Ontario study finds barriers to biopsy use in diagnosing breast cancer

Issue
Despite its many advantages, percutaneous (needle) biopsy has not been universally adopted for Ontario women requiring a breast tissue diagnosis.

Study
Identified 17,068 women without a previous cancer diagnosis who underwent breast tissue sampling by needle biopsy or surgery between April 2001 and December 2002, and compared these groups in terms of their age, residence (urban/rural/Local Health Integration Network[LHIN]), income level, diagnosis (benign/malignant), presence of a primary care provider and prior mammography.

Key Findings
A total of 10,459 women (61%) underwent needle biopsy. Of the 10,131 women who underwent surgery, 6,637 received a benign diagnosis and 3,494 had cancer, for a benign-to-malignant ratio of almost 2:1. Women with cancer were slightly more likely to undergo biopsy than women without (64.7% vs. 60.3%). There was wide variation among LHINs in the use of biopsy (range, 24% to 72%). Women with the highest incomes, urban residence, a primary care provider, or a history of a prior mammography were more likely to receive a biopsy.

Implications
Variations in the use of needle biopsy due to factors unrelated to reasons for having a biopsy indicate that strategies to identify and overcome barriers to its use are needed.
Improving quality of care in long-term care hospitals is not always more costly

Issue Although both quality and cost are important concerns for long-term care (LTC) facility management, the relationship between the two is poorly understood. The conclusions of previous studies relied on particular interventions that may not be generalizable.

Study Examined the effect of seven MDS-based quality indicators – two process indicators (use of physical restraints and antipsychotic medications) and five outcome indicators (prevalence and worsening of skin ulcers, prevalence and worsening of incontinence, and pain prevalence) – on direct and indirect resident care costs in 99 LTC hospitals in Ontario from April 1998 to March 2002. The marginal costs associated with higher facility quality performance were calculated on a resident-day basis.

Key Findings Increases in restraint use and incident skin ulcers were associated with lower per diem costs, whereas incontinence prevalence was associated with higher per diem costs.

Implications LTC hospitals have a strong business case for improving quality in incontinence; however, policy makers may need to provide financial incentives to encourage reductions in restraint use and skin ulcers to defray the higher costs associated with improving quality in these areas.

Study examines the impact of obesity on chronic disease in Canadians

Issue There is limited national data on the association between categories of obesity and chronic diseases.

Study Classified 110,200 Canadian Community Health Survey participants aged 18 years and older into four categories based on their body mass index (BMI): overweight (BMI 25.0-29.9), class I obesity (30.0-34.9), class II obesity (35.0-39.9) and class III obesity (≥ 40) to investigate the association between BMI and each of hypertension (high blood pressure), diabetes, heart disease, arthritis and asthma, as well as several sociodemographic characteristics (e.g., age, sex, race, education, income, tobacco use, physical activity).

Key Findings The results found that:
- The overall prevalence of obesity was 16.2% in men and 14.6% in women.
- The prevalence of obesity III (clinical obesity) was 1.0% in men (compared to 1.5% in U.S. men) and 1.4% in women (2.8% in U.S. women).
- Age, education level and physical activity were major risk factors across BMI levels in both sexes.
- Among men, marital status, residential location (urban/rural), race and language spoken were associated, either positively or negatively, with overweight, obesity I and obesity II, but not obesity III.
- Among women, marital status and alcohol consumption were not associated with obesity I or II, but with obesity III.
- The residential location of women was associated with overweight and obesity I, but not with obesity II or III.
- The prevalence of diabetes, hypertension, heart disease, arthritis and asthma increased with increasing BMI level, and the highest values appeared in participants at the obesity III level.
- The greatest impact of clinical obesity (class III) was on hypertension and diabetes control.

Implications These results suggest that the impact of obesity on Canadians’ health should be studied and addressed by obesity level. The estimates produced may provide policy makers with baseline figures for developing and managing a nationwide obesity action plan.

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