### Isolating patients for infection control may have unintended consequences

**Stelfox H, Bates D, Redelmeier D. Safety of patients isolated for infection control. JAMA. 2003; 290 (14): 1899-1905.**

**Issue** Data regarding the quality of care received by patients isolated for infection control is lacking.

**Study** Patients isolated for staphylococcus infection, and heart failure patients also isolated for the infection at two large North American teaching hospitals between 1999 and 2002, were compared with control groups to evaluate processes, outcomes, and patient satisfaction.

**Key Findings** Relative to the control groups of patients, isolated patients were:
- Twice as likely to experience adverse, preventable events during their hospitalization.
- More apt to complain to the hospital about their care
- More likely to have unrecorded vital signs and days with no physician progress notes.

**Implications** Hospitals need to examine infection control policies to ensure that there are no unintended consequences. Carefully evaluated, and appropriately implemented interventions are essential to ensure the safety of all patients.

### Diabetes impacts both quality and length of life


**Issue** As diabetes has the potential to impact quality and length of life, both factors must be considered when assessing the overall health burden of the disease.

**Study** Measures of health-related quality of life (HRQOL) from the 1996/97 Ontario Health Survey were combined with data from the Ontario Diabetes Database to estimate the impact of diabetes on life expectancy, and loss of healthy life years (called health-adjusted life expectancy [HALE]).

**Key Findings** Compared to people without diabetes, those with diabetes had:
- Life expectancy of 12.8 years less for men and 12.2 years less for women.
- Loss of healthy life years of 11.9 years for men and 10.8 years for women.

**Implications** Linking population health survey information with administrative databases is an accurate and important source of information for monitoring the health of people in the general population that have common diseases.

### Migraines a major cause of frequent emergency department (ED) visits


**Issue** Frequent ED users include a large proportion of people with migraine headaches. However, it is unknown if the use of health services by migraine patients differs from that of other frequent ED users.

**Study** Identified the total number of frequent ED users (defined by at least 12 ED visits per year) in fiscal year 1998, and the number of users for whom at least 50% of visits were for a migraine headache. This group of users was compared to non-migraine frequent ED users from the perspective of patient characteristics and health resource use.

**Key Findings** Nearly 7,000 patients were identified as frequent ED users, having visited an ED at least once a month, on average. Of this group, 7% were “frequent migraineurs”. These patients were also heavy users of other health care services, such as family physicians and specialists. In total, frequent migraineurs typically saw a doctor more than once a week, with care being obtained from one ED and one family doctor.

**Implications** Improved coordination of care for frequent migraineurs could be achieved through greater interaction between the main ED and the family doctor, and through the development of care management plans.
Achieving Canadian benchmarks for hospital cardiac care would save lives

Issue
Cardiovascular disease is the leading cause of death in Canada, claiming over 78,000 lives each year. While there have been significant improvements in treatments and therapies, the uptake of these advances into practice has been slow.

Study
The purpose of the study was to:
• Set national benchmarks or “gold standards” for cardiac care.
• Develop cardiac report cards that measure hospital performance.
• Provide information to minimize the gap between current practice and optimal cardiac care.
• Test the usefulness of report cards as a catalyst for quality improvement activities in hospitals.

Key Findings
• The use of life-saving heart medications (aspirin, beta-blockers, ACE inhibitors, and statins) in heart attack patients is good, but not ideal. The implementation of standard hospital admission and discharge orders is recommended to maximize the use of these drugs.
• The use of beta-blockers in heart failure patients is well below the national benchmark. Physician education should be undertaken to encourage maximum use of these drugs in this patient group.
• ‘Door to needle’ time is too long in many hospitals. Delays could be minimized if emergency department physicians were trained and permitted to administer thrombolytic therapy.

Implications
Upwards of 400 lives a year could be saved, in Ontario alone, by maximizing the use of the medications noted above in heart attack and heart failure patients.

Parkinson’s patients hospitalized more often for certain conditions

Issue
Previous studies that have evaluated hospital admissions for Parkinson’s disease (PD) have had limitations due to small numbers of patients and errors in documentation.

Study
Over 15,000 PD patients were matched by age and sex with two people without PD (control group = 30,000 people) between 1994 and 1999 to evaluate hospital admission rates and the various causes of admission.

Key Findings
People with PD were admitted more frequently for pneumonia, psychosis, fractured femur, urinary tract disorders (including infections), disorders of fluid and electrolytes, and septicemia.

Those in the control group had more frequent admissions for coronary artery disease, cerebrovascular disease, and cancer.

Implications
To reduce hospital admissions, physicians should consider the possible preventative therapies available for appropriate high-risk PD patients. Future research should examine the outcome of preventative strategies on the management of PD.

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