IN THE MATTER OF AN ARBITRATION

BETWEEN:

St. Michael's Hospital and The Ontario Hospital Association

and

The Ontario Nurses' Association

Before: William Kaplan

Sole Arbitrator

Appearances

For St. Michael's Hospital &

The Ontario Hospital Assn.

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For the Ontario Nurses'

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The matters in dispute proceeded to a hearing in Toronto on August 9 and October 31, 2016, February 3, April 6, 29, 30, May 1, June 1, 2, 22, August 22, September 30, October 28, 29, and December 11, 2017, April 19, 21, 22, May 4, and July 16, 23, 2018.

Introduction

Summarily stated, this case concerns the reasonableness of the Vaccinate or Mask Policy (hereafter "VOM policy") that was introduced at St. Michael's Hospital (hereafter "St. Michael's") in 2014 for the 2014-2015 flu season and which has been in place ever since. Under the VOM policy, Health Care Workers and that group, of course, includes nurses (hereafter "HCWs"), who have not received the annual influenza vaccine, must, during all or most of the flu season, wear a surgical or procedural mask in areas where patients are present and/or patient care is delivered.

St. Michael's is one of a very small number of Ontario hospitals with a VOM policy: less than 10% of approximately 165 hospitals. The Ontario Nurses' Association (hereafter "the Association") immediately grieved the VOM policy in every hospital where it was introduced. It should be noted at the outset that the VOM policy has nothing to do with influenza outbreaks that are governed by an entirely different protocol, and one that is not at issue in this case.

This is not the first Ontario grievance taking issue with the VOM policy. The parties appropriately recognized that the matters in dispute were best decided through a lead case rather than through multiple proceedings at the minority of hospitals where the policy was in place. Accordingly, the Association grievance at the Sault Area Hospital was designated as that lead case and proceeded to a lengthy hearing before arbitrator James K.A. Hayes beginning in October 2014 and ending in July

2015. Arbitrator Hayes heard multiple days of evidence (replicated to some extent in this proceeding) and issued his decision, discussed further below, on September 8, 2015 (hereafter "the Hayes Award"). Arbitrator Hayes found that the Sault Area Hospital's VOM policy was inconsistent with the collective agreement and unreasonable. The grievance was, accordingly, upheld.

The Hayes Award

In the Sault Area Hospital case (SAH & OHA & ONA, [2015] O.L.A.A. No. 339), the Association asserted that the VOM policy, identical in all material respects to the one contested here, was inconsistent with the collective agreement and constituted an unreasonable exercise of management rights. The Association, in that case, took the position that there was insufficient scientific evidence supporting the VOM policy. Arbitrator Hayes agreed. He concluded that there was "scant" scientific evidence supporting the VOM policy and he upheld the grievance.

In particular, Arbitrator Hayes determined, following an exhaustive review of the scientific evidence, and the detailed and extensive submissions of the parties, as follows:

On the merits, I sustain the core of the Union position. I find that the Policy was introduced at SAH for the purpose of driving up vaccination rates. I also find that the weight of scientific evidence said to support the VOM Policy on patient safety grounds is insufficient to warrant the imposition of a mask-wearing requirement for up to six months every year. Absent adequate support for the freestanding patient safety purpose alleged, I conclude that the Policy operates to coerce influenza immunization and, thereby, undermines the collective agreement right of employees to refuse vaccination. On all of the evidence, and for the reasons canvassed at length in this Award, I conclude that the VOM Policy is unreasonable (at para. 13).

Accordingly, Sault Area Hospital immediately discontinued its VOM policy, as did other hospitals. However, some hospitals, including a number of hospitals like St. Michael's, did not do so, necessitating this second proceeding. In order to ensure finality, the Ontario Hospital Association and the Association agreed on March 25, 2016, that the award in two St. Michael's VOM policy grievances would be binding on it and on a number of other scheduled hospitals (except to the extent that an issue raised by another policy was not addressed).

In light of the March 25, 2016 agreement, the matters in dispute proceeded to a hearing over a number of days in 2016, 2017 and 2018. The parties did not agree about much, although there was common ground that the contested scientific evidence had to be examined and then subjected to a legal assessment: did the VOM policy violate and/or conflict with the collective agreement, and was it reasonable?

Preliminary Observations

Some preliminary observations are appropriate starting with the following: St.

Michael's effort to distinguish the Hayes award was unsuccessful. The new evidence that was introduced in the attempt to do so was not particularly helpful. Indeed, by and large, the same policy, the same legal issues, and some of the very same evidence that was introduced in this proceeding had earlier been put before

Arbitrator Hayes. For reasons that will be elaborated below, and in general, the new evidence that was called by the Association corroborated and reconfirmed that which had been put before Arbitrator Hayes, while that called by St. Michael's was

not particularly persuasive, and as noted later, in the case of one report, has been completely disregarded.

VOM at St. Michael's - The TAHSN Report

The VOM policy was based on a recommendation drafted by a working group of the Toronto Area Health Sciences Network (hereafter "TAHSN"). TAHSN is composed of 13 Toronto-area teaching hospitals (and a number of associate hospital members). The THASN report found as follows:

There are several important infection control measures that help to prevent influenza transmission. These include: restricting HCWs with symptoms from attending the hospital, good hand hygiene practices, influenza vaccination, cough etiquette, early identification and management of infected patients, and appropriate outbreak management including prompt use of anti-viral medications for unvaccinated HCWs and exposed patients. The wearing of face masks can serve as a method of source control of infected HCWs who may or may not have symptoms. Masks may also prevent unvaccinated HCWs from as yet unrecognized infected patients or visitors. While all these measures are valuable and should be part of a comprehensive prevention program, vaccination remains the cornerstone of efforts to control influenza transmission.

The THASN report made it clear that voluntary efforts to increase influenza immunization had failed – 40% to 60% uptake "despite robust influenza education campaigns" – and that steps were necessary to address that failure and "to significantly improve healthcare worker influenza immunization rates." The report recommended that VOM policies "be part of a comprehensive prevention and control program aimed at preventing hospital-acquired influenza...." This recommendation was made in the admitted absence of direct evidence that mask-wearing HCWs protected patients from influenza; but on the basis of "indirect evidence [that] suggests it does." The only fair words to describe the evidence

advanced in support of the masking component of the VOM policy in the THASN report, and in this proceeding, are insufficient, inadequate, and completely unpersuasive.

The Collective Agreement

It is useful to set out certain provisions of the collective agreement:

6.05 Occupational Health & Safety

(a) It is a mutual interest of the parties to promote health and safety in workplaces and to prevent and reduce the occurrence of workplace injuries and occupational diseases. The parties agree that health and safety is of the utmost importance and agree to promote health and safety and wellness throughout the organization.

...

* When faced with occupational health and safety decisions, the Hospital will not await full scientific or absolute certainty before taking reasonable action(s) that reduces risk and protects employees.

...

* The employee shall use or wear the equipment, protective devices or clothing that the employer requires to be used or worn [Occupational Health and Safety Act, s. 28(1)(b).

•••

(e) (vi) The Union agrees to endeavour to obtain the full cooperation of its membership in the observation of all safety rules and practices.

...

18.07 Influenza Vaccine

The parties agree that influenza vaccinations may be beneficial for patients and nurses. Upon a recommendation pertaining to a facility or a specifically designated area(s) thereof from the Medical Officer of Health or in compliance with applicable provincial legislation, the following rules will apply:

(a) Nurses shall, subject to the following, be required to be vaccinated for influenza.

...

(c) Hospitals recognize that nurses have the right to refuse any required vaccine.

One of the provisions of the local agreement is also relevant:

...the Association acknowledges that it is the exclusive function of the Hospital to...make and enforce and alter from time to time reasonable rules and regulations to be observed by nurses, provided that such rules and regulations shall not be inconsistent with the provisions of this Agreement.

Additional Preliminary Observations

Whatever its value, a labour arbitration is not an ideal forum by any intelligent measure to establish best practices in public health. In this case, a (second) hearing was made necessary by the continuing division of expert opinion, not to mention the disagreement in some quarters with the original arbitral outcome. In the result, questions that should normally be resolved by experts – based on the best possible evidence – must be decided by a decidedly inexpert tribunal through a collective agreement and labour law lens, albeit one that has been exceptionally well informed by a thoroughly argued case that included the evidence of internationally recognized experts, or persons with subject matter expertise.

There is no shortage of questions requiring answers, but two of the principal ones are the extent to which unvaccinated HCWs pose a risk to patients – a risk of transmitting influenza especially when they are asymptomatic – and whether masking appreciably reduces that risk.

The interests at issue are substantial. On the one hand, there is a hospital policy designed to ensure patient well-being by taking steps to prevent nosocomial – hospital acquired – influenza. If unvaccinated HCWs are infecting patients, and if wearing a surgical or procedural mask prevents the spread of influenza – meaning it prevents serious illness and death – that is, by any objective standard, a reasonable precaution even if the evidence is not all in. However, if the vaccination itself is of questionable utility, and if the masks are of limited value in preventing transmission of influenza by asymptomatic HCWs (symptomatic HCWS should not be at work), then the entire enterprise is put into question even if the motive underlying the policy is completely salutary.

It is clear and agreed that influenza is a serious and life-threatening illness. There is also consensus about other things. In general, the influenza vaccine is safe for most persons and has a "moderate" effectiveness for much of the population: up to 60%, (although in some years substantially less, and once in a while, vaccination provides virtually no protection). The vaccine has no effectiveness against influenza-like illnesses. The influenza virus mutates quickly, requiring annual development of a new vaccine. Vaccine effectiveness depends on the closeness of the match of the strains in the vaccine to the strains circulating in the season in which the vaccine is employed. For influenza to be transmitted, the virus must be both shed and transmitted. Contact – direct contact with the infected person, or indirect contact through infected surfaces – and droplets – particles that travel ballistically – and aerosol – particles suspended in the air – are the likely modes of transmission.

There is clearly a health benefit in vaccination. Except in years of a complete mismatch, the vaccine provides some protection against influenza. Indeed, the influenza vaccine is the best available intervention to prevent influenza (although repeated annual vaccinations reduces vaccine efficacy and this is known as the repeat vaccination effect). Effectiveness also varies with age and population groups. The general effectiveness of the vaccine, i.e., whether the vaccine is a match for circulating strains, is only ascertainable once the influenza season is underway, although early indications are available from the experience in the southern hemisphere. Because the vaccination provides only partial protection, unvaccinated HCWs contract influenza but so too do vaccinated HCWs – that is obvious given the effectiveness rate.

In the broadest possible terms, the issue to be decided, on the evidence, is whether a VOM policy for HCWs is reasonable. Stated somewhat differently, the question to be answered is whether the evidence supports the conclusion that the use of surgical or procedural masks, worn by unvaccinated HCWs for some or all of the flu season, actually results in reduction of harm to patients? Does it prevent the transmission of illness? Does it save lives? If the VOM policy prevented patient illness and saved patient lives, its reasonableness would be difficult to challenge. After all, preventing illness and saving lives is the core purpose of St. Michael's and other hospitals. It is central to the mission.

If, on the other hand, the evidence indicated that the policy did not achieve this objective, and if the science said to support it was unsound at best, then the reasonableness of the policy would be appropriately called into question.

This case was tried over multiple hearing days over three calendar years. The evidentiary record is extensive: Volumes of scientific articles – cluster randomized controlled trials (hereafter "cRCTs"), observational studies, summaries, critiques, literature reviews, meta-analyses, commentaries, etc. and numerous expert reports, more than one hundred and fifty exhibits and thousands of pages of transcript. Two Association members also testified about the impact of the VOM policy on them: their experience of being compelled to don a mask for days, weeks and months on end. But at the end of the day, the evidence adduced here leads to the very same conclusion reached by Arbitrator Hayes. The exhaustive evidentiary review in the Hayes award need not be repeated, or a similar exercise replicated here, although the key evidence and arguments must, of course, be appropriately addressed, and this follows.

Position of the Parties

Overview of Ontario Nurses' Association Submissions

The Association argued that the VOM policy must be set aside for a number of reasons including:

 The VOM policy was inconsistent with and/or contrary to the collective agreement.

- 2. The TAHSN report the basis for the VOM policy was unreliable.
- 3. Evidence that masking as a source control results in any material reduction in transmission was scant, anecdotal, and, in the overall, lacking.

In a related point, the Association argued that the evidence establishing asymptomatic transmission – that is transmission by HCWs when shedding virus either prior to symptom onset or when asymptomatically infected – was absent. The risk, based on the evidence, the Association argued, was theoretical or minimal and insufficient to justify the VOM policy on a reasonableness standard.

In any event, if masking were effective, it would be required of all HCWs in addition to vaccination as all HCWs can acquire influenza whether vaccinated or not. The experience of mismatch years illustrated this point. From time to time the vaccine failed to work – it provided little or, rarely, no protection. In those years logic dictated a directive that everyone mask. But that was neither the policy nor the practice. The VOM policy was, in a word, "illogical."

4. There was no evidence of a problem; nor was there evidence that the "problem" was effectively addressed by the VOM policy "solution."

5. In all of these circumstances, requiring a HCW to wear a mask for each and every shift for up to six months was unwarranted and unjustifiable in light of the impact of doing so – the impact on HCWs, not to mention its adverse implications for patient care.

Inconsistent with and/or Contrary to the Collective Agreement

In the Association's submission, St. Michael's could issue rules and regulations, but they could not be inconsistent with and/or in conflict with the collective agreement. However, the VOM policy did just that by undermining and interfering with the categorical right of a nurse to refuse an unwanted vaccination. The VOM policy was unreasonable as it coerced HCWs into agreeing to vaccination by imposing on unvaccinated HCWs the obligation to wear a mask when it served no useful purpose.

The TAHSN Report was Unreliable

The justification for the VOM policy was the TAHSN report. However, that report cited no substantive evidence that VOM policies reduce influenza transmission, and the reason it failed to do so, in the Association's submission, was because there was no such evidence.

The initial focus of the working group that drafted the TAHSN report was on increasing vaccination rates and it went about its work, the Association argued, with that goal squarely in mind. Indeed, St. Michael's evidence established this, and specific reference was made to the testimony of some of its witnesses. It was

particularly noteworthy to the Association that the working group went out of its way to avoid hearing from experts who disagreed with what the Association characterized as a pre-determined outcome.

The TAHSN report substantially relied on four cRCTS: Potter, Carman, Hayward & Lemaitre (hereafter the "four cRCTs") conducted in long-term care (hereafter "LTC") facilities (not hospital settings like St. Michael's). These four cRCTS found that there was a substantial reduction in all-cause mortality in LTC facilities when HCWs were vaccinated. Stated in the simplest terms, these four cRCTs concluded that when HCW vaccination rates increased, patient deaths decreased. Additional evidence was cited by St. Michael's to support the following proposition: the risk of influenza outbreaks decreased when the rate of HCW immunization increased.

However, in the Association's view, the findings of the four cRCTs were inapplicable, implausible and unreliable (LTC vs. acute care hospital setting like St. Michael's, all-cause mortality vs. influenza-caused death, etc.), and had been thoroughly and conclusively debunked by the overwhelming weight of credible scientific evidence. (Discussion of the four cRCTs, it should be noted, occupied countless days of evidence engaging all of the experts but one.)

The fact of the matter was that the TAHSN report could not survive serious scrutiny given its manifest deficiencies. One example, the Association argued, amply illustrated this point.

Relying on the four cRCTs, the TAHSN report stated that for every 8 HCWs vaccinated 1 patient death would be prevented. This is known as the Number Needed to Vaccinate (hereafter "NNV"). But when carefully analyzed, this number was nonsensical and could not be sustained. In fact, St Michael's witnesses readily conceded limitations of the four cRCTs, while those for the Association completely rejected their findings – the experts testified that they were "controversial," "low grade," and "fundamentally flawed" – and could not serve a scientific foundation for a VOM policy. It was notable, the Association argued, that the College of Nurses did not require that nurses be vaccinated, that the Province of Ontario had not designated influenza for mandatory HCW immunization, nor had the Province of Quebec. Public Health Ontario's Provincial Infectious Disease Advisory Committee does not recommend a VOM policy (although masking for symptomatic individuals was a different matter).

Indeed, the Association made detailed reference in its submissions to the most compelling critiques of the four cRCTS, including the Cochrane Review, described by the Association as universally respected. It's finding, that the four cRCTs had a "high risk of bias" and that there was "no evidence...that vaccinating healthcare workers against influenza protects elderly people in their care," was material and directly on point.

This conclusion was supplemented by Association expert reports and peerreviewed publications, most notably "Influenza Vaccination of Healthcare Workers," a 2017 *Plos One* article by Association expert Dr. Gaston De Serres (and others). Dr. De Serres was the principal Association witness. He has an MD and a PhD in epidemiology. His evidence, along with other leading studies, e.g., Osterholm, cast serious doubt on the validity of the four cRCTs and their various findings, including their applicability to the acute care hospital setting.

As Dr. Osterholm wrote: "The four randomized controlled trials...do not provide strong evidence to support an impact on patient mortality when increased numbers of healthcare workers are vaccinated. In fact, two of the studies do not support this claim...and the other two only weakly support it."

The De Serres article reached the following conclusion:

The four cRCTs ... attribute implausibly large reductions in patient risk to HCW vaccination, casting serious doubts on their validity. The impression that unvaccinated HCWs place their patients at great influenza peril is exaggerated. Instead, the HCW-attributable risk and vaccine-preventable fraction both remain unknown and the NNV to achieve patient benefit still requires better understanding. Although current scientific data are inadequate to support the ethical implementation of enforced HCW influenza vaccination, they do not refute approaches to support voluntary vaccination or other more broadly protective practices, such as staying home or masking when acutely ill.

The rest of the data relied on by St. Michael's, the Association submitted, fell far short of making a case – and this was reviewed in detail.

In summary, on this point, neither the TAHSN report, nor any of the evidence adduced by St. Michael's at the hearing, established that the use of surgical and procedural masks by unvaccinated nurses reduced the risk of transmission of

influenza to patients or led to a reduction in outbreaks. Arbitrator Hayes had concluded, given the absence of underlying scientific support, that the VOM policy was motivated by an improper purpose: it was, he found, a coercive practice designed to drive up vaccination rates, and the Association urged me to reach the same conclusion.

Masking Effectiveness

Influenza is transmitted in a number of ways, but primarily through droplets emitted by an infected person. The virus droplet has to be shed and then transported in sufficient amount and close enough to potential recipients to infect them (and evidence was led that explored this process in detail). The question to be asked here, and which the Association answered, was whether these masks effectively prevent influenza transmission: Are they an effective means of source control?

This answer to this question was "no," and the Association pointed to the report and evidence of masking expert Professor Lisa Brosseau. In her report, Professor Brosseau canvassed all of the relevant literature and wrote: "It is my opinion that the surgical masks required for unvaccinated staff at St. Michael's Hospital will offer no or a very low level of protection from infectious aerosols either for the wearer exposed to nearby patients or for patients exposed to an infected wearer." Referring specifically to surgical and procedural masks, she testified: "…none of the surgical masks exhibited adequate facial fit characteristics to be considered respiratory

protection devices." In particular, surgical and procedural masks did not prevent influenza transmission by an infected person: "In addition to having filters that do not perform very well, the fit of these masks on your face will allow a lot of leakage around the side."

In Professor Brosseau's opinion, coughing, sneezing and talking produced a wide range of particles, and in different sizes, all of which could be infectious. The smaller particles could bypass the filter, making it unlikely that a mask would lower the risk of nosocomial influenza from an infected HCW. Masks might prevent or impede large droplets, but that was only one of the ways in which influenza was transmitted. Other evidence, which the Association pointed to, supported this conclusion indicating that the influenza virus can bypass/penetrate surgical masks.

In the Association's submission (developed further below) masking did not stop the spread of influenza. For example, as the Centers for Disease Control (hereafter "CDC") observed, "no studies have definitively shown that mask use by...health care personnel prevents influenza transmission...." Masks were, as one of St. Michael's witnesses conceded, "the weak point (not much data that they work") and, as another agreed, "there really isn't data for using the mask in a way that we have used it in the VOM policy." These admissions alone, the Association argued, formed a sufficient factual and legal basis to uphold both grievances: they made the Association case.

For the VOM policy to survive arbitral review, it could not be arbitrary. There had to be a problem – nosocomial influenza from unvaccinated HCWs, and a link between it and the solution: the "ask", i.e., wearing the mask. No element of this test – legally or factually – the Association submitted, had been met. First, there was very little persuasive evidence about the existence, indeed, scope of the problem. Second, even assuming, for the sake of argument that the evidence about unvaccinated HCWs as a source of nosocomial influenza was accurate, the evidence about mask effectiveness as a solution was insufficient, at best, to support the VOM policy.

(It should be noted that on January 18, 2018, St. Michael's amended its *Influenza Prevention & Control & Inpatient Vaccination Guideline* by posting signs asking unvaccinated visitors to wear a mask while in patient care areas. The new policy was entirely voluntary and no visitor is asked about vaccination status. This new policy, in the Association's submission, did very little to address the logical flaws in the application of the VOM policy.)

Asymptomatic Transmission

Influenza is highly contagious and it can be transmitted by asymptomatic individuals. The Association did not dispute the possibility of asymptomatic transmission. However, the evidence indicated that the rate of asymptomatic transmission was low and "unlikely to be of clinical significance" as the production of the virus and the development of symptoms was linked. Data establishing asymptomatic infection was, the Association argued, extremely limited –

inconclusive at best – and certainly coming nowhere near establishing a problem requiring a solution. Numerous authorities were referred to in support of this submission.

Moreover, if there really was, as St. Michael's asserted, a problem with asymptomatic transmission, and if masking really worked, then universal masking would be required because both vaccinated and unvaccinated HCWs can become infected with influenza and, if infected and asymptomatic, can transmit it (albeit minimally, at best). Moreover, family members, police, ambulance drivers and many others who regularly pass through patient areas of the hospital are not required to vaccinate or mask. Why just HCWs, the Association asked? This, again, illustrated how illogical the VOM policy actually was and this went to the heart, the Association argued, of its unreasonableness.

On this point, the evidence further established that masking provided even less protection against transmission by asymptomatic individuals than the already low protection they provided in the case of symptomatic persons. Masking was not an effective means of source control in general, and, in particular, in the case of asymptomatic transmission.

Mismatch Years

Even in the best year – the best match – the influenza vaccination was only partially successful (and the Association argued was become increasingly less so because of

the repeat vaccination effect). During the 2017/2018 influenza season, for example, when it became apparent that there was a serious mismatch – meaning that the vaccine did not provide significant protection – St. Michael's did not impose a system-wide masking requirement. On an earlier occasion, the 2014/2015 influenza season, the vaccine had minimal effectiveness. In all circumstances, and in every year, both vaccinated and unvaccinated HCWs could transmit influenza to patients, but only unvaccinated individuals were required to mask.

The only conclusion that could be drawn in these circumstances, and it was one that the Association urged upon me, was to find that the true purpose of the VOM policy was to increase vaccination rates by offering up an unpalatable alternative – wearing close to useless, inconvenient and burdensome masks for months on end. By definition, this could not be reasonable.

No Evidence of a Problem

For a policy to be found to be reasonable, the Association argued, and where that policy must be balanced against employee interests, then the scale and nature of the issue must be known. The solution must actually address a real, not imaginary, problem. Here, the Association submitted, there was no evidence of the burden of disease – St. Michael's experts had admitted as much – no evidence of any demonstrated need, and no evidence of the degree to which unvaccinated HCWs were the cause of nosocomial influenza. Likewise, there was a complete absence of

quantification of the amount of influenza that was preventable by surgical and procedural masks.

Pre-existing Infection Protection and Control (IPAC) policies and practices at St. Michael's – which Association counsel described – were not only working and evidence-based, but accepted. There was no problem and no need for a solution, especially the masking solution that did not work. And that meant the policy was arbitrary. In these factual circumstances, the Association argued, the VOM policy could not be found to be reasonable.

Adverse Impacts on HCWs and Patients

Although challenged, the evidence was largely uncontradicted that wearing surgical and procedural masks over the course of an entire shift day in and day out for weeks and months on end was extremely uncomfortable for the nurse and problematic for patient care, a point established in the evidence of two long-service nurses. They testified about adverse reactions to the vaccine, the discomfort they experienced from wearing masks for prolonged periods, that wearing the masks attracted negative attention, that it seemed like a punishment for not being vaccinated, that it disturbed patients who were concerned whether they – the HCWs – were infectious, and that it frequently interfered with their care. They also spoke about their concerns about empathy and understanding and how masks undermined both – an issue raised in some of the literature. The VOM policy, in short, shamed and blamed,

and served no legitimate purpose, the Association argued, other than to coerce HCWs to submit to influenza vaccination.

Conclusion to Association Submissions

The only conclusion that the Association could draw, when all the evidence was examined, was that the VOM policy was not a legitimate and scientifically based employer response to an identified problem with a reasonable and targeted solution. Instead, it was clearly designed from the outset with one objective in mind: to increase influenza vaccination.

HCWs were given an unacceptable, unjustified and unwelcome choice, and it was one that had close to zero medical justification, demonstrating its ulterior purpose: driving up vaccination rates in the face of a clear collective agreement entitlement to refuse an unwanted vaccine. The VOM policy was contrary to the collective agreement, it conflicted with the collective agreement, and it was illogical and unreasonable. Arbitrator Hayes had concluded it was completely improper, and the Association urged that I reach the same result. The Association asked that both its grievances be upheld and the VOM policy struck. The Association asked me to remain seized with the implementation of my award.

Submissions of St. Michael's

In St. Michael's submission, the case for the VOM policy was straightforward: nosocomial influenza caused serious illness and sometimes death. HCWs can

transmit influenza to patients. Vaccination reduced the risk of HCWs becoming infected with influenza and, therefore, reduced the risk of HCWs transmitting influenza. Masks were effective as source control – they prevented transmission of influenza. And masks served as a reasonable alternative for HCWs who chose not to vaccinate.

Origin of the VOM policy at St. Michael's

The TAHSN working group that drafted the VOM policy was constituted to discuss options and make recommendations on how to best reduce nosocomial influenza. Increasing vaccination rates was the obvious first step because influenza vaccination provided protection. But the effort was unsuccessful. Notwithstanding various initiatives, influenza vaccination rates remained static. The working group exercise, involving a multi-disciplinary expert team, St. Michael's submitted, took the task seriously and directed considerable resources to it.

In the meantime, the evidence indicated – the four cRCTs in particular – that the burden of HCW-associated influenza was significant. One of the main contributors to the TAHSN report, and a witness called by St. Michael's, Dr. Allison McGeer, testified as follows: "Don't know that I can adequately represent hours and hours of discussion but I think that the focus of the committee became on what the least intrusive thing we could do...[to]...provide the best protection we could give to the patients in hospital from influenza." Dr. McGeer was looking for an alternative "to protect patients at the same time as trying to be the least intrusive to workers."

That meant masking. There was, Dr. McGeer testified, and wrote in her report:

"...evidence that masks, especially when combined with good hygiene, reduce the risk of infection to exposed persons; that is, that they can be expected to confer some protection against healthcare-associated influenza in unvaccinated HCWs."

Indeed there was evidence that masking worked to prevent transmission of influenza and it was quite possibly as "effective as vaccine in protecting patients from influenza." Masking was especially important, and necessary, St. Michael's argued, as some influenza was transmitted by asymptomatic HCWs. The VOM policy was, therefore, properly arrived at: grounded in scientific evidence and carefully calibrated to balance interests.

All of this, St. Michael's argued, had been established in the evidence of its witnesses – internationally recognized experts and persons with subject matter expertise – whose evidence St. Michael's counsel carefully and comprehensively reviewed. The TAHSN report was not uncritically accepted. Its findings were carefully reviewed by epidemiologist Dr. Matthew Muller, St. Michael's Director of Infection Prevention and Control.

As Dr. Muller testified, "when I saw the results…it really increased my urgency about the fact that…perhaps to some extent we had been complacent…and thought that, if these interventions can save patient lives in the manner that was demonstrated in those cluster randomized trials, this is something we should be taking a different approach to this problem and we should have started yesterday essentially." Dr.

Muller considered the differences in LTC facilities and acute hospitals and took notice of the biological plausibility of HCW vaccination reducing influenza among inpatients. He was also persuaded by some of the conclusions reached in some of the other literature including by Ahmed et al; indicating that HCW vaccination "can enhance patient safety."

Dr. Muller was not in favour of a mandatory vaccination program – although he understood that the only guaranteed method of substantially increasing influenza vaccination was by making it a condition of service – normative in the United States. He understood that a compromise position – VOM – had achieved some success in British Columbia – meaning that vaccination rates had increased – and determined that it was both a useful and appropriate compromise for St. Michael's. His research satisfied him that masks were a good means of source control and could interrupt influenza transmission. Simply put, "by wearing a mask, unvaccinated healthcare workers will protect patients from influenza, given the proven ability of masks to contain secretions, by preventing transmission of influenza from healthcare workers with asymptomatic or subclinical illness who are shedding virus, and from healthcare workers who continue to work despite significant symptoms of influenza."

Accordingly, Dr. Muller recommended that St. Michael's adopt a VOM policy, and a widespread and collegial process was then undertaken where the policy was

presented and discussed: "...we felt that both the vaccine and the mask would protect patients."

The VOM policy in Practice

It was, St. Michael's insisted, entirely up to individual HCWs to decide whether to vaccinate or mask, and nothing in the administration of the policy – discussed in the evidence and submissions – could be fairly described as intrusive or coercive. HCWs at St. Michael's, for example, were not required to mask for the entire season but only that part of the period when influenza activity was the most significant (on average about 10 weeks a year).

St. Michael's rejected the evidence of the nurses who testified about difficulties in wearing the mask as well as the asserted concerns about interference with patient care. It noted that no HCW has been disciplined for non-compliance. In terms of mismatch years, while timing was problematical – the mismatch may not be evident until later in the influenza season – the amended VOM policy allows St. Michael's to require universal masking, if need be. An amendment to a related policy, referred to above, invites unvaccinated visitors to the hospital to wear masks.

Justification

Much of the evidence, St. Michael's argued, was accepted and non-controversial.

HCWs can be infected with influenza. HCWs can transmit influenza to their patients.

Influenza causes serious illness and death. Nosocomial influenza is a serious

problem, and one that must be addressed even if precise numbers of patients infected by unvaccinated HCWs is not readily ascertainable.

At the very least, the four cRCTs provided evidence of the problem and pointed the way to a solution. Vaccination was the first step. Association witnesses acknowledged as much – it protected HCWs from influenza. Although not perfect, it was the best protection available. And even in mismatch years, except in the rare and extreme case of a complete mismatch, vaccinations provide some protection, and that is obviously better than no protection. But if an HCW decided against vaccination, then VOM was a reasonable alternative, one that conferred protection against nosocomial influenza.

The four cRCTs

The four cRCTs, followed by a fifth, referred to as the Dutch RCT, unambiguously established, in St. Michael's view, that vaccinating HCWs against influenza protected patients. While the Cochrane Review took issue with the four cRCTs, and found that the effect size was too big to be real, that criticism was, St. Michael's argued, unfounded. Dr. McGeer rebutted the Cochrane Review, and its finding that there was "no evidence" that vaccinating healthcare workers protects patients in their care in her appendix to the TAHSN report and in her evidence in these proceedings: "There is substantial evidence increasing vaccination rates in healthcare workers results in reduced mortality during influenza season in the residents they care for."

Others who had looked into it, and reference was made to various studies, concurred: influenza vaccination can and does enhance patient safety, a point which, St. Michael's noted, the Association experts did not dispute. Equally important, Dr. De Serres's conclusions in the *Plos One* article had been thoroughly rebutted by St. Michael's expert Dr. Reka Gustafson. St. Michael's urged me to adopt her evidence and conclude likewise. Additional data that St. Michael's reviewed – for example, some observational studies – supported the VOM policy.

Asymptomatic Transmission

People transmit influenza before they know they are sick. The extent of asymptomatic transmission is difficult to establish, but the weight of the evidence, nevertheless, St. Michael's argued, is that it occurs. It is also the case that some HCWs, even though it was contrary to established policy, work while sick (presenteeism). In St. Michael's view, this was another reason to require unvaccinated HCWS to mask: it protected patients.

Masking

In St. Michael's submission, masks prevent unvaccinated HCWs from transmitting influenza. It also protected them from acquiring it. While there was not a lot of evidence demonstrating the efficacy of masking as source control, what there was – and St. Michael's reviewed a number of studies – established that masking worked.

Standard of Care

The medical data supported HCW immunization but so too, increasingly, did the standard of care, and this was especially important in an acute care institution like St. Michael's, where the patient population was particularly vulnerable. The CDC recommended it. Canada's National Advisory Committee on Immunization described HCW influenza vaccination as "an essential component of the standard of care." The Provincial Infectious Diseases Advisory Committee of Public Health Ontario recommended that influenza vaccination be a condition of HCW employment. Other organizations indicating support of one kind or another included the Ontario Medical Association, Toronto Public Health, the Canadian Nurses Association and the Registered Nurses Association of Ontario. Standards of care, St. Michael's argued, matter, and there was little question that influenza vaccination was appropriate and approved.

Not Inconsistent with or Contrary to the Collective Agreement

In St. Michael's submission, there was no inconsistency between the VOM policy and the collective agreement, and it was definitely not contrary to any collective agreement provision. The VOM policy gave effect to the parties' shared obligation to provide the best possible care and health protection for patients. It was based on good evidence – and in health and safety matters absolute scientific certainty was not a precondition to taking steps to reduce risks to protect HCWs and patients. St. Michael's was well within its negotiated rights to require HCWs to wear protective equipment.

The parties agreed that the influenza vaccine may be beneficial for patients and HCWs – they said so in the collective agreement – and this expressed their shared view that it was an appropriate medical intervention and established that the VOM policy was not only collective agreement-compliant but reasonable. And perhaps most importantly of all, Article 18.07(c) was not impacted because the influenza vaccine was not "required". No one was ordered to take the vaccine. No one was disciplined for not taking the vaccine. There was no inconsistency, in St. Michael's view, between a policy that allows HCWs a choice between vaccination and masking and collective agreement provisions where the parties agree that vaccination may be beneficial for HCWs and patients.

VOM Policy Reasonable

The VOM policy provided HCWs with a choice: they could elect between two meaningful options. They could vaccinate or they could mask. Offering a choice, St. Michael's argued, was the exact opposite of coercion and exemplified reasonableness. All choice was subject to influence, but St. Michael's preference for vaccination did not affect the voluntariness of the decision being made. The choice may be difficult, but it was still a choice. That was the finding of Arbitrator Diebolt's in *Health Employers Assn. of B.C.* (2013) 237 LAC (4th) 1 ("the Diebolt Award").

The Diebolt Award

A VOM policy was introduced in British Columbia after efforts to increase voluntary influenza vaccination rates were unsuccessful. It was grieved. Arbitrator Diebolt found that programs that increased HCW influenza immunization were reasonable:

Pausing here, in my view, the facts that: (1) influenza can be a serious, even fatal, disease; (2) that immunization reduces the probability of contracting the disease, and (3) that immunization of health care workers reduces transmission of influenza to patients all militate strongly in favour of a conclusion that an immunization program that increases the rate of healthcare immunization is a reasonable policy (at para. 205).

That left outstanding the contested policy: VOM. Arbitrator Diebolt accepted the evidence that had been led that VOM policies increase immunization rates. He also accepted that masking provided "some patient protection" (at para. 208).

That said, it would be troubling if the only purpose or effect of the Policy's masking component were to motivate health care workers to immunize. In that event, masking would only be a coercive tool. On all the evidence, however, I am persuaded that masking has a patient safety purpose and effect and also an accommodative purpose for health care workers who conscientiously object to immunization (at para. 207).

Accordingly, Arbitrator Diebolt upheld the VOM policy and dismissed the grievance, and this result, for these reasons, was urged upon me in this case.

Speaking of arbitral results, St. Michael's argued that the Hayes Award not be followed. As indicated at the outset, I have concluded that the Hayes Award, in its most material respects, is on all fours with this case. That being said, there are some differences worth pointing out, especially as they go to Arbitrator Hayes characterizing the policy as coercive as a principal basis for his determination that the VOM policy was unreasonable (in contrast to the finding here).

The Sault Area Hospital set a 100% target vaccination rate. No target was set at St. Michael's. The Sault Area Hospital required VOM during the entire influenza season. St. Michael's requires it only during the most active phase. Sault Area Hospital actually implemented its VOM policy the month before the TAHSN report became effective. St. Michael's had an epidemiologist on staff who took the time to study it and consult with colleagues. St. Michael's counsel also pointed to some differences in the evidence of the HCWs who testified in the Sault Area Hospital case and the ones who testified in this proceeding and suggested that there was no evidence in this case of anything that could be remotely described as coercive. For all these reasons, and others, St. Michael's argued that the Hayes Award could not and should not be followed. Certainly, there was no basis to adopt that award's principal finding that the VOM policy in place at the Sault Area Hospital was coercive and that masks were cast as the consequence for non-compliance.

Conclusion to Saint Michael's Submissions

The VOM policy had one goal: putting patients first. It was grounded in the evidence, evidence that established that encouraging and increasing HCW vaccination rates reduced nosocomial influenza. Experience elsewhere indicated that vaccination rates rise in response to introduction of a VOM policy, and that additional protection was obtained by requiring unvaccinated HCWs to wear masks.

Ultimately, there was no final answer in science, but no reason to wait for better evidence or the perfect study. Doing nothing was not a satisfactory response when

active steps could and should be taken to promote patient welfare. The four cRCTS, and the other evidence St. Michael's relied upon, might not produce exact quantitative results that could be extrapolated across an entire health care system, but in total convincingly established that influenza transmission was reduced when HCWs vaccinate. The burden of preventable disease was addressed by encouraging influenza vaccination and by requiring masking for those HCWs who chose not to take advantage of the vaccine. Both provided protection against nosocomial influenza infection, a clearly desirable goal. And both did so in a reasonable and lawful manner that appropriately balanced all interests. St. Michael's asked that the grievances be dismissed.

Decision

Having carefully considered the evidence and arguments of the parties, I am of the view that the grievances must be allowed. The VOM policy – unilaterally developed and implemented by St. Michael's – comes directly within arbitral purview.

For the reasons that follow, the VOM policy is inconsistent with and contrary to the collective agreement and it is also unreasonable.

General Observations

The evidence establishes that, more or less, and other than the rare case of a complete mismatch year, influenza vaccination provides some – varying – degree of protection. It makes sense, therefore, that hospitals such as St. Michael's would want to encourage influenza vaccination as it is axiomatic that if one does not contract

influenza one cannot pass it on. It is hardly surprising, in these circumstances, that there is a general consensus in the medical establishment in favour of influenza vaccination. The parties have, however, agreed that HCWs can refuse an unwanted vaccination. And as Dr. Muller and others testified, individuals have all sorts of reasons to do so, the legitimacy of which has not been brought into question. Indeed, influenza vaccination is not required by St. Michael's.

The VOM policy, however, fails for a number of reasons: There is insufficient evidence of a problem to be addressed – nosocomial influenza transmitted by unvaccinated HCWs. There is insufficient evidence that asymptomatic or presymptomatic transmission is a significant source of infection. And there is insufficient evidence that masking prevents the spread of influenza.

In the face of all of this, the "ask" that HCWs wear a mask for their entire shift for possibly months on end when entirely free of symptoms is completely unreasonable and is contrary to the collective agreement.

In general, where matters of patient safety are concerned, caution is in order, and appropriate. Better to be safe than sorry. To be sure, one need not await all the evidence before taking appropriate steps. Nor is it necessary to await perfect evidence. Vaccinations are the best tool in the box to protect against influenza. A policy encouraging HCWs to vaccinate makes obvious sense (as does encouraging

hand washing hygiene, and discouraging people from coming to work when they are sick). However, the VOM policy fails for a number of reasons as set out below.

Before turning to the reasons why the grievances have been upheld, one assertion needs to be put to rest. The VOM policy, for all of its deficiencies, does not fail because it is coercive. That submission is completely rejected.

Not Coercive

It is correct that St. Michael's HCWs are not required to submit to the annual influenza vaccination. But their right to refuse the vaccine is interfered with by an unreasonable policy. However, unlike the Hayes Award, I cannot conclude that the VOM policy is coercive. This finding requires elaboration.

In the Hayes Award, the evidence clearly established that the Sault Area Hospital determined that there was a problem – low influenza vaccination rates – and went about devising a solution to address that problem. The minutes of a hospital meeting held on January 30, 2013 say it all: "Need to determine the most aggressive stance that we can take...to either mandate staff to comply, or impose consequences (i.e. masks that they would be charged for)" (at para. 52). Quite clearly, the solution to the problem at the Sault Area Hospital had nothing to do with using masks to prevent transmission and everything to do with using the threat of masking, and charging HCWs for them, to increase vaccination rates.

When an arbitrarily set voluntary immunization goal failed to be reached, the Sault Area Hospital implemented its policy. Little or no attention was paid to evidence about masking efficacy in preventing nosocomial influenza. Rather, when the carrot of encouraging voluntary vaccination failed, the decision was made to turn to the stick, and that was imposing a masking obligation on unvaccinated HCWs as a punitive and coercive measure.

Moreover, at Sault Area Hospital the VOM policy was pursued notwithstanding concerns raised by senior medical staff. If the target immunization rate of 70% was not achieved, the VOM policy would follow. And it was not, and it did. The target of 70% was an arbitrary number in and of itself. The objective – increasing HCW influenza vaccination – was there, and here, entirely legitimate, but the means employed there to achieve that objective was highly colourable, as Arbitrator Hayes found. The situation at St. Michael's – the backstory – is completely different.

In my view, the evidence is absolutely clear that the decision to introduce the VOM policy at St. Michael's was made in pursuit of entirely reasonable objectives: to increase vaccination levels and thereby prevent nosocomial influenza based on a good-faith belief that the four cRCTs established a persuasive link between increased HCW influenza vaccination and reduced morbidity and mortality, and that masking was a reasonable alternative, providing some protection for patients when HCWs declined influenza vaccination. That was, in a nutshell, the reasons that informed the decision that was made.

While Arbitrator Hayes concluded on the location-specific evidence before him that masking was intended to coerce Sault Area Hospital HCWs to vaccinate, I do not reach the same conclusion. I conclude that St. Michael's introduced and defended its policy because it believed it to be in the interest of patients. I accept Dr. Muller's evidence on this point:

...I can say categorically that it was never my intention to shame or blame anyone by implementing this type of policy at St. Mikes. I would go further and say that on the different committees and groups that I've sat at where the policy was developed or presented or refined, every effort was made to avoid shaming or blaming, and the intention of the policy was always focused on patient and staff safety. So, I can say that absolutely.

I think that the mask was selected because of our belief that it affords some protection against influenza, both to the person wearing the mask and the people around the person wearing the mask. So, again, it acts as a piece of personal protective equipment that protects the person but it's also a form of source control. So, if that person were to have asymptomatic flu or develop mild symptoms of flu which they don't recognize or to have more significant symptoms which they choose to ignore, for whatever reason, that this could protect the people around them.

And I think we wanted to present health care workers with a real choice which means both choices had to be able to protect patients from flu, although our preference through all of this was to have more health care workers vaccinated.

So, the best evidence for vaccinating health care workers, we have the four cluster randomized trials as well as the other evidence that we've gone over in detail. We don't have four cluster randomized trials of masking but we have I think sound biologic rationale and some study data showing that masks should be effective....

So, by giving health care workers two choices, one is the vaccine and one is the mask, it means that every health care worker can make their own decision...

St. Michael's approved the VOM policy because vaccinations do (imperfectly) work and therefore reduce influenza incidence. Encouraging vaccination is a good thing. Masking may not provide perfect protection but it is better than nothing. Taken together, St. Michael's concluded that it could deal with a problem – nosocomial

influenza – and do so in a measured and balanced fashion. There is no evidence of coercion.

There is also no evidence that masking was identified as a punishment or stigma to encourage vaccination. Nevertheless, the VOM policy does impinge on the collective agreement, as set out above, and fails the reasonableness test. Acting in good faith is not enough alone to establish that a unilateral employer policy is reasonable where, as here, it is inconsistent with the collective agreement and where it sits on a shaky evidentiary foundation.

The Reasonableness Test

No one disputes that St. Michael's has the right and responsibility to take appropriate precautions to protect the health and safety of patients. But in this case, the steps taken – the VOM policy – are subject to a reasonableness test.

As is provided in the jurisprudence, and dealing with only the relevant parts of what is commonly referred to as *KVP* ((1965) 16 LAC 73), arbitrators must apply their labour relations expertise, consider context and decide whether a contested policy strikes a reasonable balance. In reaching a conclusion, among the factors to be considered is the nature of the interests at stake, whether there are less intrusive means available to achieve the objective, and the impact of the particular policy on employees. The policy must also not be inconsistent with or contrary to the collective agreement.

A VOM policy cannot be upheld simply because it is supported by good faith and some evidence. To satisfy a reasonableness test, objective evidence is required of a real problem that will be addressed by a specific solution. And when the evidence is examined, these factual and legal elements are absent. For the reasons that follow, I am left to conclude that the VOM policy violates, and is inconsistent, with the collective agreement, and is unreasonable.

Insufficient Evidence of a Problem

A useful starting point is the TAHSN report. It is, after all, the basis of the VOM policy. However, it cannot be relied upon because the evidence it cites as justification in support of the VOM policy does not withstand serious scrutiny. I am referring, of course, and in the main, to the four cRCTs.

As Dr. De Serres put it, "the four cRCTs…attribute implausibly large reductions in patient risk to HCW vaccination, casting serious doubts on their validity. (Notably, Dr. De Serres is in favour of influenza vaccination – he recommends it and is annually vaccinated.) Other persuasive evidence – for example, the Cochrane Review, generally understood to present the highest quality of analysis, supports this conclusion.

St. Michael's called Dr. Gustafson to rebut Dr. De Serres's expert evidence and publications. However, she was not an epidemiologist, and added virtually nothing to the discussion of vaccine efficacy, asymptomatic transmission, masking as source

control, or to protect the wearer, and minimal indirect evidence about the burden of nosocomial influenza in acute care. Her criticisms of Dr. De Serrres's work and conclusions fell short; they were entirely unpersuasive.

The suggestion that unvaccinated HCWs place patients at great influenza peril is, as Dr. De Serres testified, exaggerated. For example, the TAHSN report adopts the finding of one of the four cRCTS and concludes that for every 8 HCWs vaccinated, 1 patient life could be saved. If this were actually true, it would be hard to disagree with an assertion of an overwhelming public health interest in promoting influenza vaccination. But it is not true, for the reasons explained in the extremely detailed and persuasive evidence of Dr. De Serres, also as set out in his report, and in his *Plos One article*. I accept his conclusion that the assertion of 8/1 NNV is "preposterous." I accept his evidence that the four cRCTs provide impossible results from methodologically flawed studies that cannot be reasonably extrapolated and applied to an acute care hospital setting. Dr. McGeer conceded that NNV of 8/1 was incorrect. It was, another St. Michael's witness wrote, "a catchy phrase," but it is not a supportable one. Obviously, and even assuming there was persuasive data on the NNV, masking plays no role in the NNV.

To the extent that the four cRCTs have value, their value is surely limited to some extent by the fact that they arise in LTC, not in a major acute care hospital with a constant flow of personnel and visitors. Also, a reduction in all-cause mortality cannot be attributed to a higher vaccination rate. Influenza vaccines protect against

influenza, not all causes of death, and it is logically unpersuasive to suggest that an influenza vaccine has a much wider reach. The four cRCTs provide results that really are too good to be true. As Dr. McGeer wrote in one article, "vaccine efficacy is limited, and considerable morbidity and mortality occurs even in vaccinated persons."

The fact is, notwithstanding all of the studies, that no one can accurately report on how much, if any, nosocomial influenza is caused by unmasked or unvaccinated HCWs.

It is appropriate here to comment about some of the other new medical evidence (other than Gustafson, discussed above) relied on by St. Michael's. The new medical evidence, upon careful examination, was hardly new at all and/or subject to serious limitations and/or of questionable relevance – "smaller bricks", as one of the St. Michael's witnesses acknowledged. More seriously, some of the expert evidence advanced by St. Michael's was particularly problematic and actually inconsistent with the most basic academic norms.

It would serve no useful purpose to particularize this evidence in detail other than to observe that two of the principal experts advanced by St. Michael's put forward in their joint report propositions without evidentiary support, which was certainly troubling, but making matters worse, some of what they wrote was simply incorrect. On too many occasions their noted citations stood for the exact opposite of the point

being made – "I am going to agree with you that this is not the best reference..." – or, considered most favourably, completely overstated the proposition being advanced. There were too many apologies when errors were brought to their attention. As one of these witnesses testified, "we may have been sloppy...." Everyone makes mistakes, but this went beyond the pale. I completely disregard their report.

As the first step in establishing that the VOM policy is reasonable, St. Michael's had to establish that vaccination reduced transmission and/or that unvaccinated HCWs put patients at a greater risk of contracting influenza. It has not met this evidentiary burden.

There is no question that HCWs have an obligation to do what they can to protect their patients from nosocomial influenza. And there is no question that influenza vaccination provides some protection except in those circumstances when it provides no or little protection. However, on the evidence led in this proceeding, the burden of disease presented by unvaccinated HCWs is absent.

Vaccination obviously reduces some influenza transmission – except in complete mismatch years. But its efficacy varies, and every year both vaccinated and unvaccinated HCWs can transmit influenza while both asymptomatic and symptomatic. But the actual extent to which influenza vaccination reduces transmission is open to question and debate. As Dr. Michael Gardam wrote in his report, we are "only able to say with certainty that influenza transmission occurs

from close contact with infected individuals. The relative particulars of what this means...were unknown."

As one study indicated, mandatory influenza vaccination of HCWs is of "uncertain clinical impact." In another study, a hospital achieved a 97% influenza vaccination rate but experienced no reduction in sick leave. Another study noted, "we cannot say for certain whether there was a change due to influenza vaccination." Anecdotal evidence was presented that influenza outbreaks can occur in highly vaccinated and isolated populations. Needless to say, there are other studies indicating the exact opposite. On balance, though, the case establishing a link between vaccination and prevention of nosocomial influenza was not made.

It is also noteworthy that there is little evidence of any positive impact on patient care outcomes as a result of the VOM policy. Both prior to and after introduction of the policy, St. Michael's experienced, and continues to experience, influenza outbreaks. In particular, there was one influenza outbreak before the VOM policy was introduced – in 2011 – and there have been several since. The VOM policy, as earlier noted, was upheld in British Columbia, but evidence from that jurisdiction suggests that it does not achieve the stated objective. See *British Columbia Influenza Surveillance Bulletin, 2014-15, No. 21*.

The four cRCTs are controversial; so too are the studies taking issue with them. Even those studies and reviews supporting vaccination report that the quality of evidence that HCW vaccination reduces mortality and influenza cases in patients of healthcare facilities is "moderate and low." At the end of the day, the evidence does not support the proposition that nosocomial influenza is associated with unvaccinated HCWs – the evidence simply does not demonstrate that there is a specific burden of disease associated with unvaccinated HCWs

While reasonable efforts to reduce risk in public health need not await scientific certainty, the fact of the matter is that the extent of the problem is unknown; we do not know the burden of disease for nosocomial influenza, and we do not know what proportion is caused by HCWs, vaccinated or not. We also do not know NNV. We do know that it is not 8/1, the number cited in the TAHSN report. All of this evidence – really absence of evidence – goes to the heart of reasonableness.

In any event, even assuming for the sake of argument that there was adequate or sufficient evidence that vaccination prevented or significantly reduced nosocomial influenza, the VOM policy still fails for a number of reasons, beginning with the fact that the evidence does not support masking as source control for unvaccinated HCWs, thereby putting the policy's reasonableness directly into question.

Masking - Not a Solution

There is no persuasive evidence establishing a conclusive relationship between the use of surgical and procedural masks and protection against influenza transmission.

The logical flaws in the policy are discussed below.

St. Michael's did not call a masking expert, and urged me to reject the evidence of the expert called by the Association. However, the preponderance of the masking evidence is compelling – surgical and procedural masks are extremely limited in terms of source control: they do not prevent the transmission of the influenza virus. The two masks introduced into evidence clearly demonstrate why that would be the case. What protection they provide is self-evidently limited by their construction and how they sit on a human face.

I accept Professor Brosseau's evidence. She is an expert on masking. St. Michael's attempted to discredit her because of her advocacy for workers: "I am interested in protecting workers," she testified. And there is nothing in that, in my view, that undermines her testimony and expert report in any way: both were evidence-based, convincing and corroborated.

The bin-Reza systemic review concluded as follows: "None of the studies established a conclusive relationship between mask/respirator use and protection against influenza transmission." Dr. Gardam agreed: "The use of surgical or procedural masks is neither a viable nor scientifically supported alternative." And furthermore: "the evidence supporting people wearing a mask during flu season is far flimsier than the four cluster randomized controlled trials supporting influenza vaccination...." To quote one of the scientific articles, the studies supporting the use of masks as source control are "underpowered." As another study concluded, "there

is little good quality evidence to support surgical masks as an effective infection protection measure...."

Yet another study observed: "there is a lack of substantial evidence to support clams that face-masks protect either patient or surgeon from infectious contamination." The CDC is categorical: "No studies have definitively shown that mask use by either infectious patients or health-care personnel prevents influenza transmission." As the CDC also stated, "while a facemask may be effective in blocking splashes and large-particle droplets, a facemask, by design, does not filter or block very small particles in the air that may be transmitted by coughs, sneezes or certain medical procedures." As another study indicated, "overall, the evidence to inform policies on mask use in HCWs is poor, with a small number of studies that is prone to reporting biases and lack of statistical power."

The best case for masking is as follows: There is "ongoing debate" about the effectiveness of surgical and procedural masks as respiratory protection devices. The evidence in favour of masking is mostly "preliminary." Or, there is "some" evidence that surgical and procedural masks "may" reduce shedding and the concentration of the influenza virus in the air and environment around the wearer (with questions about actual transmission being entirely another matter). But the fact of the matter is, because of "leakage," surgical masks do not exhibit "adequate filter performance and facial fit characteristics to be considered respiratory protection devices."

On balance, and after the most thorough review of all of the testimony, studies and reports tendered in this proceeding, and with the greatest of respect to an accomplished and respected researcher and physician, I cannot conclude that the evidence comes even close to establishing that masking may be as "effective as vaccine in protecting patients from influenza."

Masking is the acknowledged and accepted standard of care when tending to an infected patient, but the expert evidence indicates that it is of limited value to anyone as a method of source control, particularly in case of an asymptomatic HCW. The fact that there is some evidence, for example, that masking can prevent transmission of large droplets – unlikely in asymptomatic transmission – is not enough to confer reasonableness on the policy. Little evidence – negligible evidence – cannot serve as the justification for this policy, all things considered, especially since the masking part of the VOM policy is not universalized in mismatch or bad match years. The "ask" is significant, but the benefit is so limited that the former cannot balance the latter. Independent of any other finding in this award, the VOM policy fails on a reasonableness basis for these reasons alone.

Asymptomatic Transmission Overstated

The argument was advanced by St. Michael's that masking was especially important to reduce the risk of nosocomial influenza by asymptomatic or pre-symptomatic HCWs. At best, the evidence indicates that asymptomatic transmission is not a significant factor in nosocomial influenza. As Dr. Muller testified, asymptomatic

transmission could not be ruled out, but "the likelihood of transmission is dramatically higher when you're coughing or sneezing." There is, nevertheless, some evidence that masking can prevent transmission of large droplets. However, in the same way that there is no credible quantification of the burden of disease attributable to unvaccinated HCWs, there is no credible quantification of the rate of infection that might occur in the asymptomatic period.

The degree to which asymptomatic individuals transmit influenza to others is, more or less, unknown: "Silent spreaders...may be less important in the spread of influenza epidemics than previously thought." As Dr. Eleni Patrozou concluded following her systemic review: "Based on the available literature, we found that there is scant, if any, evidence that asymptomatic or pre-symptomatic individuals play an important role in influenza transmission." As Dr. De Serres wrote, "The evidence that pre-symptomatic or asymptomatic infections contribute substantially to influenza transmission remains scant."

In general, secretion and symptoms are parallel, often rising up on a logarithmic curve. Carrat and others have demonstrated that asymptomatic transmission is unlikely to be of clinical significance. As Carrat observed, "viral shedding, the surrogate marker of infectiousness, was of moderate duration, and its dynamics largely overlapped those of systemic symptoms...." Best PPE practices indicate that individuals be required to wear protective equipment when it is necessary and appropriate for them to do so, and VOM while asymptomatic would not meet this

test. Symptomatic individuals, problems with presenteeism aside, should not be at work (and the policies requiring this should be vigorously enforced). Moreover, and to repeat, if masking really did prevent asymptomatic transmission, the only logical conclusion that should be drawn, given general vaccine effectiveness, is that everyone should mask all the time during the influenza season, whether vaccinated or not.

The masking "ask" is significant, but the benefit is so limited that the former cannot balance the latter. Two nurses testified about the impact of the VOM policy on them and their patients. I accept their evidence, which was corroborated in some of the literature. For example, Dr. Priya Sampathkumar, Chair of the Mayo Clinic's Immunization and Control Committee, has observed, "you get hot under the masks, patients can't understand what you're saying sometimes...they are not patient friendly, and they can be scary to patients." The Mayo Clinic does not require its 32,000 HCWs to mask if unvaccinated – approximately 8 or 9 percent of the eligible workforce. Infectious HCWs are told to stay home when they are getting sick, and when they are sick. There is no evidence before me that could lead me to find, as was the case with Arbitrator Diebolt, that wearing a mask is accommodative.

On balance, I am persuaded by the evidence and accept the conclusion of the experts that there is, indeed, scant evidence of asymptomatic nosocomial influenza transmission. It is unlikely to be of clinical significance. Accordingly, requiring unvaccinated HCWs to wear surgical or procedural masks – notwithstanding the

inherent illogicality of it all – is unreasonable, and so, therefore, is the policy compelling it.

Illogical and Unsustainable

Influenza is highly contagious. Hospital patients are highly vulnerable. These are reasons to encourage vaccination – generally regarded as safe and almost always providing some degree of protection. However, both vaccinated and unvaccinated HCWs can transmit it and asymptomatic transmission can occur. If donning a surgical or procedural mask provided protection, the conclusion should be inevitable that everyone should mask – at least until a vaccine with one hundred percent effectiveness, or close to it, becomes available. That is not, however, required illustrating how illogical the VOM policy actually is.

At the very least, in complete mismatch years, the only logical application of the VOM policy would require everyone to mask, as the vaccine confers no or little protection – but even that is not done. In years of a complete mismatch, or a generally ineffective vaccine, St. Michael's did not require all HCWs to mask. If the vaccine were ineffective, or exceptionally of almost no value, and if masking provided protection, the logical inference would be that all HCWs should don masks because vaccinated HCWs would be at least as susceptible to influenza as unvaccinated HCWs. But they were not required to do so, leading to the irresistible conclusion that the policy is illogical and makes no sense – the exact opposite of it

being reasonable. There are a number of collateral reasons that support this conclusion.

In January 2018, St. Michael's began asking unvaccinated visitors to mask, but its efforts in this regard – no questions are asked about visitor vaccination status – are hardly muscular. Unvaccinated visitors logically present the same risk, and possibly a greater one, than unvaccinated HCWs. If masking is truly effective as source control, how can it be that they too are not required to mask? The answer to this question reveals that the masking part of the policy is, as one St. Michael's witness admitted, "weak." As Dr. Muller also testified, "there's far more evidence supporting influenza vaccination itself to protect us from flu transmission than there is for a mask." To require only unvaccinated HCWs to mask in the case of a complete mismatch, or in a year when the vaccine is of marginal utility, is simply bizarre and completely inconsistent with any notion of reasonableness.

The VOM policy is also undermined by real questions of enforcement. Assuming an average St. Michael's vaccination rate of 70%, approximately 30% of HCWs, one would expect, would be wearing masks at one point or another. However, as Dr. Muller testified, "you ought to see 30 percent of people wearing a mask...people felt we didn't see 30 percent of people...." As Dr. Muller explained, differences in vaccination rates between full-, part-time and casual employees may provide some explanation, but one is left with the irresistible inference that on the masking side of the equation, enforcement was not a hospital priority. Clinical HCWs work throughout the hospital, and the policy is expansive in its geographic scope,

meaning that one would expect that if the policy were enforced unvaccinated HCWs would wear their masks virtually non-stop and would, therefore, be highly visible.

And I can only conclude that all of this buttresses the evidence – and at least tacit understanding – about the true effectiveness of masks as source control.

Inconsistent with and/or Contrary to the Collective Agreement

The collective agreement is clear: Article 18.07(c) states: "Hospitals recognize that nurses have the right to refuse any required vaccine." That right is categorical but the VOM policy, I find, interferes with the exercise of that right. Accordingly, and to this limited extent, there is a breach, but it is one that is particularly made meaningful by the fact that the VOM policy itself is unreasonable. Taken together – a collective agreement breach – both central and local – and an unreasonable policy – the grievances must succeed.

Conclusion

It was noted at the outset that this case was, in large measure, a repeat of the one put before Arbitrator Hayes. It is not, therefore, surprising that there is an identical outcome. Ultimately, I agree with Arbitrator Hayes: "There is scant scientific evidence concerning asymptomatic transmission, and, also, scant scientific evidence of the use of masks in reducing the transmission of the virus to patients" (at para. 329). To be sure, there is another authority on point, and the decision in that case deserves respect. But it was a different case with a completely different evidentiary focus. It is not a result that can be followed.

One day, an influenza vaccine like MMR may be developed, one that is close to 100% effective. To paraphrase Dr. Gardam, if a better vaccine and more robust literature about influenza-specific patient outcomes were available, the entire matter might be appropriately revisited. For the time being, however, the case for the VOM policy fails and the grievances allowed. I find St. Michael's VOM policy contrary to the collective agreement and unreasonable. St. Michael's is required, immediately, to rescind its VOM policy. I remain seized with respect to the implementation of this award.

DATED at Toronto this 6th day of September 2018.

"William Kaplan"

William Kaplan, Sole Arbitrator