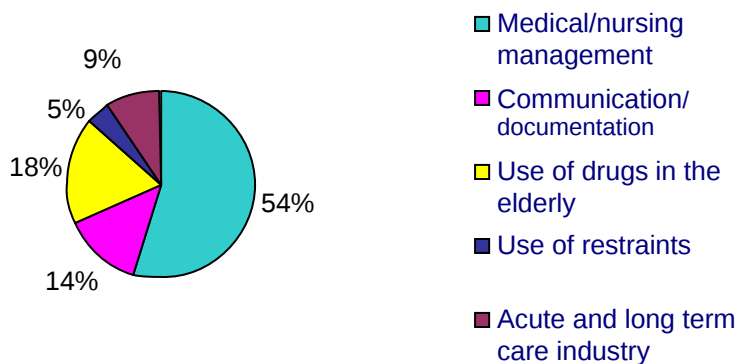
Note: Some cases had recommendations that touched on a variety of issues or themes.

Total number of cases reviewed 11

Total number of recommendations made 22

Total number of cases with no recommendations 2

**Percentage of Recommendations Based on
Area of Concern -2010**



Case Reviews

Case: 2010-01
OCC file: 2007-7779

Issue:

Concerns were identified relating to the care provided in a retirement residence and an acute care general hospital as well the use of narcotics and other medications.

Summary:

This was the case of an 83-year-old woman whose past medical history included: chronic lymphocytic leukemia, scoliosis, gastroesophageal reflux disease, osteoarthritis with bilateral knee replacements, toe and bunion surgery, hysterectomy, hernia repair, bilateral cataract surgeries and an elevated uric acid.

In December 2006, the woman experienced a fall that resulted in a left wrist fracture, fractured ribs and a probable pelvic fracture. It was unclear if the fractured wrist was treated with a splint or a cast. It appeared that the fractured wrist remained a significant cause of pain for which her family physician prescribed increasing doses of oxycodone hydrochloride. She was also taking two different benzodiazepines.

Medical records and documentation relating to the woman's fall and initial management of her multiple fractures were not available for review. From the available medical records, the decedent was already taking a high dose of oxycodone when she was admitted to the retirement home in May, 2007. It could not be determined if alternate management strategies had been tried prior to starting the oxycodone (e.g. immobilization of the wrist, local blocks for the fractured ribs, and regular administration of acetaminophen may have been helpful in decreasing the need for an opioid analgesic).

The attending physician attempted to decrease the amount and dosages of medications being given to the woman. In early June, she developed abdominal distention, nausea and diarrhea. She was treated with loperamide, dimenhydrinate and a suppository. She was subsequently transferred to hospital where she was found to be in heart failure. She was admitted and treated with furosemide, dimenhydrinate, morphine, scopolamine and a Fleet enema. She died in hospital about 15 hours after arrival.

An autopsy found cardiomegaly, valvular heart disease and evidence of congestive heart failure. Toxicologic analysis found supratherapeutic levels of oxycodone and diphenhydramine and therapeutic levels of morphine, lorazepam, acetaminophen and chlorpheniramine.

It was noted by the Committee that research has shown that there have been identified risks of using oxycodone with other psychoactive medications, including benzodiazepines and dimenhydrinate. It was also noted that the development of heart failure results in impaired drug metabolism, further increasing the potential for the development of adverse drug effects.

Records indicated that the decedent received four doses of dimenhydrinate over the last two days of her life. It was noted by the Committee that dimenhydrinate is a drug that is rarely of benefit in the elderly and the use of this drug may have further contributed to the adverse outcome in this case.

The decedent also developed constipation during the terminal phase of her illness. While constipation may present as an overflow diarrhea in the elderly, it was noted that loperamide hydrochloride should not be prescribed for elderly patients taking opioids. It should only be given when the diagnosis of constipation has been properly excluded.

Recommendations:

1. Health care professionals should be reminded that loperamide hydrochloride should not be prescribed for elderly patients taking opioids who have diarrhea until the presence of constipation has been excluded.
2. Health care professionals should be reminded that dimenhydrinate is a medication that is rarely indicated for use in the institutionalized or hospitalized elderly. The combination of dimenhydrinate with other psychoactive or anticholinergic medications can result in the development of potentially serious drug interactions resulting in adverse outcomes.
3. Health care professionals should be reminded of the importance of using caution when prescribing opioids for elderly patients with chronic pain. The use of non-pharmaceutical interventions and non-narcotic medications such as acetaminophen should be considered for use as a first intervention in an attempt to minimize the dosage of an opioid required to control pain.
4. Health care professionals should be reminded that the potential toxicity of opioid medications can be increased by the concomitant use of other psychoactive medications.

Case: 2010-02
OCC file: 2009-9823

Issue:

Concerns were identified relating to the care provided in a licensed long-term care home (LTCH) prior to being transferred to a community general hospital.

Summary:

This was the case of an 83-year-old man who was admitted to a LTCH in September 2008. At that time, his medical diagnoses included: Alzheimer's dementia, cancer of the prostate, osteoporosis, coronary artery disease, dyslipidemia and hypertension. Functionally, it was noted that he was mobile and capable of performing some of his activities of daily living (ADLs). He was noted to be becoming more "frail."

In May 2009, the decedent was moved to a different room in the LTCH; he appeared to be more confused since moving. By the end of the month, further weight loss, decreased appetite and oral intake and the presence of non-specific abdominal pain was noted.

By June 2009, the decedent still had a poor appetite with decreased intake and some weight loss. He was noted to be at increased risk for falls and he appeared to be more sad and depressed.

In July 2009, the LTCH proposed to move the man to another room. The family expressed concern that another change could negatively affect his clinical status, but they understood the necessity of the proposed move.

The decedent was moved to a new room on July 20, 2009. His family expressed concerns after observing urine and/or urine stains on the bathroom floor. The family was assured that the man was not incontinent and suggested that the stains were from the man's new roommate.

On July 25, 2009 at 0650 hours, nursing staff found the decedent on the washroom floor. Bruising was noted on the right side of his forehead and he was complaining of a sore shoulder.

Later that day, at 1419 hours, the decedent was complaining of bilateral shoulder discomfort, but was able to raise both upper extremities to shoulder height. A head injury routine was done. The decedent had lunch and did not appear to be in any significant distress. Acetaminophen was given for discomfort.

At 2115 hours, nursing staff noted that the man remained in bed, but could ambulate when necessary. He did not get up for his evening meal. Mentally, he appeared rather "down" since the fall. Acetaminophen was given at 2227 hours.

At 0633 hours the next day, there was communication between the nursing staff and the decedent's family and no concerns were identified. The decedent advised the nurses that he was feeling better, but that he still had pain in his shoulders and arms and wanted to stay in bed.

At 2121 hours on July 27, 2009, the nursing note indicated that the deceased had remained in bed all day and was complaining of pain in his arms and shoulders. He was not interested in eating, had vomited once in the evening and was afebrile.

At 1557 hours on July 28, 2009, the attending physician was contacted for the first time. The personal support worker had documented a two-day history of passing loose, dark stools, abdominal discomfort and the vomiting of "coffee grounds." The physician ordered a complete blood count and increased the dosage of pantoprazole sodium to 40 mg twice daily. At 2214 hours, the man's clinical status rapidly declined with the development of increased shortness of breath (first noted around 1800 hours) and increased confusion. The attending physician, with the concurrence of the family, arranged for a transfer to the emergency room (ER) of the general hospital.

In the ER, the decedent was tachypneic and had evidence of a pneumonia and a probable urinary tract infection. An x-ray of the left shoulder demonstrated the presence of a fractured humerus with dislocation of the humeral head. Laboratory investigations revealed the presence of anemia, leukocytosis, and azotemia. Blood was administered. It was unclear if the renal insufficiency was prerenal in etiology. The presence of an elevated troponin was suggestive of the presence of myocardial ischemia. It was evident that the decedent was very dehydrated.

Following a discussion with the family, the decision was made to provide palliative care. The patient died on August 3, 2009.

A post mortem examination was conducted.

Cause of death: pneumonia and acute renal failure due to a) fractured left humerus and b) fall in a man with Alzheimer's dementia and prostate cancer.

Manner of death was accident.

Discussion:

With the history of vomiting, the bronchopneumonia may have been due to aspiration as the decedent did not appear to be suffering from a lower respiratory tract infection prior to his sudden "turn for the worse." The development of azotemia and dehydration may have been related to a few days of decreased oral intake which could have been attributed to the pain from the unrecognized humeral fracture. Similarly, the development of myocardial ischemia may have been secondary to the dehydration superimposed on the underlying coronary artery atherosclerosis.

One of the concerns raised was whether or not the specific diagnosis of a fractured left humerus at a earlier point in this man's short clinical course may have resulted in a more favourable outcome. There was no obvious explanation for the vomiting and other than the acetaminophen, he was not given more potent medications which could be implicated in the development of anorexia, nausea, and vomiting although myocardial ischemia can present with these symptoms. Even if the fracture had been noted at an earlier point in time and/or a more potent analgesic had been prescribed and/or a splint applied, the course of the illness may not have been altered.

The vomiting may have also been secondary to the development of azotemia. It was not clear if the LTCH had protocols and resources to provide intravenous or subcutaneous fluid support for the decedent. Once the bronchopneumonia developed, given the man's frail clinical status, the clinical course and eventual outcome were fairly predictable.

The Committee discussed the lack of notification of the attending physician by the LTCH staff to report the fall incident of July 25, 2009.

Recommendations:

1. All licensed long-term care homes in the Province of Ontario should develop a policy and procedure to ensure the timely notification of physicians of incidents involving elderly residents who fall.
2. Health care professionals caring for the frail ill elderly should be reminded that the lack of oral intake, especially fluids, may rapidly lead to the development of dehydration and azotemia, even in the absence of a febrile illness.

Case: 2010-03

OCC file: 2008-13410

Issue:

The deceased was a resident of a LTCH who suffered from severe dementia and aggressive behaviour. He died after experiencing an unwitnessed fall that may have involved another demented resident.

Summary:

This was the case of an 84-year-old man who suffered from a moderately severe dementia complicated by abnormal psychiatric behavioural symptoms. He resided in a secure special care unit in a LTCH from August 16, 2006 until his death on June 5, 2008.

When admitted to the LTCH in 2006, the deceased was noted to be suffering from moderate to severe dementia. He wore glasses, was underweight, and was Methicillin-resistant Staphylococcus aureus (MRSA) positive. He had a shuffling gait and required a four-wheeled walker for ambulation.

In December 2006, the deceased had a small stroke. He was placed in a secure special care unit that housed demented residents.

In October 2007, he was noted to be somewhat resistive to dressing and bathing. Since admission, he had two falls where he fell backwards when trying to lean and missed the handrail. Nursing staff noted that he could be verbally abusive, but was not physically aggressive.

In November 2007, the deceased fell while out on an excursion. He complained of hip pain, but no significant injury was found. He refused to use a cane and a walker for ambulation and preferred to hold onto handrails. He was noted to be aggressive towards other demented residents with respect to his personal space. He developed paranoid thinking and believed that people were taking things from his room.

In December 2007, nursing staff found him on the floor after he slipped off a chair. No significant injury was noted. Later that month, another demented resident accidentally ran over his toes with a wheelchair. The deceased responded by swearing and kicking at the other resident's wheelchair. His intolerance of the behaviours of others was noted by staff.

In February 2008, the deceased threatened to push another resident "over the cliff" because he was being noisy.

In March 2008, nursing staff noted that the deceased was at significant risk of falling due to his abnormal gait and poor judgement. He continued to exhibit low tolerance of other residents' behaviours. He was observed pushing other residents out of his way, so nursing staff developed various interventions to try and redirect him. In the LTCH, he received regular foot care for corns and calluses. There was no evidence of skin breakdown.

On April 16, 2008, the deceased had an unwitnessed fall. He was found lying on the floor complaining of pain in his left hip. Shortly after being discovered, he advised staff that he had been pushed by another resident. A third resident advised staff that the deceased went to sit on a couch that was occupied by another resident. Following an exchange of words, the other resident pushed the deceased and caused him to fall to the floor. On examination, his vital signs were stable. Left hip discomfort and a skin tear on the left elbow were noted. He was later transferred to the general hospital for assessment. Upon admission to hospital, the deceased was not receiving any neuroleptic or mood altering medications.

In the emergency room (ER), x-rays confirmed the presence of a fracture of the lesser trochanter of the left femur. He was held overnight and given analgesics for pain relief. An indwelling Foley catheter was inserted. Urinary retention was not documented.

On April 17, a CT scan of the pelvis showed a comminuted, mildly displaced fracture of the lesser trochanter of the left hip. There was no obvious sclerotic or lytic process to suggest the fracture was pathologic. There was no evidence of an intertrochanteric fracture. The CT scan results were reviewed by an orthopedic surgeon who determined that surgical intervention was not indicated. The decision was made to discharge the deceased back to the LTCH with instructions for non-weight bearing and a follow-up appointment with the orthopedist in three weeks. The discharge order read: "Can go home with Foley."

Upon return to the LTCH, the attending physician was notified. Nursing staff noted that the deceased had a Foley catheter, was pale, and was moaning. Subcutaneous morphine sulfate was ordered for pain and his insulin was not given as he was eating poorly.

On April 18, the deceased had a physiotherapy assessment. His morning blood sugar was elevated. Over the next few days, he became delirious and was increasingly confused. He was grabbing at things in the air and was pulling at his Foley catheter and subcutaneous butterfly being used for the morphine sulfate injections. His oral intake was variable.

On April 20, an order was placed for a pressure relief mattress as "blue" areas were noted on both of his heels. A stage 2 ulcer was present on his left elbow. He remained restless and pale. An occupational therapy assessment was requested.

On April 21, the physician ordered a mechanical lift for transfers to a Broad chair. Hydromorphone hydrochloride was ordered.

On April 22, the physiotherapist noted the presence of pressure areas on both heels to which "foot poseys" were applied. By May 1, nursing staff had noted that his entire right heel and the tip of the fourth toe were black. There was a stage 2 ulcer on the right lateral malleolus. The nurse requested an upgrade of the pressure relief mattress and heel suspension boots. The deceased was noted to be angry and was refusing to eat.

On May 3, the quarterly review noted that the deceased had been bedridden since the fall on April 16, 2008. The "Maxi Lift" was being used for transfers into the chair. He was eating poorly and was restless at times.

On May 7, he was reassessed by the orthopedic surgeon. A repeat x-ray showed that the fracture was healing well. Instructions were given to commence full weight bearing.

On May 9, nursing staff assisted the deceased to the standing position, but he was unable to bear weight on his left leg. He was transferred to a wheelchair. The Foley catheter remained in place and was irrigated. His nutritional status remained poor.

On May 13, it was noted by the dietician that the deceased was eating less than 50% of his meals. Nutritional supplements were ordered. The physiotherapist's assessment recommended walking and a balance and strengthening program. By mid-May nursing notes indicated that the deceased remained pale and was confused and incoherent at times. Gross

hematuria with clots in the catheter were noted. He remained delirious and saw, “mice run over his feet.”

On May 23, the size of the heel ulcers were noted to have increased to 5 cm x 5 cm on the right heel and 6 cm x 5 cm on the left heel with an eschar noted. The ulcers were quite painful.

In early June 2008, the deceased’s son remained concerned about his father’s clinical status and wondered when he would be walking and restarting his exercise program.

On June 5, 2008, nursing staff found the patient in a semiconscious state. He was pale, cyanotic, and had an increased respiratory rate. The physician discussed comfort measures with the son who agreed with the decision to provide palliative care. The patient was given oxygen and subcutaneous morphine sulphate; he died later that day.

Cause of death was: hip fracture due to a) same level fall in a man with dementia and atherosclerotic heart disease.

Manner of death was undetermined.

Recommendations:

1. Health care professionals should be reminded of the importance of early mobilization of the frail elderly who have a fracture.
2. Health care professionals should be reminded that the insertion of an indwelling urinary catheter is usually not indicated for elderly persons with a fracture in the absence of urinary retention. The insertion of an indwelling urinary catheter may result in immobility related complications which can result in increased morbidity and even death.

Case: 2010-04

OCC file: 2008-7598

Issue:

The decedent was an 89-year-old woman who resided in a licensed LTCH. She had multiple medical problems, including dementia. She died from complications of traumatic brain injury on June 25, 2008, three days after being pushed by another resident who had a long history of aggression and dementia.

Summary:

The decedent was admitted to the LTCH on June 16, 2008. She was admitted from her home to a secure unit for residents suffering from dementia.

During the few days and nights in the LTCH, she was restless, pacing at times, wandering into other residents' rooms, and resisting care and meals. The first night, she was placed in 1:1 observation after wandering into another resident's room and refusing to leave. It took two staff members to redirect her on that occasion. She resisted medications and she refused to bathe or change her clothes, although her daughter was eventually able to accomplish this. After a few days, the decedent seemed to settle into her new environment and she was out of bed, dressed, and eating her meals in the dining room. A staff note stated, "resident is settling in and has come to recognize staff that routinely care for her."

On the evening of June 21, 2008, she had an unwitnessed fall. She was discovered on the floor of her room leading into the hallway shortly after midnight. The nursing notes indicated that she was confused. She refused vital signs, but was able to ambulate without assistance and was returned to bed. At the time that she was discovered, her roommate was observed standing in their shared washroom.

On June 22, 2008, the decedent had an uneventful morning. At approximately 1215 hours, while having lunch, she got up to go to her room. The other residents and staff of the unit remained in the dining room for lunch, with the exception of a nurse who was preparing medications for administration at the unit nursing station. At some point shortly after 1215 hours, the nurse documented that, "the resident was discovered in the hallway lying on her right side, holding the back of her head. The decedent told the writer that she was pushed and that her head hurt, but that she was going to be "alright"." The nurse documented that the victim's roommate was standing over her, kicking her and making racially inappropriate comments. The nurse asked the roommate if she had pushed the decedent, but the roommate walked away cursing and crying. The nurse checked the decedent for injuries, and none were apparent. Two staff members assisted her back to the dining room.

At 1330-1340 hours, results of a nursing assessment using the "Head Injury Routine" protocol were documented as: "Pulse 119, BP 191/108, pupil not reacting to light, and when repeated, BP was 172/112 and left pupil not reacting to light.... resident unable to answer questions, asleep, pulse very irregular and fast." An emergency 911 call was made and the decedent was transported to hospital.

At the local acute care general hospital, a CT scan of the brain showed a right acute on chronic subdural hematoma with a 2 cm midline shift. The decedent was intubated, given a loading dose of mannitol and taken to a regional tertiary referral hospital for neurosurgical care. Early in the morning of June 23, 2008, she underwent a right temporal craniotomy with subdural hematoma evacuation. She remained unresponsive postoperatively and a repeat CT scan of the brain done later that day showed re-accumulation of the bleed with an increasing midline shift and edema. The treating medical team met with the family and substitute decision-makers, and a decision was made to discontinue aggressive treatment and to provide palliative care. She died at 1505 hours on June 25, 2008.

Cause of death was complications of traumatic brain injury in a woman with dementia, congestive heart failure, hypertension and atrial fibrillation.

Manner of death was homicide.

The resident who allegedly pushed the deceased had Alzheimer's disease with a history of severe aggressive physical behaviour towards others. She had been admitted to the LTCH in January 2007, following hospitalization. She had been hospitalized involuntarily because of having exhibited physically violent behaviour causing others to fear bodily harm and a demonstrated lack of competence to care for herself.

Within the first three weeks of admission to the LTCH, she demonstrated physical and verbal aggression towards others and she was prone to unprovoked angry outbursts. A specialized geriatric psychiatry outreach team from a regional referral hospital was consulted and saw her at the LTCH on January 25, 2008. Neuroleptic medication was started, along with non-medication approaches to managing the behaviours.

The resident was admitted to an inpatient dementia behaviour management unit of the regional hospital from March 10 – June 2, 2008, five months after the application was submitted. She continued to demonstrate physically aggressive behaviours and racially inappropriate comments towards others. On June 16, the decedent became the roommate of the resident. (It should be noted that the decedent was black and the resident was white.)

On June 22, 2008 the alleged assault on the deceased occurred.

On June 24th, the LTCH staff documented that the resident who was the alleged perpetrator was making striking gestures towards staff and residents. That day, the LTCH applied for funding to support 1:1 supervision while awaiting emergency transfer to the psychiatric unit of the local acute care general hospital. She remained on 1:1 high intensity care until her transfer to the local acute care hospital for psychiatric admission on June 26, 2008. She died two months after the incident on August 20, 2008, of natural causes.

Discussion:

Many of the issues that arose in the review of this death were previously brought to light in the April 2005 inquest into the deaths of Ezz-El-Dine El Roubi and Pedro Lopez.

The current environment in LTCHs continues to be significantly shaped by the presence of a large percentage of residents with cognitive impairment. Many residents have behavioural and psychological symptoms of dementia (BPSD) - the current terminology used for persons suffering from complications of dementia, including aggressive behaviours, wandering, hallucinations and depression. Recommendation 4 from the El Roubi and Lopez Inquest recommended that the Ministry of Health and Long-Term Care (MOHLTC):

“...take immediate steps to implement the “Ten-Point Plan for Improving the Quality of Life and Decreasing the Burden of Illness of Residents in Long-Term Care in Ontario.

Rationale: It is recommended that the MOHLTC recognize that due to health care restructuring, LTC facilities have become “new mental health institutions” in Ontario, without the funding and resource necessary nor recognition of the anticipated needs given the demographics in Ontario related to the increased aging population with cognitive impairment.”

The alleged perpetrator in the present case was a resident of a LTCH who had documented dementia, and significant BPSD that put others at risk due to her physical aggression.

Care within the LTCH after admission:

Following admission, the alleged perpetrator was identified as being physically aggressive towards others. Expert consultation and advice was in place in the form of the psychogeriatric outreach team from the regional acute care teaching hospital. With respect to the management of her behaviours, it is not clear why the LTCH did not follow all of the specialist recommendations. No behaviour tracking was completed with this resident. This tracking may have assisted with the overall management of her aggressive behaviour, as it would have helped identify the timing and triggers for her behaviours and allowed a preventive plan to be in place. In the April 2005 inquest, the jury recommended that such standardized behaviour tracking forms be in place across the LTCH system in Ontario.

Transfer for more specialized care:

The alleged perpetrator in this present case was eventually transferred to a specialized inpatient hospital unit for development of a behaviour management plan. This did not occur in a timely manner, but it is not clear whether a more timely transfer would have changed the outcome of this case. It does serve to emphasize however, the continuing difficulties that LTCHs face in accessing specialized assessment for their residents when the LTCH can no longer manage the resident.

Recommendation 62 from the 2005 El Roubi and Lopez Inquest stated:

“That the legislation, regulations and policies be reviewed to ensure that there is a mechanism for the conditional placement of residents in LTC facilities. If, after admission, a resident is found to have a complexity of care such as aggressive behaviours that cannot be safely managed, or to have requirements beyond the staffing ratios and staff expertise of the LTC facility, the CCAC shall be responsible for overseeing the immediate removal of the resident and their placement in a more appropriate setting. The LTC facility should not be left with the responsibility of finding alternate services such as an acute care hospital, a specialized Centre or another LTC facility with a more appropriate unit.”

This process of “immediate removal” is not yet occurring in the LTCH system.

Care after Specialized Inpatient assessment:

Upon transfer back to a LTCH from a specialized inpatient unit, the GLTCRC recognized that implementing and continuing the management plan developed in an inpatient hospital unit would be difficult for the LTCH. In the specialized hospital unit, there are higher staffing levels and usually an RN/RPN staff caring for patients. Moreover, these staff are highly trained and experienced. A plan developed in the hospital setting therefore, is usually not completely transferrable to the LTCH setting.

It is not clear from the review why the LTCH did not utilize the high-intensity needs funding (HINF) for more intensive care for the alleged perpetrator earlier in her stay in the LTCH. The HINF was only used after the final assault had occurred. It is unclear if the LTCH was aware of the availability of the HINF for management of aggressive behaviours or whether there were barriers in obtaining this funding for this aggressive resident.

Recommendation 38 from the 2005 inquest sets out the proposed structure of an HINF program to serve the needs of the resident with dementia and physically aggressive behaviour. The jury recommended that:

“The MOHLTC immediately review and revise their “High Intensity Needs Program” to ensure that every LTC facility has access to additional funding for immediate staffing increases to care for *existing* cognitively impaired residents safely. The revised program should ensure that funding is used by LTC facilities to provide RN care for all such residents who are prone to, or assessed with, potential aggressive behaviours.”

Recommendation 39 from the inquest stated:

“The MOHLTC should review its High Intensity Needs Program to ensure that transitional beds in long-term care facilities are available for *newly assessed* high risk residents while waiting assessment and/or to ease their transition into a long-term care setting. The Ministry should expand the program to ensure:

- i) It is available on admission where aggressive behaviours have been identified;
- ii) It is available for residents being admitted directly from the community;
- iii) It is available on an on-going basis until a psychogeriatric assessment can be completed and a safe care plan can be implemented;

- iv) Funds are available to provide the resident with a private room at the basic ward rate, if necessary;
- v) There are sufficient funds to provide one on one care by a PIECES trained RN.”

The alleged perpetrator in this case was the type of LTCH resident that the April 2005 coroner’s jury was referring to in their discussion of specialized facilities, alternatives to regular LTCH, to care for demented or cognitively impaired residents who exhibit persistently aggressive behaviour. To date, no such facility exists as an alternative to LTCHs for the general population. (There is however, a home available in Toronto for veterans.) The philosophy of caring for an individual of this nature in the current LTCH model is predicated on the assumption that even the most difficult of aggressive behaviours can be prevented and managed within a LTCH which, in the experience of the Committee, is not the case. In the absence of either funding for ongoing close and individual care or for specialized LTCH’s for residents with dementia and aggressive behaviour, it is likely that the issues identified in this case, as well as the 2005 inquest, will recur.

Recommendations:

To the Ministry of Health and Long-Term Care:

1. Upon identification of aggressive behaviour within the long-term care home, efforts to move the resident to a private room need to be undertaken.
2. A protocol for decision-making regarding transfer to more intensive and specialized care should be in place for every LTCH. This could include the nature of physical aggression, or a minimum number of aggressive incidents. In the absence of the ability to rapidly access specialized inpatient psychogeriatric assessment beds, an aggressive LTCH resident may need to be sent to the local hospital for urgent assessment and intervention. This plan of management needs to occur with the full cooperation and engagement of the hospital, or there is a high likelihood that the resident will be sent back to the LTCH from the emergency department.
3. The MOHLTC should consider the 2005 inquest recommendation to develop specialized long-term care units for residents with dementia and persistent and dangerous physically aggressive behaviour. As an alternative, the MOHLTC high intensity needs funding should be made available for use over the long-term for residents whose physically aggressive behaviour does not improve with the approaches and medications prescribed.

4. The behaviour management plan developed in a specialized inpatient hospital unit should reflect the skills and staffing levels present in LTCHs. There should be a smooth handover of the resident from one facility to another, ideally supported by an initial period of hospital staff being available in person or by telephone for consultation with the LTCH staff.
5. LTCHs should institute behaviour tracking for residents who are being treated with medication or other modalities for behaviour. Drug doses should be adjusted according to efficacy and in concert with recommendations made by specialized consultants who are assisting with management.

Case: 2010-05
OCC file: 2009-10293

Issue:

This accidental death in a LTCH was referred to the GLTCRC for review because the local coroner and Regional Supervising Coroner felt there could be recommendations made to help prevent future similar deaths.

Summary:

The deceased was a 59-year-old woman who had moved into her present LTCH in 2003 at the age of 52. Her health conditions included: Down's syndrome, probable Alzheimer's dementia, gastroesophageal reflux disease and hypothyroidism.

Prior to the admission to the LTCH in 2003, the patient resided at home with her mother. The patient had become verbally and physically aggressive towards her mother, but not other care providers. She was subsequently placed in the LTCH where she resided until her death in 2009.

The patient had a long period of settling into the LTCH environment. For the first 6-9 months, she had difficulty sleeping in her room due to fear and she was aggressive towards other residents. She tended to wander, so she was placed in a secure unit. The staff documented many strategies that were used to assist the patient with her adjustment into the LTCH setting. These strategies were eventually successful and the patient adapted to the LTCH.

In 2003, the patient developed a grand mal tonic-clonic seizure disorder. She was investigated with a CT scan of the brain which did not show any focal cause for seizure. There was some difficulty getting the seizures under adequate control.

By 2005, the patient had become less mobile and was spending longer periods of time in bed. By 2006, she required two people to assist with walking. Her swallowing also deteriorated and there were multiple assessments by speech language pathologists to adjust her diet texture to the safest possible.

With the increased time in bed, combined with incontinence and obesity, the patient began to have documented skin breakdown in 2005. She had regular skin risk assessments completed which always placed her in the “high risk for skin breakdown” category. Generally, the episodes of skin problems involved the development of redness or small stage II sores on the inner thighs, or in skin fold creases in her buttocks or upper thighs. Each episode was treated with dressings and healed. There was a “wound care team” available to provide guidance to the staff of the LTCH.

By 2008, the patient was completely dependent for all of her care. She had to be fed her carefully modified diet and was slow to eat. She had been fitted with a special wheelchair that provided support to help her stay upright during feeding. The cushions under the seat on the chair were frequently adjusted to both relieve pressure and keep the patient from sliding forward in her chair.

The patient was seen regularly at the LTCH by physiotherapists. The main objective of physiotherapy was contracture prevention and treatment consisted of range of motion exercises conducted twice weekly. No notes were made of any positioning guidelines that were developed for the staff for the patient’s long periods of time in bed. There were no nursing or other progress notes to indicate any positioning devices or strategies used with the patient when she was in bed.

On the morning of August 9, 2009, the patient was found prone in bed with no vital signs. Her face was in her pillow and it was determined that she had asphyxiated on the pillow. The staff had last checked on her two hours earlier. Although it was not documented in any of the staff notes, according to the coroner and MOHLTC reports, the patient had been lying on her side all night with a large foam wedge placed under her back and pelvis to keep pressure off her sacral area. There had been no documentation of pressure sores in this area in the health record. The presumption was made that the patient had experienced a seizure and had rolled into the prone position with her face in the pillow during the seizure.

The MOHLTC Compliance Report stated that the foam wedge used for positioning had been trialed with the patient one year earlier and was deemed unsafe as it was too large and caused the patient to roll into the prone position. Once prone, the patient was unable to roll herself out of this position. This critical patient safety information was apparently reported verbally by the LTC wound care nurse to the MOHLTC Compliance Advisor who did an unannounced visit to the LTCH home on August 19, 2009, 10 days after the patient’s death. There was no written documentation regarding this “trial” – either in the wound care nurse’s records, or in the patient’s chart. It appears that there was no communication of this patient safety information to the staff or family. The foam wedge continued to be used up to the time of death.

The MOHLTC Compliance Report also noted that, at the time of death, the patient had a coccygeal pressure ulcer. There was no documentation of this in the health record or what treatments (if any) were being used to manage the ulcer.

Cause of death was determined to be positional asphyxia.

Manner of death was accident.

Discussion:

Although an autopsy was not conducted, it appears that the patient died from positional asphyxia due to the use of a positioning device that allowed the patient to roll over involuntarily into the prone position in bed. Once rolled over into the prone position, she was unable to roll herself out of the position in order to breathe.

There is no reported literature on the safety of bed positioning devices for use in the adult population. A search of the medical literature using the MedLine and CINAHL databases, as well as a search of Consumer Product safety information and the publications of patient safety organizations, did not produce any reports.

There is a similar safety situation with respect to bed positioning with infants who are unable to roll themselves over as they have not yet reached that developmental milestone (generally 5-6 months of age). There are repeated warnings in both the professional literature (e.g. American Academy of Pediatrics Task Force reports) and consumer literature, regarding the risks of using positioning devices for infants who cannot roll over. The consensus is that healthy infants should not be put to bed with a positioning device because of the risk of rolling prone and asphyxiating. Also, there are further recommendations that if an infant is placed to sleep on his/her side, that the top arm be brought forward to rest on the mattress, presumably to act as a brace, or at least prevent the baby from rolling completely prone. There are strong recommendations to keep all soft materials (e.g. pillows, comforters, stuffed toys, etc.) out of the infant bed because of the risk of suffocation. Similar rationale could be applied to the elderly who can not position themselves in bed.

This patient was bedridden and completely dependent on the LTCH staff to move her in bed, including rolling her over and changing positions.

The use of a foam wedge positioning device carries the risk of rolling prone into a position that restricts the patient's ability to breathe. This risk is similar to that experienced by the infant population who also have limited ability for independent movement. If the device had been trialed one year before death and was deemed unsafe, documentation and communication of this fact might have prevented this death.

Recommendations:

1. The LTCH should review documentation standards for care and treatment, especially with respect to skin breakdown.
2. Positional asphyxia is a real risk with any type of restraint and with some patient positioning devices. Risks associated with patient positioning devices should be well understood, and the risks and benefits should be discussed with the patient (or the substitute decision-maker) before using such devices. Staff should be educated in these risks and their remediation before using the device with the patient.
3. If the foam wedge positioning device had been used one year prior to death and was deemed unsafe, the LTCH should conduct a review to understand the processes that resulted in this positioning device still being in use with this resident. The review should be a thorough one, such as a “Root Cause Analysis.” All contributing factors identified should be remediated.

Case: 2010-06

OCC file: 2009-13524

Issue:

This was a mandatory review as the deceased was a resident of a LTCH and the manner of death was homicide.

Summary:

This is the case of an 81-year-old woman who had resided in a LTCH since March 2007. Her medical diagnoses included: congestive heart failure, diabetes mellitus, severe osteoarthritis, depression and anxiety, decreased hearing and vision, memory loss, obesity and chronic lumbar pain.

The resident was admitted to the LTCH in March 2007. The progress notes provided for review begin on August 11, 2009 and were sporadically entered.

The resident ambulated short distances with a walker and longer distances in a wheelchair. The resident was often uncooperative, non compliant and aggressive towards staff when personal care was being carried out. She was dependent on staff for transfers in and out of her wheelchair and other activities of daily living.

On October 16, 2009, the resident entered the room that was adjacent to her own that was occupied by another person. A private personal worker noted that she heard arguing coming from the room. The resident was holding a television remote control and the occupant of the

room was holding a doll that belonged to the resident. There was an altercation between the two individuals and the resident was injured with bruises to her forehead and left forearm.

Family and the attending physician were notified and the resident was kept under close observation by staff. She appeared to be sleepy, but was easily awakened by staff that was following the LTC Head Injury Routine. She was monitored every 15, then 30, then 60 minutes, for level of consciousness. Notes indicated that she was “disoriented – easy to arouse.”

At 2200 hours, the resident’s condition worsened and she was vomiting. She was transferred to the local general hospital after discussion with her family. Staff was informed on October 17, 2009 that the resident was in critical condition with bleeding and swelling on her brain. The resident subsequently died in hospital on October 19, 2009.

The cause of death was determined to be acute intracerebral hemorrhage in a woman with blunt impact head injury and hypertensive cerebrovascular disease.

Discussion:

Violence between elderly residents of long-term care homes is not uncommon. Some of the factors that may contribute to this violence include:

- The increasing number of elderly, demented LTCH residents with abnormal (aggressive) behaviours;
- The confined living areas which must be shared with other residents which may predispose to “space invasion”;
- Insufficient numbers of health care staff appropriately trained in the management of elderly, demented residents with abnormal behaviors.

This death was investigated by the Performance Improvement and Compliance Branch of the Ministry of Health and Long-Term Care (MOHLTC), as well as the local police service.

It was reported that the perpetrator, who was the occupant of the room, admitted to hitting the resident. The perpetrator was placed on 1:1 staffing through the high intensity needs program. The Compliance Advisor noted that the perpetrator had a history of verbal aggression towards other residents, including the deceased resident.

Since this incident, the long-term care home has met with the Regional Supervising Coroner and local police service and has implemented the following procedural changes:

1. All residents who have sustained injuries from a possible assault are sent to hospital whether or not they are DNR (do not resuscitate).
2. The LTCH have a behavioural management team to assess all residents for risk to themselves or others. The high risk residents have a red dot placed on their doors and charts so all employees are aware. High risk residents are assessed by a psychogeriatrician and appropriate measures instituted.

3. Wandering strips are placed across doors to prevent residents from entering the rooms of other residents. This does not prevent residents from leaving their own rooms.
4. The LTCH recruited a social worker who is responsible for assisting with the implementation of the behavior management policy.

Recommendations

1. The policy and procedures developed by the long-term care home in response to this incident may be of use to other LTC facilities to help reduce the risk of injuries to residents by other residents. The LTCH may wish to consider opportunities for sharing these procedures with other facilities.

Case: 2010-07

OCC file: 2010-1130

Issue:

Concerns were identified by the investigating coroner relating to the medical care provided to this resident of a long-term care home prior to his death.

Summary:

This was the case of a 73-year-old man who resided in a LTCH for only three weeks prior to his death on February 2, 2010. His past medical history included: complicated venous insufficiency with previous episodes of cellulitis, hypertension, chronic obstructive pulmonary disease, degenerative arthritis requiring narcotic analgesics at times and episodes of acute renal failure in April 2008.

In April 2008, the deceased was admitted to the general hospital with cellulitis and diarrhea. Following the diagnosis of acute renal failure, he was transferred to the tertiary care hospital in anticipation of dialysis being required. The diagnosis of pre-renal azotemia was made. Rehydration resulted in the normalization of his renal function tests. It was recommended that he avoid nephrotoxic drugs (he had been on non-steroidal anti-inflammatory drugs – NSAIDS) and he was transferred back to the general hospital to complete his care. He was subsequently discharged home.

Over the next 18 months, the man's compliance with medications and compression bandages was not exemplary.

In the fall of 2009, he was assessed by the Community Care Access Centre (CCAC) regarding placement in a LTCH. He was felt to be competent to make this decision.

In January 2010, the deceased was admitted to the LTCH. The admission nursing assessment noted that he was malodorous and unkempt. His legs were red and swollen and there were open wounds on both thighs posteriorly and on his right buttock.

During his stay in the LTCH, nursing staff were challenged in providing care. The deceased often refused his compression dressings and medications and would not bathe properly. He was independently mobile in his electric wheelchair, but required assistance to transfer into it. He did not like elevating his legs and often refused positioning to relieve pressure on his decubitus ulcer. He also had a history of making inappropriate sexual remarks to female staff.

On January 20, 2010, a culture of the wounds on his legs reported to show the growth of *Pseudomonas aeruginosa* sensitive to ciprofloxacin and Methicillin-sensitive *Staphylococcus aureus*. Even though he was afebrile and had no documented evidence of an elevated white blood cell count, a 10 day course of ciprofloxacin and Keflex © was commenced on January 25, 2010.

Prior to starting the antibiotics, the deceased's legs were so swollen and weepy that LTCH staff wanted him to go to the hospital, but he refused. It is believed that the nursing staff's concern about the deterioration in his legs prompted the start of antibiotics despite the absence of symptoms and signs of systemic infection. Appropriate orders were written for dressings and compression bandages, but the deceased remained non-compliant.

A Mini Mental Status Exam (MMSE) was performed and the deceased scored 19/30, suggesting the presence of cognitive impairment.

The deceased refused to stay off his buttocks which resulted in acquiring a gel pad for his wheelchair until a formal seating assessment could be done. On January 31, 2010, a pressure relief mattress was ordered because of his gluteal pressure sore.

Nursing staff noted that the deceased had significant pain in his hips and knees which was not relieved with acetaminophen. On January 18, 2010, sustained release morphine sulfate was ordered and on January 30, the dosage was increased.

On January 31, 2010, medication was ordered for depression.

On the afternoon of February 1, 2010, there was a sudden change in the deceased's level of consciousness and cognition. It was noted that he had not been eating or drinking well for 5-6 days. On February 1, 2010 he was not eating at all. Nursing staff noted that he was disoriented, had garbled speech, and could not form sentences. Nursing staff recognized this as a drastic change and immediately arranged for his transfer to the general hospital. The Nursing Transfer Note stressed the sudden change in his clinical status and the relatively poor oral intake over the previous few days. A comprehensive documentation package, including laboratory results, notes, and medication list, was included in the transfer package.

From the documentation submitted for review, it would appear that the deceased arrived in the emergency room where he was admitted, but no laboratory investigations were conducted

and an intravenous was not started. There was no documentation to indicate that a history and a physical examination was performed.

On the next day, February 2, 2010, the deceased's LTCH physician took over management of his care and ordered all the appropriate laboratory investigations and started aggressive fluid management and intravenous antibiotics.

Shortly thereafter, the deceased had a cardiac arrest and in accordance with his advance directive, cardiopulmonary resuscitation was not performed.

A post mortem examination was performed which revealed the presence of edematous kidneys, pulmonary edema and congestion of the spleen and liver.

Cause of death was acute renal failure due to possible medication induced nephrotoxicity in a man with cellulitis and chronic venous insufficiency of the legs.

Recommendations:

1. Health care professionals should be reminded that the development of an acute delirium in an elderly person represents a medical emergency. The importance of conducting a prompt and thorough evaluation and instituting appropriate therapeutic interventions cannot be overemphasized. Even with optimal management, the mortality rate remains high.

Case: 2010-08

OCC file: 2008-1464

Summary:

The rest home (RH) where the deceased lived had approximately 46 residents who lived on two floors. Most rooms were shared by two to four residents. Many of the residents had mental health issues.

The decedent was a 74-year-old man who had been a resident at the RH since 1999. The only formally listed diagnosis was "alcoholism." Comments in the records received indicated that he had, "mild blood pressure and arthritis" and was a long time smoker. He had apparently been on loxapine for a long time to "calm him down." There were sparse medical notes that were illegible and nursing notes of about 4-6 words each, approximately every one to two months (e.g.: "doing fine").

The decedent appeared to have been medically stable and not consuming alcohol for some time prior to the day of his death. It is unclear if he had a family physician elsewhere or if he received his primary medical care at the RH.

The perpetrator was a 34-year-old man with chronic schizophrenia. His medical records were not available for review by the Committee. According to police records, he had been living in the RH for a number of months. One report however, indicated that he had been present for “a couple of years.” According to one of the witness statements made by a care provider in the RH, the perpetrator was supposed to be taking quetiapine “to keep him calm”, but he “routinely refused to take it.” It was the care provider’s belief that one week prior to the homicide, the perpetrator had been fired from his job in a pizza restaurant. There was no indication in any of the records provided that there was a history of any violent behaviour or increased verbal or physical aggression by the perpetrator prior to the date of the terminal incident.

On February 18, 2008, two RH workers were on duty for the night shift. At 2330 hours on February 17, the perpetrator had a bowl of cereal and went up to bed. Routine bed checks were performed at 0300 and 0430 hours and all residents appeared to be sleeping in bed, including the perpetrator. The decedent, who always slept on the same couch every night, was found there that evening as well.

At approximately 0500 hours, the RH workers heard thumping and banging sounds upstairs and went to investigate. They saw the perpetrator physically assaulting a number of residents, including the deceased victim. The workers immediately hid in the kitchen and called 911 for assistance.

Police responded and found the decedent with vital signs absent lying in a large pool of blood. Two other residents had significant injuries and were transported to hospital. The decedent had sustained multiple blunt traumatic injuries to his head, neck and torso.

Evidence from the investigation identified the perpetrator as the source of the injuries sustained by the decedent and other victims. Evidence included the perpetrator’s own statements, witness corroboration and physical evidence.

The perpetrator was held criminally responsible for his actions and was subsequently found guilty of second degree murder.

Post mortem findings:

The immediate cause of death was determined to be blunt force injuries to head and neck.

The manner of death was homicide.

Discussion:

The perpetrator was a young man with schizophrenia who, for unknown reasons, assaulted several residents in the rest home where they all resided. One of the victims succumbed to his injuries and the perpetrator was subsequently convicted of second degree murder.

There did not appear to be any indication of abnormal behaviour by the perpetrator prior to this incident, despite the suggestion that the perpetrator was non-compliant with his neuroleptic medication.

Recommendations:

None.

Case: 2010-09

OCC file: 2010-2371

Reason for Review:

The deceased was an elderly resident of a LTCH who was admitted to an acute care hospital on January 18, 2010 with septic shock. The family was concerned about the care provided in the nursing home in the days preceding her transfer to the acute care hospital.

Summary:

The patient was an 84-year-old resident of a LTCH. She had a long standing left hemiparesis dating back to 1970 as a result of a cerebral aneurysm. She managed well with a wheelchair and regular toileting. She suffered from chronic left leg pain.

On January 11, 2010, the patient began complaining of nausea which may have been an early sign of her urinary tract infection. By Friday, January 15, 2010, her nausea persisted, she developed anorexia and was beginning to become confused. Although it was identified that she might have a urinary tract infection, urine was not collected until Monday January 18 due to laboratory service availability. No empiric treatment was initiated.

By Sunday, January 17, the patient started to become more ill with a drop in her blood pressure and a change in respiratory status. By the morning of January 18, she had significant hypotension, decreased level of consciousness and lethargy. The nursing staff did not appear to recognize the seriousness of the situation and contacted the physician's secretary in the office awaiting further guidance and assessment by the physician later in the day. Once assessed by the physician on the afternoon of January 18, the seriousness of the situation was recognized and the patient was immediately transferred to the acute care hospital. There, she received aggressive treatment with IV fluids, vasopressors, antibiotics and intensive care. She suffered from urosepsis with septicemia, ileus, left lower lobe pneumonia and congestive heart failure. She was eventually transferred to the ward and died in her sleep in the early hours of January 26, 2010. A DNR order was in place at the time.

It cannot be determined from this review if earlier identification of the patient's sepsis would have changed the outcome.

Staff at the LTCH did not appear to recognize the seriousness of the patient's changing level of consciousness and vital signs, even though this was brought to their attention by members of the patient's family.

Recommendations:

1. LTCH staff should be educated on the presentations of sepsis in the elderly. Where confirmatory testing cannot be carried out, early empiric treatment should be considered.
2. Protocols should be established for the management of residents with an acute change in status.

Case: 2010-10

OCC file: 2010-8314

Reason for review:

This was the case of an 85-year-old woman with a history of frequent falls and ongoing high risk for falls who died of a closed head injury suffered as a result of a fall onto the floor at her LTCH. Her fatal fall occurred within the first two weeks of her residence in the LTCH.

History:

At the time of admission to the LTCH, the decedent's medical history included: Alzheimer's dementia, hypertension, hypothyroidism, depression, chronic back pain, osteoporosis with previous bilateral Colle's fractures and a recent left supracondylar humerus fracture; alcoholism (at the time of admission to the LTCH, the decedent was drinking up to four glasses of wine daily, usually "watered down" - she would become agitated if denied alcohol); and frequent falls as a result of a significant balance and gait impairment. (She fell frequently at home and as a result, the family did not feel they could "keep her safe", resulting in her admission to the LTCH).

On June 10, the decedent was accepted for admission to a LTCH. The social worker from that LTCH met with the family and noted their concern regarding the prevention of falls. Various fall prevention options were discussed with the family.

The decedent was admitted to the LTCH on June 15, 2010. The "Admission Care Plan" completed on June 16, 2010 documented that assistance of one staff would be needed for all ADLs, transfers needed to be supervised "b/c unsteady", a walker should be used and "is available, but resident refuses to use", history of falls, bedrails to be used for "safety", wandering risk as decedent was exit-seeking and looking for her husband, and "refuses care, gets rooms mixed up, packs up her belongings."

The physician's admitting assessment completed on June 15 noted that the decedent's left arm was in a cast, that she was confused but quiet, and that "multiple falls" had occurred. A note in the health record, apparently "from a nurse practitioner familiar with the patient's history" recommended lorazepam for alcohol withdrawal management.

Over the next few days, there were several focused nursing assessments completed. The decedent was assessed as being "high risk for falls" with a score of 80 on the Morse scale (higher score means higher risk, maximum score 125). A nutritional risk assessment was completed by a dietician, and the decedent was deemed at high risk of nutritional deficiencies.

A formal plan of care was developed and documented on June 17, 2010. The areas covered in the plan of care were: nutrition (goal to gain weight); dressing, toileting, eating, bathing, personal hygiene and transfers (all requiring limited assistance); bed mobility and walking in room, corridor and on unit (independent, requiring no help or oversight – decedent was noted to need a walker and to be encouraged to use it); continence; left arm range of motion (physiotherapy to work on improving this once cast was off); balance and gait control (physiotherapy to work three times weekly to improve dynamic balance, gait control using gait training, and ambulation tolerance); pain; advance care planning; skin care; dementia care and behavior management. There was no plan of care specifically aimed at mitigating the risk of falls.

The care plan was updated on June 21, 2010 by the dietician after the admission lab results had returned to the home. Nutritional supplements were added.

A comprehensive physiotherapy assessment was completed on June 21, 2010. The decedent was noted to be unsteady with decreased balance and a poor gait pattern. Static standing balance was poor in that she was unable to stand in one place unsupported.

The decedent was restless and mildly agitated throughout the first few days in the LTCH. The LTCH used a behavior charting record to document the level of agitation of the deceased on an hourly basis. Her agitation seemed to increase each evening from approximately 1900-2200 hours and she would wander and exit-seek. She was given .5 mg lorazepam (as needed) at this time of day on several days to try and reduce the level of agitation and wandering. On June 21, 2010, the physician ordered an increase in the lorazepam to 1 mg at bedtime as needed. The deceased was often noted to be exit-seeking and wandering into other residents' rooms.

On the morning of June 23, 2010, the staff on the unit heard a "big bang" around 0940 hours. The decedent was found lying on the floor in front of her bathroom door with feet pointing towards the hallway. She did not recall how she had fallen. A hematoma was noted on the upper right scalp. She was alert, asking for her husband, and trying to get up. Emergency services were called, and she was transported to the local acute care general hospital emergency room. A CT scan of the brain in the emergency room was reported as showing, "a large left temporal lobe parenchymal contusion and left-sided subdural hematoma which is 0.3 cm in width. There is some subarachnoid hemorrhage noted in the left sylvian fissure. There is no midline shift and the ventricles are non-dilated. There is a large right scalp hematoma on the right parietal side."

She was admitted to the palliative care inpatient unit of the hospital, where she died 11 days later, on July 4, 2010.

The MOHLTC conducted a complaint investigation on July 20 and 21, 2010. The report was issued on August 31, 2010 and there were four areas of non-compliance documented; all identified areas related to the absence of a specific plan of care for the deceased directed at prevention of falls and injury.

Discussion:

Falls are a common problem among residents of LTCHs. Studies have suggested that up to 50% of residents of LTCHs fall each year, and over 40% have more than one fall each year. Even with these high percentages, the prevalence of falls in LTCHs may still be underreported. As a result of the overwhelming need to address this issue, the Ontario Ministry of Health and Long-Term Care (MOHLTC) and LTCHs have developed approaches to mitigate the risk of falls, and preventing injury when a fall does occur. A recent article in the British Medical Journal (2008)¹, reported that “evidence from systematic reviews and meta-analyses of randomized trials shows that at least 15% of falls in older people can be prevented, with individual trials reporting reductions of up to 50%. The randomized trials used either a single intervention strategy (such as exercise) or multifactorial preventive programmes that included simultaneous assessment and reduction of predisposing and situational risk factors. Scientific evidence is most consistent for strength and balance training, followed by reduction in the number and doses of psychotropic drugs, dietary supplementation with vitamin D and calcium and in high risk populations, assessment and modification of home hazards.”

The medications prescribed for this resident increased her risk of falls significantly. She had been on most of the medications for many years prior to her admission to the LTCH. Four classes of drugs that the decedent was taking are documented to increase the risk of falls:

- *benzodiazepines* for prevention of serious alcohol withdrawal.
- *narcotics* (hydromorphone 6 mg daily), presumably for pain related to her left elbow fracture.
- *SSRI anti-depressant* - These medications are well documented as being associated with an increased risk of falls.
- *anti-cholinergic* properties (ranitidine) - These medications have the potential to cause postural hypotension, increasing the risk of falls.

In general, a plan of care for preventing falls and fall-related injury should include:

- a thorough resident assessment to identify all risk factors present;
- strategies to remove or reduce risks that are deemed modifiable;
- improvement of strength, balance and walking through targeted therapy, and injury prevention strategies in the event that a fall occurs.

¹ Jarvinen TL et al. Shifting the focus in fracture prevention from osteoporosis to falls. *BMJ* 2008; 336:124 (Published 17 January 2008)

The plan should include a discussion with the resident and/or their substitute decision maker (SDM), about the risks of falls, as well as the recognition that all falls *cannot* be prevented. Part of the issue in this case is that the family seemed to believe that their wife/mother would somehow be less likely to fall in the LTCH, and/or that 100% of her falls could be prevented. The social worker on June 10 documented her dialogue with the family regarding realistic expectations of fall prevention. Alternatives to freedom of movement should be considered and the risks and benefits reviewed with the resident or SDM. This should ideally be documented in a cohesive and structured format as a “fall and fall-related injury prevention” plan of care.

The individual components of a fall prevention plan were in place for this LTCH resident, although they were not packaged as a “Fall Prevention Plan.” These components included gathering information from family, a formal physiotherapy consultation and assessment of gait and balance, and a prescription for an appropriate walking aid.

Even with maximum risk factor mitigation, there would have continued to be a high likelihood that the decedent would have fallen. The deceased had a more than 75% risk of falling at all times when she was walking. Most studies of multiple interventions to reduce fall risk have demonstrated at best, a 35% efficacy in reducing falls risk.

One alternative may have been to place the decedent in a wheelchair with a restraint belt. This would have reduced her risk of falling and allowed her to move more independently. However, it is also recognized that residents who are restrained are more likely to fall when they are moving around after restraint removal, so the benefit of this alternative would not have been clear.

The decedent had so many risks for falling, and a history of numerous falls, such that another fall was inevitable and likely not preventable. Had this decedent been confined to a wheelchair, her risk of falling would still have been significant, even with supervision.

Recommendations

None.

Case: 2010-11
OCC file: 2009-1426

Reason for review:

Concerns were identified pertaining to the documentation of assessments conducted by nursing and emergency medical services.

Summary:

The deceased was a 73-year-old man with a past medical history of: stroke (2005), craniotomy (2004) for a subdural hematoma, seizure disorder, hypertension, mitral regurgitation and alcohol abuse.

At the time of his death, the deceased was on the following medications: B12 1000 mcg monthly, enalapril 5 mg twice daily, metoprolol 75 mg twice daily, phenytoin 100 mg each morning and 150 mg in the evening, thiamine 100 mg daily, atorvastatin 20 mg daily and Ativan © (lorazepam) SL 1 mg when necessary.

The decedent became a resident of the retirement home on November 6, 2008. There is no documentation of why he decided to move into the facility. The rent for his unit included housekeeping, meals, social activities, linen change, and a pendant to call for emergency nursing help at any time. Other nursing care, including medication administration, was not included in the basic package, but could have been purchased. A physician came into the facility to see the patients, but the physician was not a “house” physician and did not routinely take over the primary care of all residents.

The decedent ordered alcohol to be delivered to his room on January 22, 2009. This was the only known delivery of alcohol. At about 1915 hours, the resident of the room one floor above, heard a bang and notified nursing staff. The deceased was found on the floor just outside the bathroom. It was noted that he had not eaten lunch or dinner, and later, that he had probably not taken his evening medications. He smelled of alcohol and was felt to be intoxicated. He was helped to bed, and nurses came in to observe him overnight, although no nursing notes were written. The family was informed of the incident, and at their request, the alcohol was removed.

At about 1100 hours the following day, January 23, 2009, the resident was noted to have vomited in bed. He was cleaned up and Emergency Medical Services (EMS) were called. The paramedics did a complete assessment and concurred with the patient’s adamant desire not to go to hospital. The EMS assessment however, did not evaluate the man’s mobility. The EMS report was not immediately available when the case was first reviewed by the coroner and the nurse’s notes pertaining to the event were not added to the chart until February 6, 2009. The delay in recording made the initial evaluation and investigation of the case more difficult.

On the evening of January 23, 2009, the deceased became less rousable and EMS was called again. He was taken to one of the local acute hospitals (which was changed to the other closer hospital when a cardiac arrhythmia occurred in the ambulance). Upon assessment, the deceased was found to have massive intracerebral bleeding and was promptly transferred to a larger regional hospital with neurosurgical coverage.

He was treated in the Intensive Care Unit (ICU), but after consultation with the family, the attending staff took a conservative course and the patient died on January 26, 2009. No autopsy was performed.

The immediate cause of death was intracranial hemorrhage.

Manner of death was accident.

Discussion:

Prior to the terminal event, the following issues relating to the deceased were identified:

1. Cost of medication administration by nurses - this option was not purchased.
2. Inability to change his primary physician to the doctor who came into the facility. Apparently, the deceased's previous family doctor had called him an "alcoholic."
3. Lack of physiotherapy - one note says CCAC was to be involved re: walking aids, but there was no further documentation in the chart.

There was no documentation provided to verify these concerns. Although the retirement facility did not have universal nursing involvement, documentation of assessments by nurses should have been done in a more timely manner.

The lack of signs of trauma and the extensive nature of the bleeding suggested that the brain hemorrhages were the primary event. The delay of about six hours from the first EMS call, to the second, would have had no effect on the outcome of this case.

The standard template for EMS assessment does not include an optional mobility assessment. A mobility assessment would not have changed the outcome of this case, but in many cases, with older patients, it can provide useful information about the need for emergency department assessment.

Recommendations:

1. Even in retirement homes, when nurses are involved with a resident, they should document their assessments in a timely manner.
2. EMS should consider adding an optional mobility assessment to their standard evaluation template.

Appendix A

Analysis of Recommendations: 2004 - 2010

	2004	2005	2006	2007	2008	2009	2010
Total Number of Cases Reviewed	25	28	27	17	18	20	11
Total Number of Recommendations	67	59	71	35	46	39	22
# of Cases and Recommendations Based on Area of Concern <i>(Note: Cases may have more than one area of concern identified)</i>							
Medical / nursing management							
# of cases with area of concern:	14	12	10	8	7	7	7
% of total cases:	56%	43%	37%	47%	39%	35%	64%
# of recommendations:	22	22	30	17	12	15	12
% of total recommendations:	33%	37%	42%	48%	26%	39%	54%
Communication / documentation							
# of cases with area of concern:	9	7	6	4	6	3	3
% of total cases:	36%	25%	22%	24%	33%	15%	27%
# of recommendations:	13	9	8	6	7	6	3
% of total recommendations:	19%	15%	11%	17%	15%	15%	14%
Use of drugs in the elderly							
# of cases with area of concern:	7	5	8	3	5	4	1
% of total cases:	28%	18%	30%	18%	28%	20%	9%
# of recommendations:	9	8	14	3	6	6	4
% of total recommendations:	13%	14%	20%	9%	13%	15%	18%
Admission, discharge and transfer procedures							
# of cases with area of concern:	3	3	3	1	1	0	0
% of total cases:	12%	11%	11%	6%	6%		
# of recommendations:	3	4	4	2	2		
% of total recommendations:	4%	7%	6%	6%	4%		
Determination of capacity and consent for treatment / DNR							
# of cases with area of concern:	2	2	0	0	0	0	0
% of total cases:	8%	7%					
# of recommendations:	1	3					
% of total recommendations:	2%	5%					
Use of restraints							
# of cases with area of concern:	0	0	1	1	0	0	1
% of total cases:	n/a	n/a	4%				9%
# of recommendations:	0	0	4				1
% of total recommendations:	n/a	n/a	6%	6%			5%
Acute and long-term care industry, including the Ministry of Health and Long-Term Care							
# of cases with area of concern:	12	12	9	4	10	6	2
% of total cases:	48%	25%	33%	24%	56%	30%	18%
# of recommendations:	14	10	10	7	17	12	2
% of total recommendations:	21%	17%	14%	20%	37%	31%	9%

Appendix B

Summary of Recommendations – 2010 Cases

Case	Theme of recommendation(s)	Recommendation(s)
2010-01	Use of drugs	1. Health care professionals should be reminded that loperamide hydrochloride should not be prescribed for elderly patients taking opioids who have diarrhea until the presence of constipation has been excluded.
	Use of drugs	2. Health care professionals should be reminded that dimenhydrinate is a medication that is rarely indicated for use in the institutionalized or hospitalized elderly. The combination of dimenhydrinate with other psychoactive or anticholinergic medications can result in the development of potentially serious drug interactions resulting in adverse outcomes.
	Use of drugs	3. Health care professionals should be reminded of the importance of using caution when prescribing opioids for elderly patients with chronic pain. The use of non-pharmaceutical interventions and non-narcotic medications such as acetaminophen should be considered for use as a first intervention in an attempt to minimize the dosage of an opioid required to control pain.
	Use of drugs	4. Health care professionals should be reminded that the potential toxicity of opioid medications can be increased by the concomitant use of other psychoactive medications.
2010-02	Acute care and long-term care industry	1. All licensed long-term care homes in the Province of Ontario should develop a policy and procedure to ensure the timely notification of physicians of incidents involving elderly residents who fall.
	Medical/nursing management	2. Health care professionals caring for the frail ill elderly should be reminded that the lack of oral intake, especially fluids, may rapidly lead to the development of dehydration and azotemia, even in the absence of a febrile illness.

Case	Theme of recommendation(s)	Recommendation(s)
2010-03	Medical/nursing management Medical/nursing management	1. Health care professionals should be reminded of the importance of early mobilization of the frail elderly who have a fracture. 2. Health care professionals should be reminded that the insertion of an indwelling urinary catheter is usually not indicated for elderly persons with a fracture in the absence of urinary retention. The insertion of an indwelling urinary catheter may result in immobility related complications which can result in increased morbidity and even death.
2010-04	Medical/nursing management Medical/nursing management Acute care and long-term care industry	1. Upon identification of aggressive behaviour within the long-term care home, efforts to move the resident to a private room need to be undertaken. 2. A protocol for decision-making regarding transfer to more intensive and specialized care should be in place for every LTCH. This could include the nature of physical aggression, or a minimum number of aggressive incidents. In the absence of the ability to rapidly access specialized inpatient psychogeriatric assessment beds, an aggressive LTCH resident may need to be sent to the local hospital for urgent assessment and intervention. This plan of management needs to occur with the full cooperation and engagement of the hospital, or there is a high likelihood that the resident will be sent back to the LTCH from the emergency department. 3. The MOHLTC should consider the 2005 inquest recommendation to develop specialized long-term care units for residents with dementia and persistent and dangerous physically aggressive behaviour. As an alternative, the MOHLTC high intensity needs funding should be made available for use over the long-term for residents whose physically aggressive behaviour does not improve with the approaches and medications prescribed.

Case	Theme of recommendation(s)	Recommendation(s)
	Medical/nursing management	4. The behaviour management plan developed in a specialized inpatient hospital unit should reflect the skills and staffing levels present in LTCHs. There should be a smooth handover of the resident from one facility to another, ideally supported by an initial period of hospital staff being available in person or by telephone for consultation with the LTCH staff.
	Medical/nursing management	5. LTCHs should institute behaviour tracking for residents who are being treated with medication or other modalities for behaviour. Drug doses should be adjusted according to efficacy and in concert with recommendations made by specialized consultants who are assisting with management.
2010-05	Medical/nursing management Use of restraints Medical/nursing management	1. The LTCH should review documentation standards for care and treatment, especially with respect to skin breakdown. 2. Positional asphyxia is a real risk with any type of restraint and with some patient positioning devices. Risks associated with patient positioning devices should be well understood, and the risks and benefits should be discussed with the patient (or the substitute decision-maker) before using such devices. Staff should be educated in these risks and their remediation before using the device with the patient. 3. If the foam wedge positioning device had been used one year prior to death and was deemed unsafe, the LTCH should conduct a review to understand the processes that resulted in this positioning device still being in use with this resident. The review should be a thorough one, such as a "Root Cause Analysis." All contributing factors identified should be remediated.
2010-06	Communication and documentation	1. The policy and procedures developed by the long-term care home in response to this incident may be of use to other LTC facilities to help reduce the risk of injuries to residents by other residents. The LTCH may wish to consider opportunities for sharing these procedures with other facilities.

Case	Theme of recommendation(s)	Recommendation(s)
2010-07	Medical/nursing management	1. Health care professionals should be reminded that the development of an acute delirium in an elderly person represents a medical emergency. The importance of conducting a prompt and thorough evaluation and instituting appropriate therapeutic interventions cannot be overemphasized. Even with optimal management, the mortality rate remains high.
2010-08		No recommendations
2010-09	Medical/nursing management Communication and documentation	1. LTCH staff should be educated on the presentations of sepsis in the elderly. Where confirmatory testing cannot be carried out, early empiric treatment should be considered. 2. Protocols should be established for the management of residents with an acute change in status.
2010-10		No recommendations.
2010-11	Communication and documentation Medical/nursing management	1. Even in retirement homes, when nurses are involved with a resident, they should document their assessments in a timely manner. 2. EMS should consider adding an optional mobility assessment to their standard evaluation template.