Hospital-Acquired Infections

Hospital acquired infections are the fourth largest killer in Canada. Each year, 220,000-250,000 hospital acquired infections result in 8,000-12,000 deaths. Thirty to fifty per cent of these hospital-acquired infections are preventable. [i]

While SARS raised awareness of hospital-acquired infections, the problem is much, much more than SARS. Indeed the danger is worsening, as many hospital infections can no longer be cured with common antibiotics. Key hospital-acquired infections are:

MRSA: Short for methicillin-resistant *Staphylococcus aureus*. It lives harmlessly on the skin but causes havoc when it enters the body. Patients who survive MRSA, often spend months in the hospital and endure several operations to cut out infected tissue. The Canadian Nosocomial Infection Surveillance Program (CNISP) reports consistently rising MRSA rates at hospitals. Since its first report in 1995, MRSA rates have increased *ten-fold*. In 1974, 2 percent of US staph infections were from MRSA. By 1995, that number had soared to 22 percent. Today, experts estimate that more than 60 percent of staph infections are MRSA. MRSA can be found on everything from hospital cabinets to bedside tables. Once patients and caregivers touch these surfaces, their hands can spread the disease. Ordinary cleaning solutions can kill these bugs, but surfaces need to be drenched in disinfectant for several minutes, not just sprayed and wiped quickly.[ii] Indeed, recent research indicates that MRSA can live on surfaces for weeks.

***C. Difficile*:** *C. Difficile* is a bacterium spread by touching a surface or skin that is contaminated with fecal matter. A new strain, twenty times more virulent than previously existing strains, has been going through Quebec hospitals for two years, leading to a 60% increase in the number of *C. Difficile* deaths in Quebec. For the year ended March 31, 2004, 1,270 people died in Quebec due to hospital-acquired *C. Difficile* infections. Notably, this new, more virulent strain has recently moved into Ontario, with a cluster of hospital deaths last fall.[iii]

VRE: Of perhaps even more concern is vancomycin (or glycopeptide) -resistant enterococci (VRE or GRE). For the first time since the introduction of antibiotics, here is a strain of clinically important bacteria that is resistant to all available antimicrobials.

Clean hospitals are the backbone of infection control and hospital support workers keep our hospitals clean. Hospital support services have been cut back ruthlessly over the last 30 years. **Further cuts should not be on the agenda – but unfortunately, they are.**

Hospital Support Work Today: Approximately 50,000 support workers are employed in Ontario hospitals. They are the lowest paid workers in hospitals, with most earning

between $16 and $19 per hour – significantly less than the average hourly wage or industrial wage. Most are women.

Spending on hospital support services has fallen. The Canadian Institute for Health Information reports that hospitals have cut the dollars spent on support services in recent years: Housekeeping spending cut (on average) 1.8% per year; Material management cut 2.2% per year; Patient food services cut 3.1% per year; Plant administration and operation cut 1.1% per year. Indeed since the mid-1970s, hospital spending on support services has been squeezed– dropping from 27% to 17% of hospital spending.

Hospital Support Services Under Attack: The Ontario Liberal government has made further cuts in spending on hospital administrative and support services a major goal. But cleaning hospitals is labour intensive. Staff costs account for 93 per cent of the cost of cleaning. As a result, "efficiencies" are largely at the expense of staff. Health Minister George Smitherman has flatly raised wage cuts for hospital support workers: "Just because it is a public health-care system doesn't mean …. that we should expect to pay more to sweep the floor in a hospital."[iv]

So what has been the experience of jurisdictions that have attacked support services through cuts or privatization?

Britain: Britain experimented with compulsory contracting of hospital housekeeping services. The result? In the last 15 years, the number of hospital cleaning staff has dropped from nearly 100,000 to 55,000. The outbreak of infectious diseases in British hospitals and the filthy condition of British hospitals has become a major public policy issue. Twenty out of 23 of the hospitals that had poor standards of cleanliness used contract cleaners.

In 2002, the British National Health Service (NHS) began publishing the names of hospitals with high infection rates in newspapers and in July 2004, the NHS announced that every hospital will have to publicly display its infection rate.[v] Now, British Health Secretary, Patricia Hewitt, is considering holding hospital bosses criminally responsible for hospital-acquired infections.[vi]

Quebec: Recently, the *Montreal Gazette* editorialized on the province's *C. Difficile* outbreak:

> A number of factors are believed to be contributing to this outbreak. An easily corrected one is the lack of proper hygienic cleaning in Quebec hospitals. Budget cutbacks that date from the mid-1990s have resulted in hospitals where patients' toilets and sinks are too rarely disinfected or even cleaned…..In some Montreal hospitals, housekeeping staff is stretched so thinly that a cleaner is given exactly 36 seconds to clean a toilet. This is completely unacceptable.[vii]

Dr. Mark Miller, head of infection control at Montreal's Jewish General Hospital and a specialist in hospital-acquired infections told the *Gazette* that the hospitals just aren't clean enough: ``It's the general sanitation in the hospitals that is under the microscopic

eye right now…You've got fewer housekeepers. You've got less cleaning of patient rooms and less intensive (cleaning)".[viii]

Other researchers investigating the Quebec *C. Difficile* outbreak concluded:

> The aging infrastructure of hospitals and our willingness to tolerate hospital rooms with 4 patients and a single bathroom, less than 3 feet between beds and progressively fewer resources assigned to housekeeping all facilitate the spread of this disease, as does our inability to achieve acceptable levels of hand hygiene among hospital staff. ….This strain, or others similar to it, will almost certainly be introduced into hospitals across the rest of Canada in the next few months or years.[ix]

British Columbia: The B.C. Liberal government recently privatized thousands of health care support service jobs. Wages and working conditions were pulverized. CUPE interviewed workers in the new system and here is what we found.

Poor training and high turnover: "The contractors don't care how we use chemicals. They don't know how to clean…I opened clean linen and it was full of hair. Six or seven sheets a day like that. Nobody listens to us. It's frustrating." With poor working conditions, many of the staff plan to leave as soon as they can.

Breaking the connection with staff and patients: Housekeeping staff are now often told to avoid talking with patients -- to save time. As one experienced cleaner said: "We feel awful because the residents know us. They call to us." Similarly, hospital staff can't deal directly with housekeeping staff if a problem arises. Instead they have to call headquarters, breaking the link between housekeeping and infection control staff.

Supplies: Staff are sometimes told to use only one pair of disposable gloves per shift. The gloves are flimsy and break after extended use, exposing the workers to hazardous bodily fluids and wastes. Moreover, using the same gloves all day could spread pathogens throughout the facility.

Cleanliness: Many cleaners are concerned that inadequate staffing levels are exposing patients and workers to serious risks. "[The company] can do better but they don't," said a lead-hand housekeeper. A survey of a Vancouver hospital Emergency Room staff, found that 86% felt that overall cleanliness had declined since housekeeping services were privatized. As one B.C. Registered Nurse stated: "Ask any nurse and they will tell you how filthy the hospital is."

Quality Can Save Patients *and* Money: Hospital-acquired infections cost a lot of money to treat. Former New York State Lt. Governor Betsy McCaughey argued in a 6 June 2005 editorial in the *New York Times* that when hospitals invest in proven precautions "they are rewarded with as much as tenfold financial return. These infections add about $30 billion annually to the nation's health costs. This tab will increase rapidly as more infections become drug-resistant."[x] Canadian researchers estimate that the total

attributable cost to treat MRSA infections is $14,360 *per* patient.[xi]

Part of the solution lies in the meticulous cleaning of equipment and hospital rooms. As researcher Kris Owens – who recently demonstrated that MRSA can live on surfaces for weeks – told the media: "The results of this study clearly demonstrate the need for frequent hand washing and environmental disinfection in health care settings".[xii]

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[i] Zoutman et. al, "The state of infection surveillance and control at Canadian acute care hospitals," *American Journal of Infection Control*, 2003:31 , 266-275. For comments from Zoutman regarding this study see also *Medical Post*, "Hospitals inadequate at infection control," August 26, 2003, Page: 5. *The Toronto Star,* "Hospital infections blamed for deaths; Up to 12,000 die each year; Study National survey a 'wake-up call'," Wednesday, August 6, 2003, Page: A1. *Winnipeg Free Press,* "Hospital infections killing thousands," Wednesday, August 6, 2003,Page: A7

[ii] *The New York Times*, "Coming Clean,"Mon 06 Jun 2005,Page: 19,Section: Editorial
Byline: Betsy McCaughey

[iii] Laura Eggertson, "Hospital-Acquired Infection *C. difficile*: by the numbers," Canadian Medical Association Journal, July 6, 2004; 171 (1). Laura Eggertson, "*C. difficile* strain 20 times more virulent," Can. Med. Assoc. J., May 2005; 172: 1279 ; 10.1503/cmaj.050470.

[iv] *The Toronto Star*, "Hospital wages too high, minister warns; Latest salvo in battle over costs. CUPE braces for confrontation. Row brews over hospital wages," Thu 21 Oct 2004, p. A1.

[v] Committee to Reduce Infection Deaths web site, Hospital Infection Fact Sheet.

[vi] BBC, "Hospitals could face MRSA charges," Last Updated: Sunday, 15 May, 2005, 16:07 GMT 17:07 UK.

[vii] *Montreal Gazette* editorial, "How to better control C. difficile outbreak," Saturday, October 23, 2004

[viii] Debbie Parkes and Linda Slobodian, "Dirty hospitals lead to rise in deadly infections, says doctor," Sat 5 Jun 2004, *Montreal Gazette.*

[ix] L. Valiquette et. al., **"***Clostridium difficile* infection in hospitals: a brewing storm," Canadian Medical Association Journal, July 6, 2004; 171 (1).

[x] *The New York Times*, "Coming Clean," Mon 06 Jun 2005,Page: 19,Section: Editorial
Byline: Betsy McCaughey

[xi] Tony Kim, MA; Paul I. Oh, MD; Andrew E. Simor, MD, "The Economic Impact of Methicillin-Resistant *Staphylococcus aureus* in Canadian Hospitals," *Infect Control Hosp Epidemiol* 2001;22:99-104.

[xii]" 'Super' bacteria live on sheets, fingernails-study," *Reuters*, Mon Jun 6, 2005 02:18 PM ET

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