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INSIDE:

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Simor et al, ICHE 2002;23:696-703

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Fawley et al J. Clin. Microbiol. 43:2685-2696

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Dubberke et al, AJIC 2007; 34:315-318

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1. Vernon MO, et al., Arch Intern Med. 13 Feb 2006;166:306-12.

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CHICA-Canada is a national, multidisciplinary, voluntary association of professionals. CHICA-Canada is committed to improving the health of Canadians by promoting excellence in the practice of infection prevention and control by employing evidence-based practice and application of epidemiological principles. This is accomplished through education, communication, standards, research and consumer awareness.

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Learning from the past, looking to the future

We are approaching the fourth anniversary of the Severe Acute Respiratory Syndrome (SARS) outbreak that affected many parts of the world including Ontario. There are a few events in the world where we define periods of time in terms of "pre- and post-": pre- and post-9/11, pre- and post-wars, pre- and post-Depression, to name a few. SARS was one of those events for infection prevention and control in Canada.

In Ontario alone there were 375 persons infected and 44 deaths including three health care workers. The health care workers were: nurse Tecla Lin, nurse Nelia Laroza and Dr. Nestor Yanga. Chapter five of the SARS Commission Final Report Volume 3, Spring of Fear (2006) memorializes these heroic individuals who "died in the line of duty". There were also many other heroes who worked the frontlines in health care facilities, public health agencies, emergency response and community health care settings; as well as those who stepped forward to provide leadership and direction during this time of crisis.

As we face the prospect of a global pandemic of influenza, we must all keep in mind the lessons of SARS. We also know that there could be another SARS-like event where a new viral threat emerges and spreads among humans.

Following SARS provinces across Canada have improved infection prevention and control within their boundaries. Regional networks and health authorities continue to give structure and support for these programs. The dramatic increase in membership in CHICA-Canada from all health care sectors shows an increasing recognition of the field of infection prevention and control. Submissions to this journal have also increased dramatically post-SARS. These are just a few indications of the infection prevention and control response in Canada.

In October 2007, CHICA-Canada partnered with the Association of Medical Microbiology and Infectious Disease Canada (AMMI) Canada, Canadian Association for Clinical Microbiology and Infectious Diseases (CACMID), International Centre for Infectious Diseases (ICID) and industry representatives to create Canada's first National Infectious Disease Day. This event took place on Parliament Hill in Ottawa and resulted in fruitful discussions with 60 politicians, promoting the formation of a national infectious disease strategy. This pivotal event will now become an annual event.

Congratulations to the board and members of CHICA-Canada who supported and participated in this event. We all have a responsibility to ensure that the lessons of SARS and other infectious diseases remain in the forefront of our local, regional, provincial and national priorities. ●

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Joanne Laalo, RN, BSc N, CIC

Never a dull moment

This has been an exciting and busy year; there has never been a dull moment. In the fall issue the National Infectious Diseases Day on October 18 was highlighted as a future collaborative event for CHICA-Canada. I can report that it was a success for CHICA-Canada and our partners, the Canadian Foundation for Infectious Diseases (CFID), the Association for Medical Microbiologists and Infectious Diseases and the Canadian Association for Clinical Microbiology and Infectious Diseases (CACMID).

On October 18, 14 teams of two people each made rounds on Parliament Hill to meet with a total of 60 parliamentarians. I thank the CHICA-Canada team who participated either behind the scenes with the position paper and/or on Parliament Hill: **Anne Bialachowski, Nora Boyd, Natalie Bruce, Marie-Andree Bruneau, Karen Hope, Dany Larivee, Colette Ouellette, Pat Piaskowski, Suzanne Rowland, Josee Shymanski, Marion Yetman, Rick Wray** and **Dick Zoutman.**

Equally rewarding was the press conference on the Hill which gathered national media coverage of Dr. Zoutman's message on behalf of CHICA-Canada highlighting the need to focus on preventing infection and the case for doing so.

CHICA-Canada members were again front and centre as Nora Boyd delivered a presentation about community-associated infections (CAIs) and Dr. Zoutman delivered a presentation about healthcare-associated infections (HAIs) to a diverse audience. These topics and others sparked discussion about future National Infectious Diseases Days (NIDD) and the need for more fine-tuning of the position paper and messages for the day.

In our recent board meeting, we agreed to assemble a business plan to further assess the feasibility of participating in future NIDDs with respect to finances and fit with our strategic plan.

Another exciting project this year is the Infection Prevention, Control and Epidemiology: Professional and Practice standards in collaboration with APIC and CHICA-Canada. Special thanks to **Zahir Hirji** and **Margie Foster** for their excellent work as CHICA representatives on this project. Following approval of the standards by both boards, the hope is to publish them in our respective journals, so keep an eye out for them.

As CHICA-Canada moves forward with our strategic goals, we continue with expanding and strengthening our alliances with organizations that have infection prevention and control as part of their programs or initiatives. I am pleased to report that CHICA-Canada has assumed the co-lead position with the Public Health Agency of Canada (PHAC) on the Safer Healthcare Now "ARO" intervention. Our hope is that with input from IPAC experts on this intervention, it will be a useful tool for healthcare organizations.

It was a privilege to represent CHICA-Canada for this last year and I extend my warmhearted thanks to both Gerry Hansen and Karen Hope for all of their help, guidance and support. I welcome Marion Yetman who takes over for 2008 as she continues to move our organization forward with her energy and enthusiasm. In addition, a warm welcome to our three new incoming board members: Cathy Munford as President-elect 2008, Bern Hankinson as Secretary/Membership Director and Donna Moralejo as Director of Education. I would also like to recognize outgoing board members Pearl Orenstein, Betty Ann Henderson, and Karen Hope who have contributed so much to bring CHICA-Canada to where it is today.

I look forward to working with your board and serving you in 2008. ●

Pas un seul moment d'ennui

L'année qui se termine a été stimulante et chargée; nous n'avons pas eu le temps de nous ennuyer. Dans le numéro de l'automne, nous parlions d'un événement à venir, le 18 octobre, auquel CHICA-Canada collaborait, soit la journée nationale de l'infectiologie. Je peux vous dire que ce fut une réussite pour CHICA-Canada et ses partenaires, la Fondation canadienne des maladies infectieuses (FCMI), l'Association pour la microbiologie médicale et l'infectiologie (AMMI) ainsi que l'Association canadienne de microbiologie clinique et des maladies infectieuses (ACMCMI).

Le 18 octobre, 14 équipes de deux personnes ont fait une tournée sur la colline du Parlement et ont ainsi rencontré 60 parlementaires en tout. Je remercie les gens de CHICA-Canada qui ont participé soit dans les coulisses, à la préparation de l'exposé de position, soit par leur présence sur la Colline : **Anne Bialachowski, Nora Boyd, Natalie Bruce, Marie-Andree Bruneau, Karen Hope, Dany Larivee, Colette Ouellette, Pat Piaskowski, Suzanne Rowland, Josee Shymanski, Marion Yetman, Rick Wray** et **Dick Zoutman.**

La conférence de presse tenue sur la Colline a également été profitable, puisqu'elle a donné une couverture médiatique nationale au message de CHICA-Canada présenté par le Dr Zoutman sur la nécessité de mettre l'accent sur la prévention des infections et la justification d'une telle démarche.

Les membres de CHICA-Canada se sont de nouveau trouvés au cœur de l'action lorsque Nora Boyd a donné une présentation sur les infections acquises dans la communauté et le Dr Zoutman a parlé des infections liées aux milieux de santé devant un auditoire diversifié. Ces thèmes et d'autres enjeux ont suscité des discussions au sujet de futures journées nationales de l'infectiologie et fait ressortir le besoin de peaufiner davantage l'exposé de position ainsi que les messages à communiquer au cours de telles journées. Lors de notre récente réunion du conseil d'administration, nous avons convenu de préparer un plan d'affaires afin d'évaluer la faisabilité de participer à de futures journées nationales de l'infectiologie compte tenu de nos ressources financières et de notre plan stratégique.

Parmi les autres projets fort intéressants de l'année, mentionnons l'examen des normes professionnelles et des normes de pratique dans les domaines de la prévention et du contrôle des infections, et de l'épidémiologie. Un merci tout spécial à **Zahir Hirji** et **Margie Foster** pour leur excellent travail à titre de représentants de CHICA dans ce dossier. Lorsque ces normes auront été approuvées par les deux conseils d'administration, nous espérons les publier dans nos revues respectives, alors gardez l'œil ouvert.

À mesure que CHICA-Canada progresse dans la concrétisation de ses objectifs stratégiques, l'organisation continue d'étendre et de renforcer ses alliances avec d'autres organismes qui intègrent la prévention et le contrôle des infections dans leurs programmes ou leurs initiatives. J'ai le plaisir de rappeler que CHICA-Canada a joué un rôle de coleader avec l'Agence de la santé publique Canada (ASPC) dans le programme de lutte contre les organismes résistant aux autibiotiques (ORA), qui s'inscrit dans la campagne Soins de santé plus sécuritaires maintenant. Nous espérons qu'avec la contribution d'experts de l'ASPC dans ce dossier, cela deviendra un outil pratique pour les organismes de soins de santé.

Ce fut un privilège pour moi de représenter CHICA-Canada une dernière année; je remercie du fond du cœur Gerry Hansen et Karen Hope pour leur aide, leurs conseils et leur appui. Je souhaite la bienvenue à Marion Yetman, qui prend la relève en 2008, et je suis persuadée qu'elle fera progresser notre organisme avec toute l'énergie et l'enthousiasme dont elle fait preuve. Je souhaite aussi accueillir chaleureusement trois nouveaux membres du conseil d'administration : Cathy Munford, à titre de présidente désignée 2008, Bern Hankinson, à titre de secrétaire et directrice des membres, ainsi que Donna Moralejo, à titre de directrice de la formation. J'aimerais également souligner le départ de trois membres qui quittent le conseil d'administration, Pearl Orenstein, Betty Ann Henderson et Karen Hope; elles ont considérablement contribué à amener CHICA-Canada là où l'Association se trouve aujourd'hui.

J'anticipe avec plaisir l'occasion de travailler avec votre conseil d'administration pour vous servir en 2008. ●

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Development and evaluation of a decision aid about influenza prevention for healthcare workers

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ABSTRACT

Background: International standards recommend 90% influenza vaccine coverage among healthcare workers but coverage is as low as 23%. A decision aid to improve knowledge and clarify values of healthcare workers may improve decision quality and increase influenza vaccine uptake.

Purpose: To develop a decision aid for healthcare workers deciding among influenza prevention options and to evaluate the feasibility of implementing the decision aid in long-term care homes.

Methods: A multi-disciplinary team developed the Ottawa Influenza Decision Aid (OIDA), following the International Patient Decision Aid Standards (IPDAS). The OIDA described options, benefits, risks, and associated probabilities. It embedded questions about knowledge, values, and decision conflict and was completed by staff advocates (n=10) and direct care providers (n=52) in two long-term care homes. These groups also completed a questionnaire regarding the acceptability and feasibility of implementing the decision aid in the workplace.

Results: Staff advocates (90%) thought the decision aid was helpful for direct care providers. After reviewing the decision aid, staff knowledge of influenza prevention options was good (mean score=79.3%). Most direct care providers felt: informed (85%); clear about the benefits and side effects that mattered most to them (94%); supported (85%); and sure about the best choice for them (95%). Among staff, 67% preferred the influenza vaccine, 6% preferred anti-virals, 4% preferred declining both the flu shot and anti-viral medication, 4% were not sure of their preferred influenza prevention option and 19% did not report their preferred option.

Conclusions: The OIDA was developed, peer-reviewed and assessed to be acceptable by healthcare workers and staff advocates. Next steps will include assessing the efficacy of the OIDA on vaccine uptake and developing guidelines to introduce the OIDA into annual influenza vaccine programs.

INTRODUCTION

Influenza vaccination of front-line healthcare workers prevents transmission of disease and keeps individuals in essential services healthy [1, 2]. The Canadian National Advisory Committee on Immunization (NACI) has recommended a 90% influenza vaccine coverage rate for front-line healthcare workers [1]. Three randomized controlled trials have reported decreases in the mortality of residents in long-term care homes where staff were offered the influenza vaccine compared to homes where staff were not offered the vaccine [3-5]. Despite this evidence and interventions such as institutional policies, occupational health campaigns and educational activities (for example, 6-8), influenza vaccination rates are suboptimal among healthcare workers, with rates as low as 23% among nursing staff healthcare workers in an acute-care hospital setting [9], 37% among hospital emergency department healthcare staff (10), and 26-65% among formal caregivers in long-term care homes [11-13].

Decision conflict may be contributing to poor uptake of the influenza vaccine among front-line healthcare workers. Decisional conflict is a state of uncertainty about a course of action when choice among competing actions involves risk, loss, regret or challenge

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to personal life values [14]. Surveys of healthcare workers in long-term care homes in Ontario and in Nova Scotia found that healthcare workers experience decisional conflict and have difficulty deciding whether or not to be vaccinated against influenza [15]. Among unregulated healthcare workers, decisional conflict about influenza vaccination was related to feeling uninformed about the benefits and risks of influenza vaccination and to feeling unclear about the value of these pros versus cons. Studies of decision aids reveal that they can resolve decisional conflict. A systematic review of randomized trials of decision aids found that users of decision aids have lower decisional conflict; better knowledge; more realistic expectations of benefit/risks; and actively participate more in decision making [16]. Decision aids also result in fewer people remaining undecided and improve an individual's agreement between values and choice. The effect of decision aids on uptake of recommended options is unknown; moreover, there are no decision aids focused on influenza vaccination.

Our research program objective is to develop and evaluate a decision aid for healthcare workers deciding about influenza preventions options. This report summarizes (a) the development of the decision aid according to international standards, (b) the feasibility of implementing the decision aid with healthcare workers in two long-term care homes and (c) the acceptability of the decision aid to healthcare workers and staff advocates (union representatives, managers and administrators).

METHODS

Decision Aid Development

The Ottawa Influenza Decision Aid was developed following International Patient Decision Aid Standards (IPDAS) (http://ipdas.ohri.ca) (Box 1). This is one of the first decision aids to be developed according to these new standards.

Evidence on benefits and risks was obtained from a systematic review of influenza prevention options using the following search terms: influenza, influenza vaccine/vaccination, healthy adults, neuraminidase inhibitors, influenza prevention/prophylaxis, vaccine adverse events. Studies were included if they were randomized controlled trials on healthy adults that evaluated the effectiveness of influenza prophylaxis using laboratory-confirmed influenza as an outcome. Studies were excluded if the vaccine or anti-viral medication was not currently available in Canada. Summary probabilities were estimated from the systematic review and visualized in the Ottawa Influenza Decision Aid using groups of 100 faces. Independent scientific peer-review was provided by members of the Canadian National Advisory Committee on Immunization.

Evaluation of the Decision Aid by Healthcare Workers and Staff Advocates

Between November 2006 and January 2007, healthcare workers in two long-term care homes volunteered to review the decision aid. They had the option of reviewing the decision aid in English or in French. Although healthcare workers completed the decision aid on their own, there were occupational health and infection control staff available to answer any of their questions. Questions embedded in the decision aid related to participants' preference for three influenza prevention options: vaccination, anti-virals or declining both vaccination and anti-virals. They were also asked to rate the importance to them of the benefits and side effects of each option (see Figure 2). Healthcare workers' knowledge of influenza prevention options was assessed by four questions: "which option has the lowest chance of your patient dying from flu complications"; "which option has the highest chance of you getting the flu"; "which option has the highest chance of side effects such as a sore arm"; and "which option has the highest chance of side effects such as nausea and vomiting". Six questions were also asked about decisional conflict surrounding influenza prevention options: "do you know which options are available to you"; "do you know both the benefits and side effects of each option"; "are you clear about which benefits and side effects matter most to you"; "do you have enough support and advice from others to make a choice"; "are you choosing without pressure from others"; and "do you feel sure about the best choice for you". In the last step of the decision aid, healthcare workers were asked what they needed to do next: sign a consent form, discuss the options with their doctor and family or read more about their options.

To assess the acceptability of implementing the OIDA in the workplace, two unique questionnaires were completed, one by direct care providers and one by staff advocates. Staff advocates were individuals in influential positions in the two long-term care homes such as mangers, administrators and union representatives. Demographic information on gender and occupation was also collected on the questionnaires.

DATA ANALYSIS

Frequencies are reported from questions embedded in the decision aid and from the acceptability surveys of healthcare workers and staff advocates. Healthcare workers' knowledge is reported as the mean score on four questions related to influenza prevention. Data analyses were performed using SPSS 14.0. Ethical approval for this study was received from the SCO Health Service Research Ethics Board.

RESULTS

Decision Aid Development

A standard format using the Ottawa Decision Aid template was used. The aid provided structured guidance in the steps of decision making: definition of influenza; influenza prevention options; probabilities of benefits and risks; an explicit values clarification exercise; questions on knowledge and unresolved decisional needs (using a simplified decisional conflict scale); and planned next steps.

Evidence Review

Forty-eight relevant studies were collected and reviewed. Eight studies met the inclusion criteria and were summarized for the decision aid [3-5, 17-21]. Summary probabilities were calculated from the systematic review and incorporated into the OIDA using groups of 100 faces (see Figure 1). Weighted event rates and relative risks were calculated for the effectiveness of vaccine and anti-virals in preventing influenza among healthcare workers and in preventing mortality of long-term care residents. Based on published results, an estimated 4% of healthcare workers that get the annual influenza vaccine and 4% of healthcare workers that take oseltamivir (Tamiflu®) during an outbreak will get influenza [22, 23]. As well, it was estimated that vaccination of healthcare workers resulted in only 12% of their patients dying from influenza-related complications during an outbreak [22, 23]. Due to insufficient data, the effect on patient mortality of healthcare workers taking oseltamivir (Tamiflu®) during an outbreak could not be estimated. General population attack rates for influenza were used to represent no treatment. For example, it was estimated that 15% people in the community get influenza during an outbreak and that 19% patients in long-term care homes die from influenza-related complications during an outbreak. Similarly, event rates estimated for the two most commonly reported side effects, a sore arm from getting the influenza vaccine and nausea/vomiting from taking oseltamivir (Tamiflu®) were summarized in the decision aid. The key benefits and side effects of each option are also listed in the decision aid, in order to help healthcare workers clarify which pros and cons matter most to them (see Figure 2). Full details on the evidence behind the decision aid can be found in the documents "Facts and Numbers Behind the Ottawa Influenza Decision Aid" and "Technical Background Document for Facts and Numbers Behind the Ottawa Influenza Decision Aid" [22, 23].

Four members of the National Advisory Committee on Immunization (NACI) provided the scientific peer-review of the evidence in the Ottawa Influenza Decision Aid. After suggested changes were made to the content and layout of the decision aid, the experts agreed that the decision aid had the right amount of information; was neutral and balanced; and that most or all of the information was clear. They thought that the decision aid would be very helpful in preparing healthcare workers to make a decision about influenza prevention and they would recommend healthcare workers use the decision aid.

Box 1: International Patient Decision Aid Standards (IPDAS) and how the Ottawa Influenza Decision Aid Meets Each of the Standards.

DECISION AID CONTENT

- Provides option information in sufficient detail for decision making
  - Describes flu, options, natural course without options, positive and negative features of options
- Probabilities are presented in an unbiased and understandable manner
  - Uses event rates specifying population and time period; compares outcome probabilities using the same denominator, time period, and scale; uses multiple methods [words, numbers, diagrams of 100 faces] in positive and negative frames; describes uncertainty regarding numbers ['best estimate'].
- Includes methods for clarifying and expressing patients' values
  - Describes outcomes and procedures to help patients imagine what it is like to experience them; asks patients to consider which positive/negative features matter most to them; worksheet helps them communicate values to others.
- Include structured guidance in deliberation and communication
  - Provides a step-by-step process, displayed as a worksheet for discussion with a healthcare practitioner.
- Present information in a balanced manner
  - Makes it easy to compare positive/negative features of options; shows negative/positive features with equal detail [fonts, order, statistical display]

DECISION AID DEVELOPMENT

- Uses a systematic development process
  - Needs assessments of users [front-line workers and stakeholders were conducted]. Literature reviews of needs were conducted. Decision aid was externally reviewed by staff, stakeholders and scientific experts. Decision aid was field tested for acceptability with people ranging in education levels.
- Uses up-to-date scientific evidence
  - A systematic review was conducted of the effectiveness of influenza prevention options; quality of evidence described; references provided in technical document; update policy is every two years; uses evidence similar to target population.
- Discloses conflicts of interest
  - Potential conflicts of interest, such as funding sources and affiliations, are declared in accompanying technical document.
- Plain language must be used in the decision aid
  - Readership was formally assessed at a grade eight level using Readability Info software.

DECISION AID EFFECTIVENESS

- There is evidence that the decision aid leads to decision-making which is informed and based on personal values
  - After using the decision aid, most healthcare workers had good knowledge of influenza prevention options, were clear about which benefits and side effects mattered most to them and were satisfied with their decision about influenza prevention.

Evaluation of the Decision Aid by Healthcare Workers and Staff Advocates

Fifty-seven direct care providers completed the decision aid and the questionnaire. The respondents were 61% female, 11% male and the remainder did not report their gender. Twenty-three percent of respondents were regulated direct care providers (registered nurse or registered practical nurse) and 44% were unregulated direct care providers. Approximately 71% respondents completed the decision aid in

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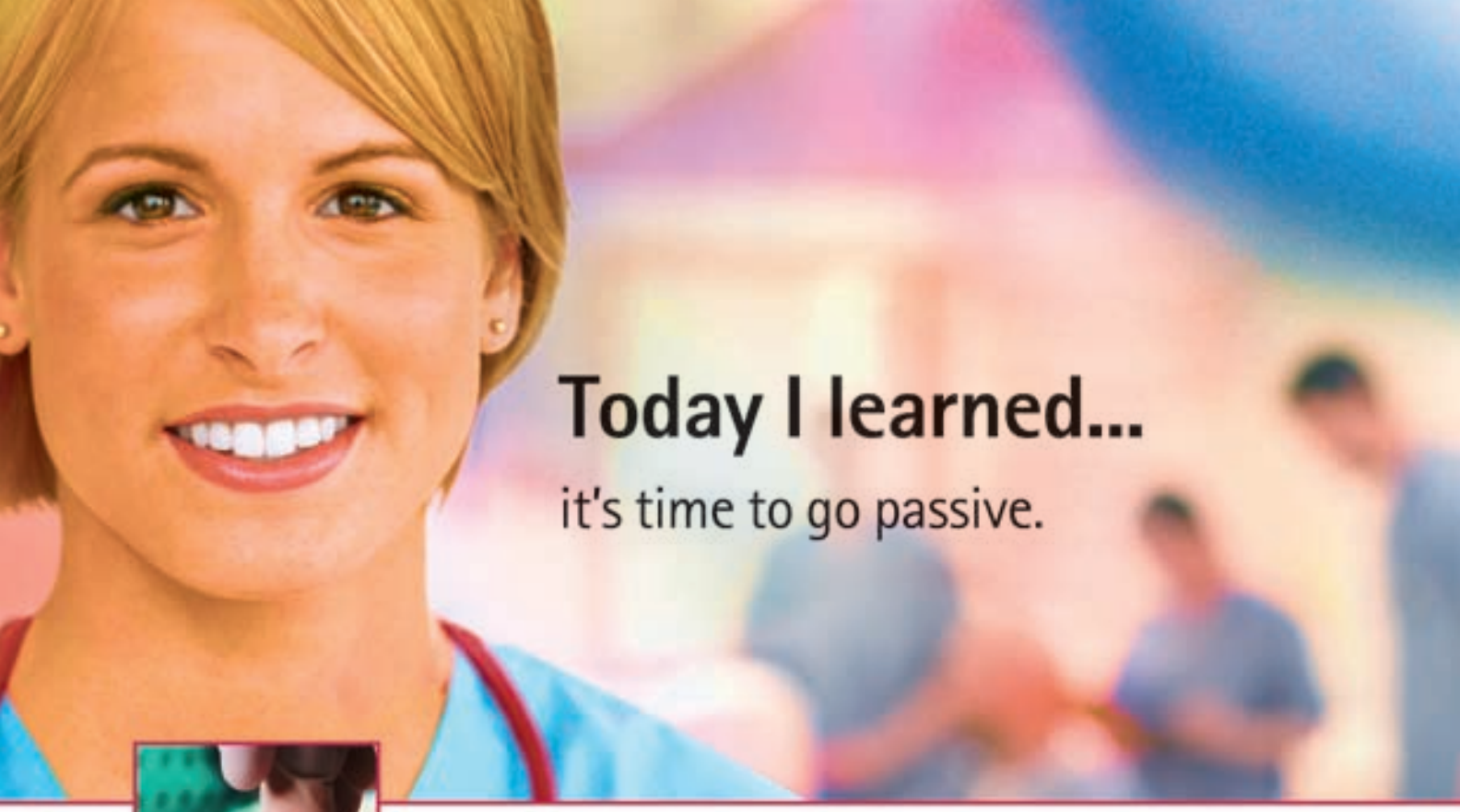

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[1] Perry, Jane. International Healthcare Worker Safety Center. "Preventing Sharps Injuries: Where Do We Stand in 2007?" Presented at B. Braun Medical, Orlando, FL, Feb. 23, 2007. 2003 EPINet data: Of injuries from safety devices, 44% occurred after use and before disposal (potentially preventable if passive or if safety feature activated).

[2] Mendelson MH, Lin Chen BY, Finkelstein-Blond et al. Study of Introcan safety IV catheter (B. Braun Medical Inc.) for the prevention of percutaneous injuries in healthcare workers [abstract]. Presented at: 13th Annual Meeting of the Society for Healthcare Epidemiology of America (Arlington, VA), 2003.

[3] Inuma Y, Igawa J, Takeshita M, et al. Passive safety devices are more effective at reducing needlestick injuries [letter]. J Hosp Infect 2005 (Dec.): 61 (4): 360-1.

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French while the remainder completed the English version of the decision aid.

Of the 52 healthcare workers who answered questions embedded in the decision aid, 67% preferred the influenza vaccine, 6% preferred anti-virals, 4% preferred declining both the flu shot and anti-viral medication, 4% were not sure of their preferred influenza prevention option and 19% did not report their preferred option. All (n=35) healthcare workers who preferred the vaccine placed high value on protecting themselves and others from influenza.

Knowledge scores were good after reviewing the decision aid (mean=79.3%). When each question was examined separately, 86% of healthcare workers knew which option has the highest chance of side effects such as nausea and vomiting, 85% knew which option has the highest chance of side effects such as a sore arm, 77% knew which option has the lowest chance of their elderly patient dying from flu complications and 71% knew which option has the highest chance of them getting the flu.

After using the decision aid, healthcare workers reported low levels of decisional conflict and related factors. They felt they knew which options were available to them (88%); knew the benefits and side effects of each option (88%); were clear about which benefits and side effects mattered most to them (94%); had enough support and advice from others to make a choice (85%); were choosing without pressure from others (80%) and were sure about the best choice for them (96%). Sixty-seven percent were ready to sign informed consent to be vaccinated against influenza.

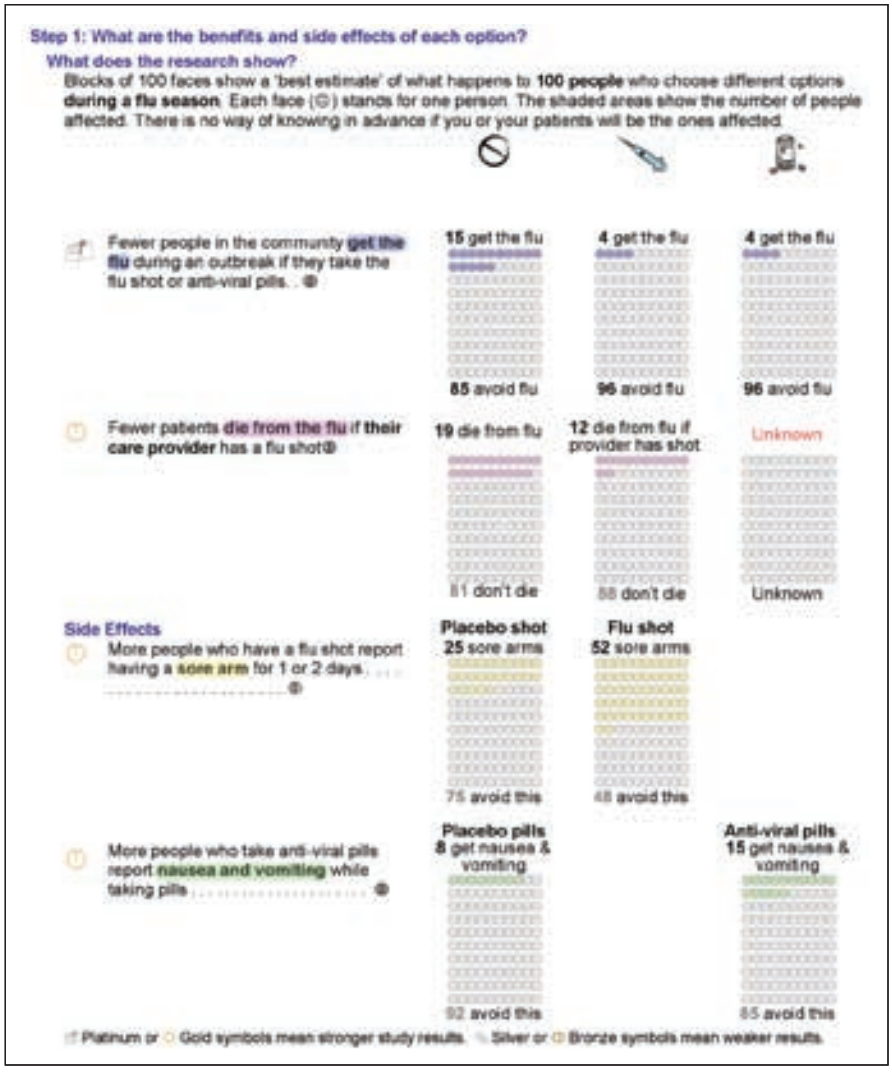
Overall, healthcare workers reported the decision aid was acceptable (see Table 1). Most respondents thought the information was clear (90%) and had the right amount of information (67%). They found the decision aid was helpful in preparing them for a decision as it helped them know that the decision depended on what mattered to them (83%) and to think about how they wanted to be involved in the decision (77%). Healthcare workers thought the decision aid was helpful in making their decision (75%) and they would recommend using the decision aid to others (88%). Although only 36% of healthcare workers thought the decision aid was neutral and balanced, the remainder were not agreed whether the decision aid was slanted toward the flu shot (54%) or slanted toward anti-virals (8%). Eighty-three percent of staff reported being very satisfied with the influenza prevention option they had chosen. Due to the lack of variability among choice of influenza prevention option and non-response on this question, statistical comparisons were not possible between those who preferred the influenza vaccine and those who preferred other options.

Ten staff advocates completed the decision aid and the questionnaire. The majority reported high acceptability of the decision aid (see Table 2). They thought the decision aid was helpful for healthcare workers (90%), that it would help them better understand issues of importance to their staff (90%) and that it is a reliable tool for helping healthcare workers make decisions (90%). Only half of the staff advocates agreed that the OIDA would be easy to use in the workplace and easy to experiment with before adopting it in their healthcare facility.

DISCUSSION

Overall, after working through the OIDA, 67% of healthcare workers reported they preferred the influenza vaccine. This is consistent with reports

Figure 1: The Influenza Decision Aid: Visualization of Probabilities from the Evidence Review on Influenza Prevention Options.



that, on average, 65% of healthcare workers are vaccinated against influenza [1]. Of note, 19% of participants did not answer the question concerning their preferred option.

After reviewing the decision aid, the majority of healthcare workers did not have decisional conflict about their final choice and related factors such as feeling uninformed, having unclear values regarding benefits versus risks, and feeling unsupported in decision-making. These results contradict reports that healthcare workers only get vaccinated against influenza under organizational pressure. The use of decision aids to encourage shared decision-making may provide an alternative to the introduction of mandatory influenza vaccination policies for healthcare workers [16, 24].

Healthcare workers' reports of feeling informed about influenza prevention options were confirmed by good scores on the knowledge test. A study examining physicians' and nurses' knowledge of influenza vaccination found that individuals who correctly answered five influenza vaccine basic knowledge questions were more likely to be vaccinated [25]. Even after completing the decision aid, almost 30% healthcare workers did not know which option best protected them against influenza and 33% were not ready to sign informed consent to be vaccinated against influenza. This indicates that some healthcare workers either do not understand the information presented in the decision aid or they may not trust the information to be correct. Consistency between preferred choice and values was observed among participants, with those who preferred the vaccine also reporting that they most valued preventing influenza in themselves, their families and their patients. This is also supported by a study reporting that nurses who place a high value on their duty to care are more likely to be vaccinated against influenza [26].

Although over 500 decision aids have been catalogued, there are only two other decision aids that address decisions related to vaccination, and neither addresses the influenza vaccine. One is designed for parents deciding about vaccinating their children against measles, mumps and rubella (MMR) [27] and the other is a decision aid for Hepatitis B vaccination (Carol Bennett, personal communication, February 2007). The Ottawa Influenza Decision Aid is also unique in that it targets healthcare workers in a workplace setting, versus the more usual decision aid users, patients and their families in clinical settings.

The introduction of the OIDA into a healthcare organization comprises a complex array of issues related to

Figure 2: The Ottawa Influenza Decision Aid: Clarifying the Benefits and Side Effects that Matter Most.

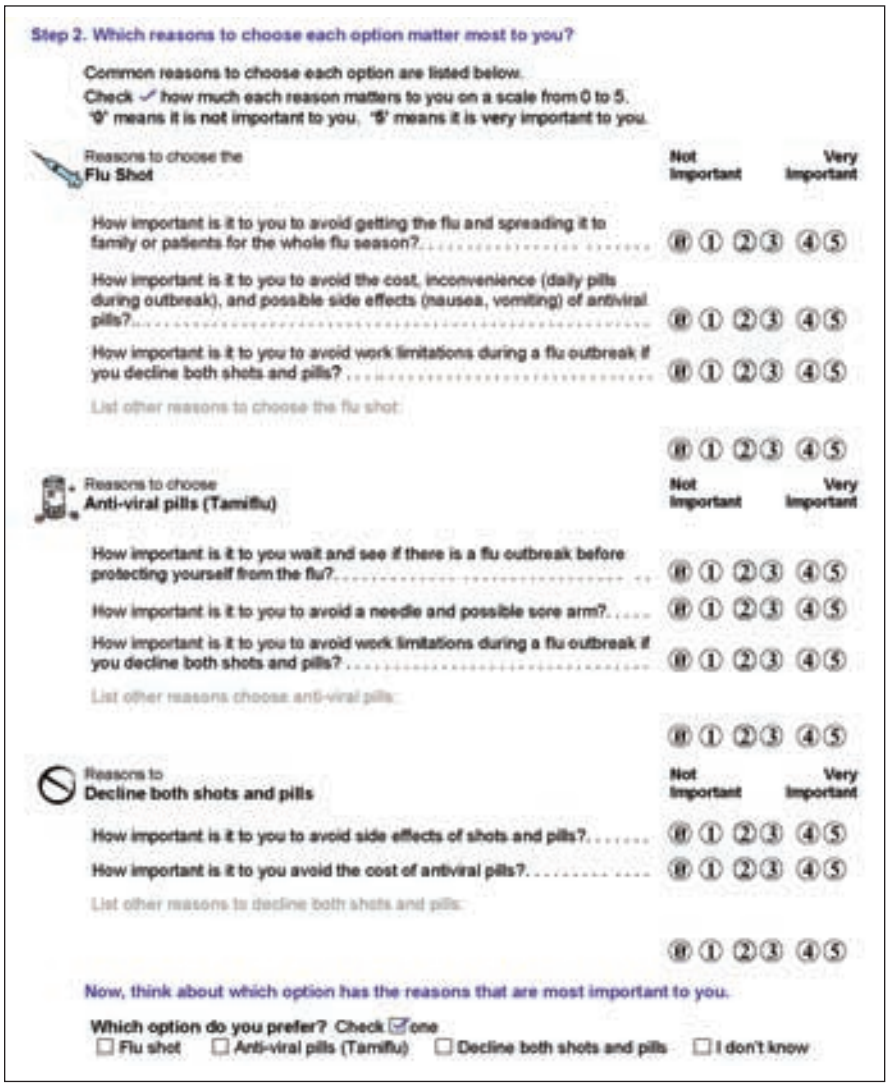


Table 1: Acceptability of the Ottawa Influenza Decision Aid to healthcare workers.

Healthcare workers reported that the decision aid:	% Yes
Information was completely or mostly clear	90
Would definitely or probably recommend using it	88
Helps you know that the decision depends on what matters to you	83
Helps you think about how involved you want to be in this decision	77
Helps you recognize that a decision needs to be made	75
Was very or somewhat helpful when making the decision about influenza prevention choices	75
Would be very or somewhat helpful in preparing staff to make a decision	71
Had about the right amount of information	67
Was neutral and balanced	36

Table 2: Acceptability of the Ottawa Influenza Decision Aid to staff advocates.

Staff advocates agreed or strongly agreed that the Ottawa Influenza Decision Aid:	% Yes
Is compatible with how I think healthcare workers (HCW) should be informed about choices	90
Is a reliable tool for helping HCW make decisions	90
Will help me to more fully understand those issues of importance to HCW	90
The developers of the decision aid are credible	90
Will increase HCW satisfaction with influenza prevention	80
Will complement my usual approach	80
Will improve the quality of interaction with HCW	80
Will affect my relationship with HCW in a positive way	80
The descriptions of the risks/benefits of the choices are supported by evidence	80
Help HCW understand the benefits/risks of the recommended prevention options	80
Prepare HCW for the decision making process	80
Help HCW reach their decision about the choices	80
Allow HCW to participate as they wish in the decision making process	80
Improve the quality of decision making for HCW	80
Will improve my usual approach	70
The decision aid is well developed	70
Acceptable for HCW	70
Guide HCW through the decision making process in a logical fashion	70
Will save me time	60
Will help me tailor my communication to HCW needs'	60
Apply to a sizeable proportion of HCW	60
Will be easy to use in the workplace	50
Will require reorganization of my prevention protocols	50
Will not require major changes to the way I currently discuss the topic with HCW	50
Will be easy to experiment with before deciding to adopt it institutionally	50
Simple to use for HCW	50
Will provide easily observable benefits to the HCW	40
The development of the decision aid may have been influenced by vested interests	40
Too complex (provides information that is too complex) for HCW	40
Is unlikely to be used by most of my colleagues	20

HCW: Healthcare Worker

organizational culture, their policies and procedures and the resources available for continuing professional development of their employees. For example, the support of both union representatives and management is required so that healthcare workers will be encouraged to use the influenza decision aid and be given the time to complete the decision aid in the workplace. Therefore, the high acceptability of the decision aid to staff advocates, as expressed in this study, is key to its successful implementation. Berta et al. [28], report that the likelihood of adopting an innovation in long-term care increases with the extent of ownership an organization feels over an innovation and the extent to which it serves the interest of the staff who use it. Therefore, having 90% of staff advocates report the decision aid is compatible with how they think healthcare workers should be informed about choices and 88% of healthcare workers who would recommend others use the Ottawa Influenza Decision Aid is promising.

While staff advocates reported favorably on the decision aid, they also expressed hesitancy and identified potential barriers to the successful implementation of the decision aid (see Table 2). Therefore, our multi-disciplinary team is planning to develop an implementation strategy in consultation with staff advocates from a small number of acute and long-term care facilities. This will result in a set of guidelines that will maximize the impact of the Ottawa Influenza Decision Aid when implementing it in a healthcare organization.

This study has established the feasibility of implementing the influenza prevention decision aid among healthcare workers actively contemplating influenza vaccination in long-term care homes. It is now ready to be introduced and evaluated in the workplace. Moreover, it is important to provide guidance to healthcare facilities on how to effectively implement the influenza decision aid because well-designed and theoretically sound interventions can be ineffective if not implemented appropriately [29, 30]. In this context, an influenza decision aid to support healthcare workers making a decision about influenza prevention and accompanying implementation guidelines will be a key component of influenza prevention campaigns aiming to improve influenza vaccine uptake. ●

REFERENCES

1. National Advisory Committee on Immunization. Statement on influenza vaccination for the 2006-2007 season. Canadian Communicable Disease Report 2006; 32(ACS-7): 1-28.
2. World Health Organization. Influenza vaccines. Weekly Epidemiological Record 2002; 77: 229-240.
3. Carman WF, Elder AG, Wallace LA, et al. Effects of influenza vaccination of health-care workers on mortality of elderly people in long-term care: A randomized controlled trial. Lancet 2000; 355: 93-97.
4. Hayward AC, Harling R, Wetten S, et al. Effectiveness of an influenza vaccine programme for care home staff to prevent death, morbidity, and health service use among residents: cluster randomised controlled trial. BMJ 2006; 333(7581): 1241-48.
5. Potter J, Stott DJ, Roberts MA. et al. Influenza vaccination of health care workers in long-term care hospitals reduces the mortality of elderly patients.

Journal of Infectious Disease 1997; 175:1-6.
6. Akiko C, Kimura M, Nguyen C, et al. The effectiveness of vaccine day and educational interventions on influenza vaccine coverage among health care workers at long-term care facilities. American Journal of Public Health 2007; 97(4):684-90.
7. Arden, NH. Control of influenza in the long-term care facility: A review of established approaches and newer options. Infection Control Hospital Epidemiology 2000; 21*:* 59-64.
8. Goldstein AO, Kincade JE, Gamble G, Bearman RS. Policies and practices for improving influenza immunization rates among healthcare workers. Infection Control Hospital Epidemiology 2004; 25: 908-11.
9. Qureshi AM, Hughes NJ, Murphy E & Primrose WR. Factors influencing uptake of influenza vaccination among hospital-based health care workers. Occupational Medicine 2004; 54:197-201.
10. Saluja I, Theakston K, & Kaczorowski, J. Influenza vaccination rate among emergency department personnel: a survey of four teaching hospitals. Canadian Journal of Emergency Medicine 2005; 7(1):17-21.
11. Manuel DG, Henry B, Hockin J, & Naus M. Health behavior associated with influenza vaccination among healthcare workers in long-term-care facilities. Infection Control Hospital Epidemiology 2002; 23:609-14.
12. Russell, ML. Influenza vaccination in Alberta long-term care facilities. Canadian Medical Association Journal 2001; 164:1423-27.
13. Stevenson CG, McArthur MA, Naus M, Abraham E, & McGeer AJ. Prevention of influenza and pneumococcal pneumonia in Canadian long-term care facilities: How are we doing? Canadian Medical Association Journal 2001; 164:1413-19.
14. O'Connor AM, Tugwell P, Wells GA et al. A decision aid for women considering hormone therapy after menopause: Decision support framework and evaluation. Patient Education Counselling 1998; 33:267-79.
15. Sullivan SM, Gallant D, Chambers LW et al. Influenza Vaccination and Decisional Conflict among Regulated and Unregulated Direct Nursing Care Providers in Long-Term Care Homes. [*Accepted:* AAOHN Journal, November 2007]
16. O'Connor AM, Stacey D, Entwistle V, Llewellyn-Thomas H, Rovner D, & Holmes-Rovner M. Decision aids for people facing health treatment or screening decisions. Cochrane Database of Systematic Reviews 2003, Issue 1. Art. No.: CD001431. DOI: 10.1002/14651858.CD001431
17. Demicheli V, Rivetti D, Deeks JJ, Jefferson TO. Vaccines for preventing influenza in healthy adults. The Cochrane Database of Systematic Reviews 2004; Issue 3.
18. Hayden F, Atmar R, Schilling M, et al. Use of the selective oral neuraminidase inhibitor oseltamivir to prevent influenza. New England Journal of Medicine 1999; 341:1336-43.
19. Jefferson T, Demicheli V, Rivetti D, Jones M, Di Pietrantonj C, Rivetti A . Antivirals for influenza in healthy adults: systematic review. Lancet 2006; 367: 303-13.
20. Thomas R, Jefferson T, Demicheli V. Influenza vaccination for healthcare workers who work with the elderly people in institutions. A systematic review. Lancet Infect Dis 2006; 6:273-79.
21. Wilde J, McMillan J, Serwint J, Butta J, O'Riordan MA, Steinhoff M. Effectiveness of influenza vaccine in professionals; A randomised trial. JAMA 1999; 281:908-13.
22. Influenza Decision Aid Team. Facts and Numbers Behind the Ottawa Influenza Decision Aid. 2006; Ottawa, ON.
23. Influenza Decision Aid Team. Technical Background Document for Facts and Numbers Behind the Ottawa Influenza Decision Aid. 2006; Ottawa, ON.
24. Poland GA, Tosh P & Jacobson RM. Requiring influenza vaccination for health care workers: seven truths we must accept. Vaccine 2005; 23(17-18):2251-5.
25. Martinello RA, Jones I, & Topal JE. Correlation between healthcare workers knowledge of influenza vaccine and vaccine receipt. Infection Control Hospital Epidemiology 2003; 24:845-47.
26. Orr, P. Influenza vaccination of health care workers: A duty of care. Canadian Journal of Infectious Diseases 2000; 11(5):1-5.
27. Wallace C, Leask J & Trevena L. Effects of a web based decision aid on parental attitudes to MMR vaccination: a before and after study. BMJ 2006; doi:10.1136/bmj.38678.681840.68
28. Berta W, Teare G, Gilbart E et al. The contingencies of organizational learning in long-term care: Factors that affect innovation adoption. Health Care Management Review 2005; 30(4):282-92.
29. Bhattacharyya O, Reeves S, Garfinkel S, & Zwarenstein M. Designing theoretically informed implementation interventions: Fine in theory, but evidence of effectiveness in practice is needed. Implementation Science 2006; 1(5), doi:10.1186/1748-5908-1-5
30. Campbell N, Murray E, Darbyshire, J et al. Designing and evaluating complex interventions to improve health care. BMJ 2007; 334:455-59.

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Regional Infection Control Networks in Ontario

ABSTRACT

The outbreak of Severe Acute Respiratory Syndrome (SARS) in Ontario in 2003 illuminated the chasm between ideal infection prevention and control (IPAC) knowledge and standardized practice and the reality across health care sites in Ontario, exposing the deficiencies to an international audience. The lessons learned from the devastating effects of SARS, and the resultant attention on the need for systematic improvements in infection prevention and control and thus patient and health care worker safety, were perhaps the only positive outcomes of this shocking and sobering time. The Regional Infection Control Networks arose from the ashes of IPAC in SARS, and continue to grow and flourish in a revitalized health care environment in Ontario.

INTRODUCTION

It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity, it was the season of Light, it was the season of Darkness, it was the spring of hope, it was the winter of despair, we had everything before us, we had nothing before us, we were all going direct to heaven, we were all going direct the other way – in short, the period was so far like the present period, that some of its noisiest authorities insisted on its being received, for good or for evil, in the superlative degree of comparison only.

– Charles Dickens, *A Tale of Two Cities* (1859) [1]

Once upon a time, a Chinese physician and professor of nephrology made a trip to Hong Kong for his nephew's wedding, carrying with him symptoms of a serious respiratory illness. His brief overnight stay on the ninth floor of the Metropole Hotel on February 21, 2003, changed the face of infection prevention and control (IPAC) worldwide. Sixteen other guests and one visitor on the ninth floor soon contracted what would come to be known as SARS – Severe Acute Respiratory Syndrome – and four of these individuals sparked devastating outbreaks in Hong Kong, Toronto, Singapore, and Vietnam. But this is not a fairy tale. By March 26, the first provincially declared public health emergency in the history of Ontario had begun. Before the outbreak was over, 375 people in the Greater Toronto Area (GTA) would be infected with SARS and 44 would die.

SARS "revealed a system-wide underemphasis on and decline in infection control practices and standards"[2]. There were numerous factors contributing to this gap. Public health and infection control tended to receive attention only when something went wrong, such as an outbreak or exposure. There were always other pressing issues that leapt to the forefront. Infection prevention and control is largely invisible when done well, and infectious diseases in Ontario in recent years rarely caused severe illness or death. With an over-reliance on antibiotics, and the tendency for patients to survive almost "in spite of" the care they received, health care workers and their charges were woefully unprepared for the rapidly spreading and highly virulent SARS.

Responses to SARS

In the wake of SARS, a number of reports were produced, adding to previous documents and recommendations to strengthen health protection and promotion in Canada and to improve capacity to detect, prevent, and manage infectious disease outbreaks (Kirby and LeBreton, 2003; Lac Tremblant Declaration, 1994; Survey of Public Health in Canada – Technical Report of the Advisory Committee on Population Health, 2001) that had gone largely

unheeded. Health Canada released *Learning from SARS – Renewal of Public Health in Canada – A Report of the National Advisory Committee on SARS and Public Health*[3], known as the Naylor Report, in October 2003. The committee identified numerous systemic deficiencies, including lack of surge capacity; difficulties in timely access to laboratory testing and results; absence of protocols for data sharing across levels of government; inadequate epidemiological investigation capacity; lack of coordinated outbreak management and emergency response processes across institutions and jurisdictions; inadequate institutional outbreak management protocols, infection control, and surveillance; and weak links between public health, primary care, institutions, and home care (Naylor, 2003).

The Initial Report of the Ontario Expert Panel on SARS and Infectious Disease Control[4], known as the Walker Report, was released in December 2003, and highlighted the need for Ontario to realize the vision of the Naylor Report and the recommendations of the standing Senate Committee on Social Affairs, Science, and Technology[5] for public health renewal and formal regional linkages of hospital, community, and public health expertise, initially around infectious disease control and health emergency preparedness. In Ontario, Operation Health Protection[6] was launched in June 2004 by the Ministry of Health and Long-Term Care, as a three-year commitment with six strategic priorities: creation of a Health Protection and Promotion Agency, public health renewal, health emergency management, infection control and communicable disease capacity, health human resources, and infrastructure for health system preparedness.

The Infection Control and Communicable Disease Capacity activities included creation of the Provincial Infectious Disease Advisory Committee (PIDAC), phasing in of regional infection control and communicable disease networks, establishment of regional networks throughout Ontario, and hiring of additional infection control experts in healthcare facilities across Ontario. PIDAC was to:

"Act as an anchor and assist in developing a framework for the implementation of a series of regional networks for infection control and communicable disease across the province. These networks will coordinate infection control activities across and through all parts of the healthcare system, based upon provincial standards and guidelines wherever possible. The networks will improve communication and information sharing and enable better access to infection control expertise through the efficient use of scarce resources and reduced duplication of services. In conjunction with other government ministries, they will also support a more coordinated health emergency response and contingency planning for new and re-emerging outbreaks" (p.18).

The first regional networks were to be phased in over 2004/2005 and operational by 2005/2006. Based on the evaluation of these, regional networks were to be fully implemented across the province by 2006/2007.

The Walker Report advocated for a model with infection control expertise available regionally and supported centrally by a new public health agency, which was enacted in the summer of 2007 (Ontario Agency for Health Protection and Promotion – in the Health System Improvement Act, 2007). The networks would forge appropriate linkages with experts in hospitals and other health care facilities, relevant community settings, and Public Health Units, and have a strong role in the ongoing monitoring of standards and in ensuring that health care workers receive necessary infection prevention and control education and training. Of particular concern were standards for the "new normal"; quality improvement initiatives including audits, monitoring, and accreditation; and the need for consistency and promoting compliance. The report also mentions IPAC concerns in facility design, and training and orientation for managing infection control risks, universally available and customizable across all groups and sectors. Accountability is required for safe IPAC practice, whether mandated or achieved through performance review or professional regulatory colleges and associations. Integrated IPAC educational standards across facilities and organizations must encompass core competencies by health care worker group and sector.

The Walker Report also noted the inadequate numbers of infection control professionals (ICPs) and available formal education programs and lack of educators, and recommended Regional Infection Control Networks (RICNs), developed by designated hospital and public health unit joint leads. Members should include Public Health Units, hospital ICPs, Emergency Health Services, Long-Term Care, and community-based health care providers.

The 2005 Report of the Chief Medical Officer of Health for Ontario[7] defined the crucial role of a RICN: to promote a unified approach to infection prevention and control and implementation of best practices within the region and province. Not replacing existing networks, but maximizing integration and enhancing communication, the RICNs facilitate knowledge transfer and information sharing to reduce duplication and provide members with continuing education and access to expertise.

Initial work

The RICN Working Group drew together infection prevention and control specialists and local healthcare professionals in 2004 to explore the logistics and functions of these networks, initially in four geographic regions. Only later did the RICNs officially align with the 14 newly legislated local health integrated network (LHIN) geographic boundaries (Local Health System Integration Act, 2006). A Network Steering Committee comprised of local representatives from all health care sectors, would provide strategic direction. A Network Coordinator would manage the development and operations of the network, promoting consistent infection prevention and control best practices and sharing across the network, the province, and with the MOHLTC. A Medical Coordinator would provide

medical expertise and champion best practices and network participation amongst physicians and others.

Documents and tools were drafted including memorandums of understanding to encourage commitment to this voluntary group of members and resource inventory tools to identify strengths and gaps in IPAC across each region. Draft calls for members, position descriptions, and terms of reference, and an introductory office set up manual were compiled. A Provincial Network Coordinator ensured that linkages to the Ontario Ministry of Health and Long-Term Care (MOHLTC), PIDAC, and networks in other provinces were established, and especially to build and support the RICNs as a "network of networks" rather than fourteen new silos.

Roll out the RICNs

The RICN roll-out began in March 2005, when the first four networks began to grow in Champlain (surrounding Ottawa), Central South (Hamilton-Niagara), Northwestern Ontario (east, west, and north of Thunder Bay), and South Eastern Ontario (surrounding Kingston). Within a year, these RICNs were collaborating with PIDAC to facilitate provincial videoconferences showcasing PIDAC best practice documents on reprocessing, and supporting pilot sites for Clostridium difficile surveillance.

In January 2006, four more RICNs began to grow in Central East (Durham Region and north), North Simcoe Muskoka (Barrie and north), Northeastern Ontario (Sudbury and north), and Waterloo-Wellington (Kitchener-Waterloo), followed by Central Region (north Toronto, most of York Region, and southern Simcoe County), and Mississauga Halton (Mississauga, Oakville, Milton, and parts of west Toronto) by the end of the year. By the summer of 2007, the Network Coordinators for South Western Ontario (surrounding London and north) and Erie St. Clair (Windsor- Sarnia area) had started their work, and the Network Coordinator for Central West (Brampton and north) was hired in November.

There just remains Toronto Central RICN to begin by 2007 year end to complete the networks.

The same but different

The province of Ontario is home to over 12 million people, with much of the population clustered in and around the major cities of Toronto, Mississauga, Ottawa, Hamilton, London, and Kitchener. These areas are geographically small and population dense, while the rural areas, especially to the north are the reverse, with small populations widely distributed across vast areas. These regional differences in size and population present different challenges to individual RICNs, which must elicit stakeholder consultation and consensus and be responsive to local IPAC needs, while also sharing and communicating across the province to promote consistency and standardization.

Mutually beneficial relationships and partnerships have evolved – initially with PIDAC, local public health units, and healthcare facilities, and more recently with other governing bodies such as the Ministry of Labour, professional colleges, Local Health Integration Networks, and educational facilities, as well as community and primary care groups and individuals. First Nations health, national defense, and correctional facilities are also partners. With ever-growing lists of contacts across the spectrum of health care in their regions, the RICNs are uniquely positioned to distribute consistent messaging and evidence-based information to all stakeholders, and to provide much needed education and mentorship to IPAC staff. Recognizing that communication is an essential part of the RICN role, newsletters are shared, articles co-authored, and a website was launched in June 2007 (**www.ricn.on.ca**).

Directions and principles

In 2007, the provincial strategic plan was formulated to steer the RICNs in an aligned collective direction, based on four guiding principles: evidence-based decision-making and practice, information accessibility; IPAC best practice promotion, and active integration of IPAC activities across the care continuum and province.

Dissemination of PIDAC best practice documents and IPAC core competency modules help to pull all of the principles together. These evidence-based documents promote IPAC best practice and the RICNs make these and other quality IPAC information readily accessible to all of their contacts locally and provincially.

The educational ability has grown in each operational RICN, with the additional hiring of an Infection Control Consultant, an ICP with particular responsibility to enhance IPAC education. Beyond direct consultation with an IPAC expert (Network Coordinator, Infection Control Consultant, Medical Coordinator) by phone, e-mail, or in person through site visits and presentations, and reference/library materials, resources have evolved. Teleconferences, videoconferences, web casts, and webinars are offered on-site in the RICN offices as well as at a distance in designated local sites across the regions and province. Recent offerings include cleaning, disinfection, and sterilization, *Clostridium difficile*, surveillance, hand hygiene, antibiotic resistant organisms, and paediatric infection prevention and control.

Communication and knowledge sharing – a network of networks

RICNs lead and coordinate group meetings, provide space, resources including guest speakers, and study guides, and build the confidence of relatively novice ICPs to successfully complete the Certification in Infection Control (CIC) exam. In their outreach initiatives, RICNs conduct site visits and provide presentations to acute and long-term care staff and community providers, including home care workers and physician, dental, and veterinary office staff. Not only does network staff get the right information to the right people at the right time and in the right (and most usable) way, but the RICNs are pooling resources. By partnering with each other, local CHICA-Canada chapters and other groups to provide shared conferences, presentations, seminars and workshops, with accompanying videotaping and videoconferencing whenever possible, the RICNs enable these educational gems to reach busy health care professionals in far flung parts of the province, who can also view taped and archived presentations in their workplaces or elsewhere, when their workload permits.

Regional networks are also closing the loop. RICNs are facilitating focus groups to explore understandings and impacts of PIDAC best practice documents and other IPAC tools and to provide essential feedback on the challenges of implementation to PIDAC and the MOHLTC, for example on antibiotic resistant organisms and draft IPAC resource documents.

Are we there yet?

The RICNs' growing contacts and linkages enable them to disseminate and foster consistent surveillance strategies across health care environments in the province. They have been an important partner in supporting trials of a *Clostridium difficile* surveillance tool, developed by PIDAC which should soon be in use across the province. Other tools and projects are under development by the networks.

The RICNs were initiated as a five-year project. Each year, an annual report[8 9] has outlined the growth and achievements of the dedicated group of professionals who staff the RICNs. Now at the mid-point of the project, they are commissioning a province-wide IPAC resource survey/inventory – an updated needs assessment, and reviewing how far they have traveled along the road to improved IPAC and thus patient and staff safety. As the last RICNs come on board, they will benefit from the efforts of their RICN colleagues, and move the program forward to full provincial implementation. As each RICN becomes operational, members are assisted to learn and implement best practices in infection prevention and control, new infection prevention and

control professionals are mentored and encouraged to attain certification, and everyone – patients, providers, and the public benefit from safer health care.

As they look to the future, the RICNs strive to continue to gain recognition as best practice experts and educators, raising the profile of IPAC, facilitating access to specialized and relevant education, and assisting all health care providers to enhance their IPAC knowledge and practice.

CONCLUSION

Eyes in other provinces and countries are still watching Ontario, at one point during SARS considered by the World Health Organization to be an unsafe travel destination. The lived experience of providing care in a Toronto facility in the spring of 2003 is not soon forgotten, but with time, health care workers can become complacent and IPAC practices can slip. That "worst of times" must not be permitted ever again to be "so far like the present". The lessons learned from SARS are a gift to bring us the "best of times" for IPAC. The successful implementation of the RICN program and future documented evidence of positive outcomes such as reduced health care associated infections, outbreaks, and staff absenteeism will make Ontario the safest place to travel to, and the RICNs, the infection prevention and control program to emulate. ●

REFERENCES

1. Dickens, C. A Tale of Two Cities. 1859. Available at: http://www.gutenberg.org/etext/98
2. Campbell, A. The SARS Commission. Final report: The spring of fear. 2007; 64. Available at: http://www.sarscommission.ca/
3. Naylor, D. Public Health Agency of Canada. Learning from SARS – Renewal of public health in Canada – A report of the national advisory committee on SARS and public health. 2003. Available at: http://www.phac-aspc.gc.ca/publicat/sars-sras/naylor/
4. Kirby, M. The Standing Senate Committee on Social Affairs, Science and Technology. Reforming health protection and promotion in Canada: time to act. November 2003. [Online] Available at: http://www.parl.gc.ca/37/2/parlbus/commbus/senate/com-e/soci-e/rep-e/repfinnov03-e.htm Accessed November 5, 2003.
5. Walker, D. For the public's health: The initial report of the Ontario expert panel on SARS and infectious disease control. 2003. Available at: http://www.health.gov.on.ca/english/public/pub/ministry_reports/walker_panel_2003/walker_panel.html
6. Ministry of Health and Long-Term Care. Operation Health Protection. 2004. Available at: http://www.health.gov.on.ca/english/public/pub/ministry_reports/consumer_04/oper_healthprotection.html
7. Basrur, S. Building the foundation of a strong public health system for Ontarians: 2005 annual report of the Chief Medical Officer of Health to the Ontario legislative assembly. 2006. Available at: http://www.health.gov.on.ca/english/public/pub/ministry_reports/ph_ontario/ph_ontario_011706.pdf
8. Syms-Sutherland, P. Building regional infection control networks (RICNs) in Ontario: Year one: Borders to bridges. 2006. Available at: http://ricn.on.ca/photos/custom/annualreport06.pdf
9. Syms-Sutherland, P. Connecting people, connecting practice: 2006/2007 annual report. 2007. Available at: http://ricn.on.ca/photos/custom/RICN%202006-07%20Annual%20Report_FINAL.pdf

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Infection prevention and control measures to prevent transmission of hepatitis B among hemodialysis patients

Hemodialysis patients are at high risk for acquiring blood-borne infections. The dialysis treatment requires large volumes of blood to be processed outside of the body. Contact either directly or indirectly with the contaminated environment, equipment or hands of healthcare workers may result in transmission of blood borne pathogens[1].

Hepatitis B virus (HBV) is spread by percutaneous or permucosal exposure to blood or body fluids that contain HBV. HBV is relatively stable in the environment and remains viable for at least seven days on environmental surfaces[1,5].

To prevent the transmission of HBV, hemodialysis programs should institute a comprehensive HBV prevention plan [1,4], including the recommendations provided below. The following recommendations address the prevention and management of hepatitis B infection in hemodialysis patients. Other blood-borne pathogens (such as hepatitis C or HIV) do not require isolation or other additional measures outlined below; these patients are effectively managed through the implementation of routine practices [1,2,3,4].

CHICA-CANADA supports implementation of the following recommendations to help prevent and manage HBV infections in patients receiving hemodialysis.

1. Immunization: The risk of transmission of HBV is reduced by immunization against hepatitis B[2].

Test all vaccinees for anti-HBs one to two months after the last primary vaccine dose, to determine their response to the vaccine (adequate response is defined as >10 mIU/mL)[2,4,5]. Patients and staff members who do not respond to the primary vaccine series should be revaccinated with three additional doses and retested for response[1,2,4]. No additional doses of vaccine are warranted for those who do not respond to the second series[2,4]. In this case, follow recommendations for patients considered susceptible.

Patients: Hepatitis B vaccination is recommended early in the course of kidney disease for all susceptible patients. Beyond hemodialysis, this includes pre-dialysis and peritoneal dialysis patients. Kidney failure interferes with the body's natural immunity and chronic dialysis patients who become infected may become chronic carriers of the disease. Hemodialysis programs should have policies and procedures in place regarding revaccination and follow-up of immune status [1,2,4].

Staff: HBV immunization of healthcare workers began in Canada in 1982 and is recommended for those persons at increased risk of occupational infection, (i.e., those exposed to blood, blood products, and bodily fluids that may contain the virus)[2,4,5]. Hemodialysis programs should have a policy and procedures to monitor HCW HBV immunization.

2. Containment and management:

- Consistent use of routine practices for the care of all hemodialysis patients[3].
- Hand hygiene reduces the number of microorganisms on the hands, and is the most important practice to prevent the spread of infection to patients and staff[2,3,5].
- Personal protective equipment – single use[2,3,5]:
  - Gloves for direct patient care or when touching the patient's equipment.
  - Mask, eye protection, and face shield to protect the mucous membranes of the eyes, nose and mouth when performing procedures that may generate splashes or sprays of blood or body fluids.
  - Gown to prevent soiling of clothing or unprotected skin.
- Standard facility-based environmental cleaning policies should be in place to reduce opportunities for transmission of infectious agents[2,3,5].

Additional infection prevention and control practices for HBsAg-positive patients:

Contact transmission is the most important route by which pathogens are transmitted in healthcare settings[3]

- Dialyze HBsAg-positive patients in a separate room with dedicated machine, equipment, medications and supplies[1,2,4].
- If a separate room is not available, a separate area may be used in order to geographi-

cally separate HBV-positive patients from HBV-susceptible patients[1,2,4].

- Healthcare workers should not care for HBV-positive patients at the same time as HBV-susceptible[1,4].
- HBV-immune patients may act as a geographical buffer between positive and susceptible patients[1,4].
- Staff members can be assigned to care for both HBV-positive and HBV-immune patients on the same shift. There must be current serology to confirm the patient's HBV immunity prior to assigning the two groups together. Protection against HBV is not maintained if the patient's anti-HBs drops below protective levels of 10 mIU/ml[1,4].
- Internal pathways and external surfaces of the dialysis machine used on a HBV-positive patient must be cleaned and disinfected with a high-level disinfectant prior to use on another patient[1,4].
- Post dialysis treatment, clean all surfaces in the dialysis station with a facility-approved disinfectant, including the bed/chair, table, television remote, and machine[1,4].

3. Screening:

- Serologic testing of all chronic kidney disease patients should occur prior to admission to the program or the first dialysis treatment (hemodialysis or peritoneal dialysis). This should include HBsAg, anti-HBs, anti-HBc, and hepatitis C screening (anti HCV, ALT)[4].
- If the patient's HBV status is unknown at the time of first treatment the dialysis machine must not be used on another patient until the internal pathway and external surfaces have been cleaned and disinfected[4].
- A method should be developed to monitor, review and evaluate all serological testing for HBV[1,4].
- Annual testing of all hemodialysis patients is required to determine immunity, susceptibility and/or conversion. Susceptible patients should be tested more frequently until immunity has been established by vaccination. The frequency of testing (q monthly, q 2 months, or q 6 months) will depend on the patient population and risk[1,4].
- Programs should have a policy for follow-up and testing of susceptible patients who have received hemodialysis at other facilities (e.g. while traveling).

4. Education: The hemodialysis program should have an educational plan for patients, their families and advocates. The program should also provide educational opportunities for healthcare workers to gain knowledge and familiarity in[1,2,3,5]:

- Transmission of blood-borne viruses.
- Interpretation of HBV serology.
- Routine practices and additional precautions, including hand hygiene, and the donning and doffing of personal protective equipment.
- Additional transmission-based precautions (airborne, droplet, contact).
- Consultation of infection prevention and control for additional education regarding the appropriate management and prevention of HBV infection. ●

References

1. Centers for Disease Control and Prevention. Recommendations for Preventing Transmission of Infections Among Chronic Hemodialysis Patients. MMWR Recommendations and Reports. 2001; 50 (RR05); 1-43
2. Health Canada. Laboratory Centre for Disease Control, Division of Nosocomial and Occupational Infections. Infection Control Guidelines. Preventing the Transmission of Bloodborne Pathogens in Health Care and Public Service Settings. Canada Communicable Disease Report 1997; Volume 23S3
3. Health Canada. Laboratory Centre for Disease Control, Division of Nosocomial and Occupational Infections. Infection Control Guidelines. Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Health Care. Canada Communicable Disease Report. 1999; Volume 25S4
4. Canadian Society of Nephrology. The Prevention of Transmission of Bloodborne Pathogens in Hemodialysis Patients. 2005
5. Health Canada. Laboratory Centre for Disease Control, Division of Nosocomial and Occupational Infections. Infection Control Guidelines. Prevention and Control of Occupational Infections in Health Care. Canada Communicable Disease Report. 2002; Volume 28S1

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New Board of Directors elected

Cathy Munford RN CIC President-elect 2008

Cathy Munford is the infection prevention and control practitioner for all Vancouver Island Health Authority residential and psycho-geriatric units in southern Vancouver Island. She is an influenza and outbreak management team member for Vancouver Island. Cathy received her nursing diploma from the Saint John School of Nursing and has a diploma in nurse management. She is currently enrolled for a BT in healthcare administration at the BC Institute of Technology. Cathy also holds the CIC designation. Cathy has served CHICA on the CJIC Editorial Board, as Presidents of both CHICA Vancouver Island and CHICA New Brunswick/Prince Edward Island, co-chair of the CHICA-Canada Long Term Care Interest Group, and as a member of the Government and Public Affairs Committee and Mental Health Interest Group. Currently she is a member of the Public Health Association of Canada working group for the rewriting of the Routine Practices and Additional Precautions guidelines.

Philosophy

As a long-time member of CHICA-Canada and extremely respectful of the mission of CHICA and its objective to improve the healthcare of staff, patients and residents, I feel that CHICA-Canada should continue to expand its profile on all levels and from that bring rightful recognition to infection prevention and control professionals. During my term in office, my objective is to encourage our board to work toward awareness of and participation in CHICA-Canada in nontraditional areas such as personal care areas (spas), jails, free-standing clinics, first responders, etc. I will work with the board in encouraging input into national issues that may have an influence on infection prevention and control, on national, provincial and local levels. Through board participation, I also intend to encourage participation from the membership in CHICA-Canada through their local chapters and national activities. I am very honoured to have been appointed President-elect and look forward to working closer with the board, staff, chapters, and membership.

Donna Moralejo, PhD Director of Education (3-year term)

Dr. Moralejo is an associate professor at the School of Nursing, Memorial University of Newfoundland Labrador, a CHICA-Canada member, former chapter president of CHICA Newfoundland Labrador, and CHICA-Canada Scientific Program Chair for the 2008 and 2009 national education conferences. Dr. Moralejo attended McGill University and earned a BSc in Microbiology and Immunology, an applied generic Master's degree in Nursing, and a BA in the History of Non-Western Societies. She completed a PhD in Epidemiology at the University of Calgary. She has taught a range of subjects including Pathophysiology, Pharmacology, Population Health and Nursing Research. Dr. Moralejo was part of an Advisory Committee awarded the CHICA-Canada Award of Merit in 2006 for developing the CHICA-Canada Entry to Practice Distance Education Program, which was launched in 2005 and offered through the University of Calgary. In 2007 she received the Award for Excellence in Nursing Education from the Association of Registered Nurses of Newfoundland and Labrador.

Philosophy

My philosophy about education is consistent with that of CHICA-Canada and the direction it has been moving. Educational opportunities need to be made available to all practitioners, regardless of their geographic setting, level of experience, desire for academic credit or ability to attend the Annual National Conference. We therefore need to facilitate, though not necessarily provide ourselves, a variety of learning opportunities, via a number of modalities (e.g., web, journal, in-person) and directed to a wide variety of learning needs. Since individuals may not always be able to identify their own learning needs or how they can be met, we need to continue our efforts in providing such direction. Furthermore, it is important to facilitate interaction between members and other experts so individuals can learn from each other, as well as collaborate in problem solving and developing evidence-based programs and policies. CHICA-Canada can help create and strengthen the infrastructure for education and communication, so as to strengthen the practice of infection prevention and control in all parts of the country.

Bern Hankinson RN BN CIC Secretary/ Membership Director (3-year term)

Bern Hankinson is an infection prevention and control professional with the David Thompson Health Region, Alberta. She has worked in infection and prevention and control for the past eight years. An active member of CHICA-Northern Alberta and the CHICA Standards and Guidelines Committee, Bern's nursing background includes intensive care, medical, surgical, oncology, and operating room. Passionate about patient safety, she is involved regionally with the Safer HealthCare Now initiative

Philosophy

CHICA-Canada is an organization dedicated to the development and advancement of best infection prevention and control practices nationally and communicating these practices to those involved with processes of infection prevention and control. The organization is proactive in influencing policies to promote the safety, health and welfare of Canadians. I believe that this value is synonymous with patient safety and to this end I encourage persons in infection prevention and control to be actively involved locally and nationally to effect change to current practices within their practice area while cognizant of the cultural differences of the persons they serve and work with.

Membership in CHICA-Canada and the supporting chapters provides an invaluable resource and the opportunity to work and communicate with members who voluntarily devote time to uphold and promote infection control standards regionally, provincially and nationally. As a member of CHICA-Northern Alberta I promote the awareness of the local chapter and dedicated time to recruiting membership into the organization. I will continue to promote membership from a national perspective. ●

Mary LeBlanc
Infection control pioneer

By Cheryl Parisien

Mary LeBlanc could be called an infection control pioneer.

At the age of 20, she became a staff nurse, working in various settings, including urology, surgery, medicine, and orthopedics. In 1977, while working at The Moncton Hospital in Moncton, NB, Mary applied for a new position as an infection control officer. At the time, she had no idea what infection control was all about, but decided to go for it anyway. She got the job, and the rest is history.

As the first and only infection control officer in the hospital, Mary had to do a lot of learning on her own. "We didn't have any infectious diseases doctors or medical microbiologists on staff, so I was on my own. I had to develop the program from the bottom up," she says.

She was lucky to have an understanding boss who understood the value of continuing education. "Every time there was an educational opportunity, local or national, I'd apply to go and my bosses were very supportive. But I've learned that you have to be assertive when it comes to these things, to make sure your boss knows you're interested. It was also important to come back from these sessions and report on what I learned – sharing the information with others."

In 1991, Mary moved to Halifax, where she again accepted a post as a sole provincial infection control practitioner for Nova Scotia Department of Health based at the Victoria General (now known as the QEII Health Sciences Centre) under the direction of infectious diseases. She served as the provincial coordinator for HIV and infection control education and consulting for over seven years. In this role she covered the entire province, travelling extensively. She assisted with outbreak investigations, developed guidelines, policies, and procedures, including the first MRSA guideline for long-term care for Nova Scotia.

Mary credits her common-sense approach to infection control for her success. She says being honest and visible on the wards are key to a successful IP&C program. "You have to get out on the units and get to know the staff on a personal level before an outbreak or crisis," she says. "It builds your credibility. And don't be afraid to say you don't know the answer at the moment, but you can find out. If you guess and give the wrong information, they'll never trust you again!"

Almost every infection control situation is grey, not black and white, she says. "People want the cut-and-dried facts, but it's not always that easy. You may have to bend the rules to take into account the patient's emotional health – she feels that people can die from depression if isolated completely."

When conducting HIV education sessions, Mary used storytelling and humour to make the lessons interesting, and she'd also often bring an HIV-infected person along to share how it felt to have the infection, to put a human face on the disease. "That really had an impact on healthcare workers."

She remembers one session where she mentioned how 19 per cent alcohol killed the HIV virus. "One guy raised his hand and said 'Well, if alcohol kills the AIDS virus, why the hell don't they just drink a quart of rum to get rid of it'," Mary laughs.

Being an active member of CHICA and other organizations has enriched Mary's career. In her 30 years as an ICP, she missed only one CHICA conference, and has belonged to three different CHICA chapters. "It's been very rewarding, both personally and professionally," she says.

In 2003, Mary received honourary CHICA life membership, an event she calls the "biggest highlight" of her career. Now she is retired, and pondering her future. She and her husband are building a house in Prince Edward Island (where Mary is originally from) so she has come full circle. She would like to remain involved in infection control in some capacity, preferably as an educator and consultant. With the wealth of knowledge and passion for the field she has, it will be hard to keep her away. "For now I'm enjoying being home, but with my enthusiasm, it'll be hard to do nothing."

She is reflective of her career, and is thankful for the experiences she has had. "I have gotten as much out of my time in infection control as I've given. It's a good feeling." ●

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CALL FOR ABSTRACTS

The preliminary program and call for abstracts are now available at **www.chica.org** and **www.aipi.qc.ca**. The registration brochure will be available in January 2008. Look for the following information on the 2008 conference webpage:

2008 Preliminary Program – Professional Continuing Education proposed topics

Call for Abstracts – Deadline date March 2, 2008

2008 EDUCATION CONFERENCE COMMITTEE

CHICA-Canada

Karen Hope BSc MSc
Calgary Health Region
Calgary, Alberta

Donna Moralejo PhD
Memorial University
School of Nursing
St. John's, NFLD Labrador

AIPI

Danielle Goulet, Inf. MSc
Hôpital Laval
Sainte-Foy, Québec

Lyne St-Martin RN BSc CIC
Montreal Children's Hospital
Montréal, Québec

CHICA Montreal

Frédérica Gaspard
MSc(A) CFPCI
West Island Health and Social Services Centre
Pointe Claire, Québec

Ramona Rodrigues
MSc(A) CIC
McGill University Health Centre
Montréal, Québec

EXHIBIT & SPONSORSHIP OPPORTUNITIES

An Industry Showcase will be held to give attendees the opportunity for further knowledge and education through viewing and discussion of products and services in the field of infection prevention and control. Exhibit information packages will be available in the autumn of 2007. Booth rentals are $1,750 each (8'x10' booth) plus GST. **Set up: Monday, June 2; tear down Wednesday, June 4.**

Guidelines for sponsorship of the conference are available from CHICA-Canada. Sponsors of the conference benefit from additional promotion of their company as well as direct benefits through discounted booth fees, complimentary registration, and the opportunity to hold a mini symposium with specific product information. For more information, contact CHICA-Canada Conference Planner.

CONFERENCE HOTEL

Hyatt Regency Montréal
1255, rue Jeanne-Mance
Montreal, Quebec H5B 1E5

Room rate: Traditional Room: $186.00 single/double (plus 16.5% taxes). Includes Internet access.

Deadline for reservations: April 28, 2008 – do not wait to make hotel reservations. The room block will go quickly.

All reservations must be made individually through the hotel's Reservation Department by calling 514-982-1234, or, toll free, 1-800-361-8234, or on **www.Hyatt.com**.

EDUCATION PROGRAM

Novice Practitioner Day: Sunday, June 1

Advanced Practitioner Day: Sunday, June 1

Preconference Day: Monday, June 2
Focusing on environment, surveillance and pre-hospital/first responders

Conference: Tuesday, June 3-Thursday, June 5

Mosaic/Mosaïque – Local Change has Global Consequences

Keynote speaker, Tuesday, June 3, 2008

Samantha Nutt is a medical doctor with more than 10 years of experience working in war zones. She has helped children in some of the world's most violent flashpoints, working with War Child Canada, the United Nations and non-governmental organizations (NGOs) in Iraq, Afghanistan, The Democratic Republic of Congo, Liberia, Sierra Leone, Somalia, Iraq, Burundi, northern Uganda and the Thai-Burmese border.

A specialist in maternal and child health in zones of armed conflict, family medicine, public health, and women's health, Sam is also on staff at Sunnybrook and Women's Health Science Centre and is an assistant professor at the University of Toronto in the Department of Family and Community Medicine. Sam holds undergraduate degrees in arts and science, and in medicine, from McMaster University and postgraduate degrees in medicine and in public health from the University of Toronto as well as the London School of Hygiene and Tropical Medicine (London University).

Chosen by Maclean's for their annual Honour Roll as one of "12 Canadians making a difference," she is a role model to many Canadians and has received numerous humanitarian awards for her work in support of war-affected children. Sam was among 12 Canadian women honoured for leadership by Global Television and the National Post on International Women's Day 2002, and was chosen as one of 30 "outstanding Canadian women" profiled by Flare for their 25th anniversary edition in 2004. She is a recipient of Canada's Top 40 Under 40 Award (Globe and Mail, Report on Business), and has been profiled by Time as one of Canada's five leading activists (December, 2005) and by CBC News Sunday as an outstanding Canadian leader (January 2006). Global Television has declared her a "Canadian Trailblazer". In 2006, she was also chosen by Chatelaine readers as one of 12 Canadian women they would most like to see run for politics.

Sam has written for Maclean's covering war-related issues and frequently appears on Canadian television and radio as an expert commentator on war and its impact on civilians. She is also a keynote speaker on the impact of war and on public engagement in global issues, inspiring others to make a difference. Most recently, she received honorary doctorates from McMaster University, Brock University, and Niagara University for her work promoting human rights, and her role in delivering humanitarian assistance to some of the world's most vulnerable populations.

Dr. Samantha Nutt is committed to peace, human rights and social justice. Her ambition has always been to help war-affected women and children. Sam's activities range from providing direct humanitarian support and long-term programming to war-affected children and their families, to promoting greater awareness in Canada concerning the issue of war-affected children, to fundraising and advocacy. ●

Life Balance – Changing Our Own Behaviour

Closing session, Thursday, June 5, 2008

Take a doctor who can sing, add a wild sense of humour and the ability to see things from a bizarre point of view and you have Dr. Gilles Lapointe. Dr. Lapointe graduated from Laval Medical School in 1974, and is a member of the Professional Corporation of Medical Doctors of the province of Quebec.

Dr. Lapointe focuses on the importance of attitude in life. In his hilarious presentation, he helps individuals cope with stress by introducing the seven laws of success. Strategies for handling tough days, self-image, simplicity in life, dignity, and human pride are addressed in insightful presentations.

As host of the popular daily television show, *Allo Docteur,* on Canal Vie, Dr. Lapointe became known for his presentations on healthy living and coping with stress. He is fluently bilingual, an accomplished musician, and extremely entertaining – his keynotes bring audiences to their feet and tears of laughter to their eyes.

Dr. Lapointe believes in the whole-person concept of healthier living and that our physical health is entirely dependent upon our mental and emotional heath.

He is particularly interested in sports, stress, and the quest for a better lifestyle. Since 1981, through his lectures in Canada, the United States and Europe, Dr. Lapointe has been pursuing his goal to make people aware that life is fun.

He is the author of the best-selling book *Docteur, Aidez-Moi! (Doctor, I need help)* and has produced two videocassette series on health: *Savoir Produire sans se Detruire (Being Productive Not Destructive)* and *Le Succes par la Sante (Success Through Health)*. He has lectured across Canada, in both French and English, to judges and attorneys, sales representatives, civil servants and medical practitioners, to name a few. ●


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The Registered Nurses' Foundation of Ontario Molson Canada SARS Memorial Fund providing grants to ICPs

The SARS Memorial Fund for Infection Control Practitioners is a tuition/certification/professional development reimbursement program funded by Molson Canada SARS Concert (2003) and supported by the Ontario Ministry of Health and Long Term Care.

RNFOO manages the SARS Memorial Fund, initiated in January 2005. The fund provides grants to Infection Control Practitioners **from any discipline** to support them in advancing their knowledge to lead infection control practices within their healthcare settings. Grants can be applied to continuing education, certification/re-certification and professional development.

The fund of $175,000 is to be administered over three years, allowing for the allocation of approximately $58,000 per year in support of individual pursuing formal education and certification in the area of infection control. ●

See **www.rnfoo.org** for details.

CHICA-BD Road Show Seminars

CHICA–CANADA (Community and Hospital Infection Control Association-Canada) a multidisciplinary, professional organization for those engaged in the prevention and control of infections, will hold a series of "Road Show Seminars" in various provinces throughout the country, starting in November and continuing into 2008. The "Road Show Seminars" are designed to educate healthcare professionals and healthcare administrators on decreasing the rate of healthcare-associated infections with the focus on Methicillin Resistant Staphylococcus Aureus (MRSA), the antibiotic-resistant superbug impacting millions of patients worldwide.

Over the next eight months CHICA's "Road Show Seminars" will be held in Vancouver, Winnipeg and Montreal. In addition, CHICA-Canada will host a series of National Webinars (tentatively scheduled for January, March and April 2008). The programs will feature nationally recognized infection prevention and control professionals and physicians discussing the consequences of MRSA, an increasingly prevalent and deadly organism in healthcare facilities. More importantly, the panel will highlight successful, systems-wide approaches that have effectively combated the increasingly troublesome infection.

"CHICA-Canada is pleased to partner with BD (Becton Dickinson) for the MRSA educational initiatives as Infection Prevention and Control Professionals are continually faced with the challenges that accompany a growing burden of MRSA in Canadian healthcare facilities", said CHICA-Canada President Joanne Laalo.

The "Road Show Seminars" program, sponsored by BD (Becton, Dickinson and Company), is aimed at both clinicians and healthcare executives faced with the clinical and financial impact of MRSA in their facilities.

"BD is proud to work jointly with CHICA-Canada on this important initiative" said James Glasscock, Country General Manager of BD "as it is central to our commitment at BD to prevent healthcare-associated infections and help all people live healthy lives."

For further information, visit *www.chica.org.* ●

New Power to Fight

for your patients

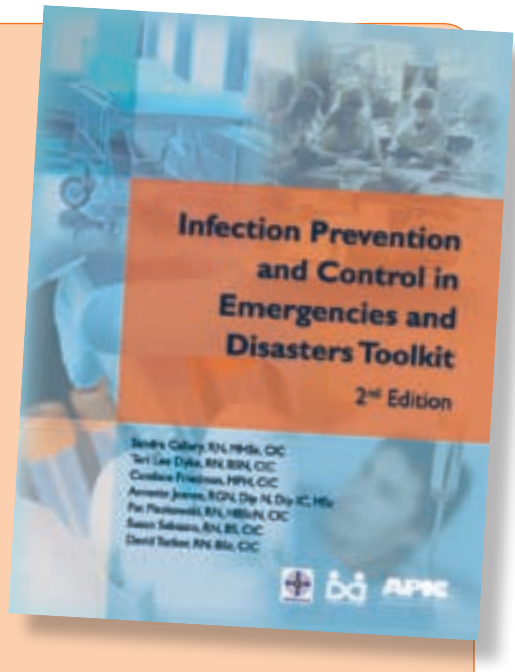
Did you know …

The International Infection Control Council (I2C2) is a partnership of CHICA-Canada, APIC and ICNA (UK).

In 2002, it published the *Infection Control Toolkit: Strategies for Pandemics and Disasters*. With the advent of SARS and the H5N1 influenza virus, as well as other natural disasters and disease outbreaks since 2002, the I2C2 recognized the need to update and revise the previous toolkit.

The content has been updated and reformatted into the newest version ***Infection Control Toolkit for Emergencies and Disasters***. The purpose of the toolkit is to assist IPCPs in the preparation and implementation of plans for emergencies and disasters.

The revised toolkit is now available at $120.00 CDN (Member rate) plus shipping & handling and GST. ●



www.icna.co.uk

CHICA-CANADA

APIC
ASSOCIATION FOR PROFESSIONALS IN INFECTION CONTROL & EPIDEMIOLOGY, INC.

VIROX Techologies Partners
2007 Scholarship Applications Accepted

Through the financial support of the Virox Technologies Partnerships, 10 CHICA-Canada members were awarded scholarships to attend the 2007 National Education Conference in Edmonton. CHICA-Canada and its members thank Virox Technologies and their partners Deb Canada, JohnsonDiversey, Steris Corporation, Virox Technologies, and Webber Training for their initiative to make the national education conference accessible to those who may not have otherwise been able to attend.

The Virox Technologies Partnership will again provide a scholarship to assist CHICA-Canada members with attending the 2008 Education Conference in Montreal. The 2008 Virox Technologies Partnership Scholarship application is available on www.chica.org.

The deadline date for applications is February 1, 2008. ●

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CHICA-Canada Editorial Award

The Board of Directors and the Editor-in-Chief of CHICA-Canada announce the creation of an Editorial Award.

The Editorial Award will acknowledge the author(s) of a selected scientific article that has appeared a 2007 issue of the *Canadian Journal of Infection Control.*

The winning author(s) will each receive one waived registration to the conference portion of the 2008 conference (Tuesday-Thursday only; does not include Novice or Advanced Practitioner Day or Pre-Conference Day). Applicable registration fee will be refunded if the registration has been paid before the award winner(s) are announced. A cash award may be presented in lieu of registration.

All papers will be judged by the CHICA-Canada Awards Committee according to:

- The author or at least one of the authors must be a member of CHICA-Canada.
- Papers must be relevant to Infection Prevention and Control in healthcare or in the community and must have appeal to the membership of CHICA-Canada.
- The paper must be original work.
- The paper must reflect clinical relevance and accuracy.
- There must be clarity, quality of organization, and grammatical correctness.
- The paper has current references, footnotes and bibliography.
- Manuscripts are prepared according to the *Canadian Journal of Infection Control* Guidelines for Contributors.

The award may not be presented to the same author(s) two years consecutively.

The Editor-in-Chief, members of the *Canadian Journal of Infection Control* Editorial Board, the CHICA-Canada Board of Directors, and the Awards Committee are not eligible.

The 2007 competition closes December 31. Candidates will be the submissions in the 2007 issues of the *Canadian Journal of Infection Control.* ●

3M Canada Infection Prevention Research Grant

As part of an ongoing initiative to promote innovative infection control and prevention practices in Canadian healthcare, 3M Canada has created a research grant through its Infection Prevention Platform. The research grant is targeted to individual members of the Community and Hospital Infection Control Association – Canada (CHICA–Canada) for use in research studies. The research grant will be a one-time payment offered on an annual basis.

One research grant of $6,000 to the Principal Investigator of the successful application will be presented at the 2008 CHICA–Canada National Education Conference (Montreal – May 29 - June 5, 2008) (travel, accommodations and meals will be provided by 3M Canada Company for the successful recipient).

An application form is available at www.chica.org. Deadline date for applications: March 1, 2008.

Applications must be sent to:
Secretary/Membership Director
CHICA-Canada, PO Box 46125 RPO Westdale
Winnipeg MB R3R 3S3

Or courier to:
Secretary/Membership Director
CHICA-Canada, 67 Bergman Crescent
Winnipeg MB R3R 1Y9

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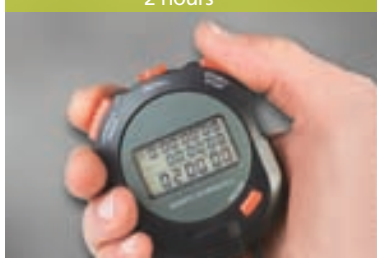
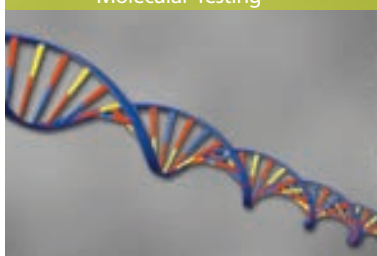


PCR Rapid Molecular Testing



*National Centre for Statistics and Analysis †Methicillin-Resistant Staphylococcus Aureus (MRSA) ΔMinistry of Health and Long-Term Care

How to submit an article to the *Journal*

The Canadian Journal of Infection Control publishes member-supplied articles as feature technical article or as "News from the Field". All material submitted is reviewed by an editorial board consisting of CHICA-Canada members. If you are not sure about your writing skills, get your ideas down and ask a colleague or member of the editorial board for help. Full requirements for technical articles can be found at **http://www.chica.org/inside_cjic_journal.html**, but here are some tips for getting started:

1) The author of the content must be clearly identified by name, title and organization and both a telephone number and email address must be supplied for contact purposes.
2) The subject of the material must be relevant to the interests of infection control practitioners.
3) The material should be submitted electronically via email as a Word document.
4) Length of submitted material is to be limited to a maximum of 1,500 words.
5) No part of the submitted material is to include what can be construed as sales-oriented promotion of specific individuals, companies, products or services.
6) Any photographic images to be included with the material must be free and clear of any copyright and must be submitted electronically as JPGs or TIFFs that are high resolution (at least 300 dpi) and a minimum of 6" x 9" in size. Image files should be sent separately, not embedded in the Word document.
7) In the event that the material is accepted for publication in *CJIC*, the author agrees that the first publication rights for the material belong to *CJIC* magazine and that any subsequent publishing of the material can only be done after the author or publisher is granted reprint approval in writing from CHICA-Canada and *CJIC* magazine.

ECOLAB

Poster Contest

An Annual Poster Contest is sponsored by Ecolab and supported by a Chapter of CHICA–Canada to give ICPs an opportunity to put their creative talents to work in developing a poster which visualizes the Infection Control Week Theme.

The winner of the Annual Poster Contest is announced at the annual CHICA-Canada Conference. Winners receive full registration at the next CHICA–Canada conference.
Deadline Date: January 31, 2008

Grand Prize: Full registration at 2008 Education Conference (Montreal, May 29-June 5, 2008 (including Novice or Advanced Practitioner Day and Pre-Conference Day). Or $500 cash without registration.

HOST CHAPTER 2008:
Southwestern Ontario Professionals in Infection Control (SOPIC)

SPONSOR:
ECOLAB

You are invited to design a poster that will be used for **Infection Control Week 2008** using the following theme:

Antibiotic-Resistant Organisms – A Call to Action!

• Your entry should be informative, eye-catching and applicable to both healthcare and community settings. • Your entry will be judged on overall content. Artistic talent is helpful but not necessary. • The winning entry will be submitted to a graphic designer for final production. • Your entry will become the property of CHICA–Canada.

Send submissions to:
Director of Programs and Projects,
c/o CHICA–Canada
PO Box 46125 RPO Westdale,
Winnipeg MB R3R 3S3

Courier address:
67 Bergman Cresent,
Winnipeg MB R3R 1Y9
Fax: 204-895-9595
E-mail: *chicacanada@mts.net*.

INCLUDE YOUR NAME, ADDRESS AND PHONE NUMBER ON THE BACK OF YOUR ENTRY.

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— Dr. Sheila Dunn, Publisher, OSHA Watch

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A new tool in the fight against MRSA

The Baker/Norton study published in 2004 highlighted the incidence of adverse events in Canadian hospitals and that the rate of adverse events is a key indicator of patient safety. The study showed that HAIs (hospital-associated infections) had some of the highest incidents of all adverse events. Preventing and managing HAIs is a patient safety issue and BD has products and capabilities to help reduce HAIs.

The BD GeneOhm™ MRSA Assay enables hospitals to dramatically improve the identification of MRSA, which can effectively result in the prevention and control of MRSA infections.

The BD GeneOhm™ MRSA Assay is a qualitative *in vitro* diagnostic test for the direct detection of methicillin-resistant *Staphylococcus aureus* (MRSA) from a nasal specimen. Test procedure time for the assay is under two hours. Compared to culture methods requiring two to five days, this rapid turn-around time can be used to enhance any infection control program. The test provides a definitive result in a single assay. ●

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2008 Membership Application and Payment Verification

Enjoy the many benefits of CHICA-Canada Membership

Membership Benefits

- Subscription to The Canadian Journal of Infection Control
- Annual Member and Source Guide
- Professional exchange of ideas
- Access to CBIC certification
- Local Chapter activities and support
- Development of infection control standards
- Reduced registration fees for annual conference and other education offerings
- Access to Members Only section of website, www.chica.org
- Push emails, providing timely infection control updates
- Access to on-line distance education

Membership Categories

Active/Professional: Individuals occupationally or professionally involved in the practice of Infection Control and/or Epidemiology. May vote, hold office and serve on committees.
Associate/Business: Industry representatives, as well as those not actively involved in the practice of infection control and/or epidemiology. May not vote or hold elected office.
Institutional: Health care related institutions or agencies interested in fostering the purposes and objectives of the Association. Representatives receive the same benefits as Active members.
Student: Full-time student attending an infection control related program. May not vote or hold elected office. Applications for Student membership must be accompanied by a letter of attestation that you are a full-time student attending an infection control related program.
Silver Membership – Retired: Neither employed nor seeking employment in Infection Prevention and Control. Non-voting membership.

The membership year is the calendar year, January 1st to December 31st of the same year. New membership application and dues received prior to November 1st are effective immediately and expire December 31st of the same year. Those received after November 1st are effective immediately and expire on December 31st the following year. Memberships are transferable during the membership year. Fees will not be refunded after 30 days of receipt. There will be a $15.00 charge for all returned cheques. Payment must accompany application. No post-dated cheques.

Section 1: APPLICATION FOR INDIVIDUAL MEMBERSHIP – (Active, Associate or Student/Retired)

NOW INCLUDES CHAPTER MEMBERSHIP OF YOUR CHOICE

Individual Membership fees: $125.00 (CAD$) **or** Retired or Student fees $75.00 $_____ (Sub Total A)

Section 2: APPLICATION FOR CHAPTER MEMBERSHIP – For your nearest Chapter, see reverse

CHAPTER MEMBERSHIP IS INCLUDED WITH YOUR MEMBERSHIP FEE. ADDITIONAL CHAPTERS ARE $25 EACH.

□I am a member of/I am joining _____Chapter. (See list of Chapters on second page. Geographic locations of Chapters can be found on www.chica.org.)

□ Additional chapters (in addition to primary chapter) - $25.00 each
Names of additional chapters I wish to join _____ $_____ (Sub Total B)
□I am declining Chapter Membership.

Section 3: APPLICATION FOR INSTITUTIONAL MEMBERSHIP (Active or Associate)

This category will be beneficial to those agencies which have two or more representatives to the Association and/or a turnover of representatives in any calendar year. An "institution" is defined as **one physical site** with representatives to the Association employed at that site. If any agency has more than one physical location throughout the province or the nation, each site would be designated a separate "institution" for purposes of membership.
An annual fee of **$175.00** for the first representative of the institution **and an annual fee of $75.00** for each additional representative from the institution. **MEMBERSHIP FEES INCLUDE CHAPTER MEMBERSHIP**. **Please indicate chapter choice above**. **At least one representative must be named. Additional representatives**: List on a separate page and return a completed Membership Application Form **for each name** on the list.

Facility/Agency_____ First Representative: _____

Address:_____
Street City Prov/State Code

Tel: ( )_____ Fax: ( )_____ Email:_____

Institutional Membership fee: $175.00 (includes first representative and chapter membership) Institutional Fee: $_____

Additional Representatives: $ 75.00 each (includes chapter membership) x _____ = Additional Reps: $_____
Total Institutional Membership Fees: $_____ (Sub Total C)

Section 4: TOTAL MEMBERSHIP FEES DUE

Sub Total of Membership Fees from sections 1 and 2 or 2 and 3, above $_____ (Sub Total D)

Enclosed is my additional donation to CHICA-Canada in the amount of: $_____ (Sub Total E)
TOTAL AMOUNT ENCLOSED: (**GST/HST NOT APPLICABLE**) $_____ (TOTAL)

❑ Please charge my VISA, MASTERCARD or AMEX Number:_____ Expiry Date:_____/____

Cardholder's Name (please print):_____ Cardholder's Signature_____
Or send cheque or money order, payable to CHICA-Canada, to the address on reverse. No post-dated cheques please

Membership and Expert Resource Information

Please complete all applicable sections. This information will provide accurate demographics for our Association and assist in our planning for the future. It also provides a resource of experts in the field of Infection Control, Epidemiology and associated disciplines.

Membership Categories

Please check one (see reverse for category definitions). MEMBERSHIP FEE NOW INCLUDES CHAPTER MEMBERSHIP

ACTIVE - $125 ❑ Renewal ❑ New Member ASSOCIATE - $125 ❑ Renewal ❑ New Member
INSTITUTIONAL $175/$75 ❑ Renewal ❑ New Member SILVER/RETIRED - $75 ❑ Renewal ❑ New
STUDENT - $75 ❑ Renewal ❑ New Member

I am replacing the following CHICA-Canada Member at the National and Chapter Level:_____

The former member is aware that their membership in CHICA and any local chapter(s) will hereby cease.

This section to be completed only by new members or if information has changed since last application.

(Mr. Mrs, Ms. Dr.) – Circle one

Name:_____ Academic Designations_____

Position:_____

Place of Employment:_____

Address of Employer:_____
Street Address City Prov/State Code

Office Tel: ( )_____ Extension: _____ Office Fax: ( )_____

Email:_____ Send information to my: ❑ Office ❑ Home address (below)

The employment information given above will be included in the CHICA-Canada Member and Source Guide. If you do not wish to have your information printed in the Guide, advise the Membership Services Office in writing by December 31st each year.

Home Address (optional)_____
Street Address City Prov/State Code

Home Tel (optional): ( )_____ (please list if no employer listed above, for contact info only)

DISCIPLINE: ❑ RN ❑ Microbiologist ❑ MD ❑ Technologist ❑ Other_____
EDUCATION ❑ Diploma ❑ Bachelor ❑ Master ❑ Doctorate ❑ Other_____
CERTIFICATION ❑ CIC – Year of Exam_____ ❑ Other_____
INSTITUTION: ❑ Hospital ❑ Long Term Care ❑ Community Health ❑ Industry ❑ Other_____
OF BEDS: ❑ 1 to 99 ❑ 100 to 249 ❑ 250 to 499 ❑ 500 to 699 ❑ 700 to 999 ❑ 1000 or more ❑ N/A
COMMUNICATION: ❑ English ❑ French

Chapter Membership

Chapter membership is not compulsory for membership in CHICA-Canada; however, Chapter members **must** be members of CHICA national (CHICA-Canada Policy 8.60). There are 20 local Chapters of CHICA-Canada (see list below). Membership in your local Chapter provides invaluable networking, education and communication opportunities**. Individual Chapter Membership is included in your CHICA Membership Fee (see reverse)**. Please indicate choice of chapter or decline of chapter membership on reverse page. To contact your nearest chapter or determine their geographic location, see www.chica.org. NOTE: Chapters may assess additional fees to their members. NOTE: Membership in more than one chapter is $25.00 per chapter.

*CHICA-Newfoundland Labrador
*New Brunswick/PEI
*CHICA-Nova Scotia
*CHICA Montreal
*CHICA-Eastern Ontario
*CHICA - Renfrew County
*Central Ontario Professionals of Infection Control (COPIC)
*CHICA-Ottawa Region
*CHICA-Southwestern Ontario
*Toronto and Area Professionals in Infection Control (TPIC)
*CHICA-HANDIC
*CHICA-HUPIC
*CHICA - Northeastern Ontario
*CHICA Northwestern Ontario
*CHICA Manitoba
*CHICA SASKPIC
*CHICA Southern Alberta
*CHICA-Northern Alberta
*CHICA - BC
*CHICA - Vancouver Island

Please forward this completed form, with payment to:
CHICA-Canada PO Box 46125 RPO Westdale, Winnipeg MB R3R 3S3
Tel: 204-897-5990/866-999-7111 Fax: 204-895-9595 Email: chicacanada@mts.net
Business Number 11883 3201 RT0001
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WILLINGNESS TO SERVE FORM

Please type or print clearly
The information provided will be shared with the member's Chapter.

GENERAL INFORMATION

Name: _____ Designation(s):_____

Mailing Address: _____
Position title
_____
Department
_____
Facility
_____
Street City
_____
Province Postal Code

Telephone
(work): _____(home/optional): _____

Fax: _____E-mail: _____

RELATED EXPERIENCE

Number of Years in Infection Prevention and Control:
- ❑ 1
- ❑ 1 – 5
- ❑ 6 – 10
- ❑ 10+

Chapter Affiliation:_____

Chapter Activities:
President (specify year) _____
Secretary (specify year) _____
Treasurer (specify year) _____
Membership (specify year)_____
Committee Chair (please specify)

Number of years as a member of CHICA-Canada:
❑ 1 ❑ 1 – 5 ❑ 6 – 10 ❑ 10+

Membership Number: _____

INTEREST (If you make more than one choice, please indicate the order of your preference)

I would be willing to have my name considered for the following Board position(s):

- ❑ President (3 year term: *President Elect, President, Past President*
- ❑ Secretary/Membership Director
- ❑ Director of Finance
- ❑ *Director of Education*
- ❑ Director of Standards and Guidelines
- ❑ Director of Programs and Projects
- ❑ Physician Director

I would be willing to have my name considered as a participant in upcoming projects/events (dependent on my field of interest:

- ❑ A CHICA-Canada working group
- ❑ Document reviewer
- ❑ Representative on CHICA-Canada External Committee
- ❑ National Conference Scientific Program Committee

EDUCATIONAL BACKGROUND (Attach additional pages if more space is required)

Publications/Abstracts/Research Conducted: _____

_____

Areas of Specialty: _____

Additional Information: _____

Signature: _____ Date: _____

CHICA-Canada thanks you for the interest you have shown to serve your Chapter and CHICA-Canada.

Please Forward This Completed Form To:
CHICA-Canada
BOX 46125 RPO Westdale
Winnipeg MB R3R 3S3

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GLO GERM COMPANY	200, 201	800-842-6622	info@glogerm.com	www.glogerm.com
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