

Trend of Parental Refusal or Delay of Childhood Vaccinations

Meagan Marie Daoust

Abstract

The healthcare trend of parental refusal or delay of childhood vaccinations will be investigated through a complex Cynefin Framework component in an economic and educational context, allowing patterns to emerge that suggest recommendations of change for the RN role and healthcare system. As a major contributing factor adding complexity to this trend, social media is heavily used for health related knowledge, making it is difficult to determine which information is most trustworthy. Missed opportunities for immunization can result, leading to economic and health consequences for the healthcare system and population. Through analysis of the powerful impact social media has on this evolving trend and public health, an upstream recommendation for RNs to respond with is to utilize reliable social media to the parents' advantage within practice. The healthcare system should focus on incorporating vaccine-related education into existing programs and classes offered to parents, and implementing new vaccine classes for the public.

Introduction

Every parent in Canada has the right to choose if they want to vaccinate his or her child against vaccine-preventable diseases (Born, Yiu, & Sullivan, 2014; Diekema, 2005, p. 1429). As a result, parents are free to refuse or delay this preventive intervention, which has successfully reduced and even eliminated the occurrence of multiple communicable diseases in children around the world (Capron, 2015, p. 12; Diekema, 2005, p. 1429; Pat &

Bass, 2015, pp. 20-21). Despite protection to the child and benefit to the population as a whole, objections and delays for vaccination are still present and remain a public health issue in Canada, as coverage rates do not meet national targets according to recent statistics (Public Health Agency of Canada [PHAC], 2014, "Discussion", para. 1; Winsa, 2015, para. 2). In order to understand this controversial trend, the impact of social media and the relevance of public health will be analyzed using the complex Cynefin Framework component and an economic and educational perspective from Ray's Theory of Bureaucratic Caring. From this analysis, strategies for decreasing parental refusal or delay of childhood vaccinations will be recommended for the registered nurse (RN) and the healthcare system.

Introduction to Contexts for Analysis and Healthcare System Trend Complexity in the Cynefin Framework

The Cynefin Framework draws its roots from complexity science, in which it is understood that organizational systems are unpredictable, constantly changing, and require a new way of thinking about responding within the system (Ray, 1998, p. 91; Snowden & Boone, 2007, pp. 69-70; Tremblay & Richard, 2011, pp. 380-381; Van Beurden, Kia, Zask, Dietrich, & Rose, 2013, pp. 74-76). As this framework offers a complexity science perspective, trends in healthcare can be placed into one of five domains, which can then be utilized to guide decision-making within the system (Snowden & Boone, 2007, pp. 69-70; Sturmberg & Martin, 2008, pp. 769-770; Van Beurden et al., 2013, p. 76). Out of these five domains, complexity is most prevalent within healthcare systems, where emerging trends are multifactorial and the relationship between cause and effect is evident only in hindsight (Snowden & Boone, 2007, pp. 72-74; Sturmberg & Martin,

2008, p. 769; Van Beurden et al., 2013, pp. 76-77). There is no single best-practice answer when using this domain, as patterns and knowledge must be allowed to emerge through experimentation, creativity, and open-mindedness (Snowden & Boone, 2007, pp. 72-74; Van Beurden et al., 2013, p. 77). As a result, the key to making change is 'probing' to understand contextual factors influencing the situation, 'sensing' to evaluate emerging patterns, and finally, 'responding' to decide how to work with these emerging patterns within the modern healthcare system (Snowden & Boone, 2007, p. 74; Van Beurden et al., 2013, p. 77).

Ray's Theory of Bureaucratic Caring

Through research and reflection on modern hospital culture the Theory of Bureaucratic Caring was developed, which recognizes that nursing practice now occurs in bureaucratic organizations, and results in nurses struggling to balance care as a corporation and care as relational (Ray, 1989, pp. 37-40; Ray & Turkel, 2010, p. 473; Turkel, 2007, pp. 57-58). From this perspective, caring within complex organizations is viewed as contextual and influenced by the synthesis of bureaucratic and humanistic caring dimensions (Ray, 1989, pp. 37-40; Ray, 1998, pp. 91-92; Ray & Turkel, 2010, pp. 479-480; Turkel, 2007, pp. 58-59). As a powerful bureaucratic dimension, economic reform within the corporate nature of the healthcare system greatly impacts the meaning and ability for human caring in nursing practice, and includes contextual factors such as time and scarce resource allocation (Ray, 1989, pp. 37-40; Turkel, 2007, p. 59; Turkel & Ray, 2000, p. 307). Integrated with economics as an antithesis of caring is education as a humanistic dimension, which enhances capacity for nurse-patient relational caring through contextual factors such as intentional sharing of information and educational

programs (Ray, 1989, pp. 37-40; Ray & Turkel, 2010, pp. 479-480; Turkel, 2007, pp. 57-59). This theory, including its caring dimensions, can be utilized and interpreted in evolving complex organizations to guide future practice and enable system transformation by balancing relational caring with bureaucratic stability in healthcare system trends (Ray, 1989, pp. 40-41; Ray & Turkel, 2010, pp. 490-491; Turkel, 2007, pp. 63-64).

Healthcare System Trend

The trend of parental refusal or delay of childhood vaccinations has current significance for the population and the Canadian healthcare system (Born et al., 2014; Public Health Agency of Canada [PHAC], 2014, "Discussion", para. 1). Argued as one of the most valuable public health advancements in the 20th century, the development and delivery of vaccines and immunization programs has resulted in cumulative benefits such as decreased premature death and decreased disability from disease (Capron, 2015, p. 12; Diekema, 2005, p. 1428; Schuchat, 2011, p. 120; Whitney, Zhou, Singleton, & Schuchat, 2014, p. 352). As widespread vaccine use has occurred for over half a century, these public health successes of herd immunity have resulted in a trend of parents not understanding and witnessing the devastating consequences of the diseases that vaccines prevent (Diekema, 2005, p. 1428; Lang, 2014, p. 612; Malone & Hinman, 2003, pp. 262-263; Pat & Bass, 2015, p. 21). Lack of personal connection to these diseases, due to decreased individual risk from herd immunity, is causing an increase in concern about the safety of vaccines, including fear of side effects and adverse outcomes (Diekema, 2005, p. 1428; Leib, Liberatos, & Edwards, 2011, p. 13; Malone & Hinman, 2003, pp. 262-263; Pat & Bass, 2015, pp. 20-21). This concern for vaccine safety is facilitated by a lack of transparency to the public

regarding the high level of regulation and safety monitoring systems in place within the healthcare system, often resulting in distrust and speculation (MacDonald & Pickering, 2009; Malone & Hinman, 2003, p. 263; PHAC, 2015; Shoup, 2015, pp. 302-303).

The resulting distrust in the healthcare system has translated into decreasing vaccination rates and increasing outbreak rates of vaccine-preventable diseases, such as measles and pertussis, in Canadian children (Born et al., 2014; Leib et al., 2011, p. 14; MacDonald & Pickering, 2009, p. 1; Malone & Hinman, 2003, p. 263; Ubelacker, 2015, para. 1). While there can be many contributing reasons for this parental concern of vaccine safety and the subsequent refusal or delay of childhood vaccinations, the public is put at risk for morbidity and mortality if this trend continues (Diekema, 2005, pp. 1428-1430; Leib et al., 2011, p. 14; Pat & Bass, 2015, p. 21; Ragan & Duffy, 2012, p. 26). If more and more parents put their individual interests above those of the common good, the successes made from vaccines could be threatened, leading to more disease outbreaks and concern for the effect on public health and the healthcare system (Diekema, 2005, pp. 1428-1429; Leib et al., 2011, pp. 13-14; Malone & Hinman, 2003, p. 263). As a result of probing this trend, government, administration, and healthcare providers are called to action to investigate and sense the emerging patterns that contribute (Capron, 2015, p. 12; Diekema, 2005, pp. 1429-1430; PHAC, 2014, "Conclusion", para. 1).

Analysis of Trend

Influence of Social Media

As a contributing factor adding to the complexity of parental refusal or delay of childhood vaccinations, social media has become a heavily used channel for health related knowledge accumulation as a result of global

networking (Shoup, 2015, pp. 302-303; Ventola, 2014, p. 491). The Internet is easily accessible and allows for communication with people from around the world, which has resulted in its dramatically increased use within the last decade as an informal educational system (Tremblay & Richard, 2011, p. 381; Ventola, 2014, p. 491). However, there are many anti-vaccination websites that "disseminate erroneous information, discredit the [healthcare system] and create fear" among the public (Pat & Bass, 2015, p. 22). This presents potential benefits and risks to parents relying on the Internet for health related education, as the sites and people they are receiving information from may or may not be accurate sources. As there are many types of vaccine related websites, and the world is more connected than ever before, it becomes difficult to navigate and determine which information is most trustworthy, creating uncertainty for parents and evolution within the healthcare system (Pat & Bass, 2015, p. 22; Shoup, 2015, pp. 302-303). As a result healthcare providers may then work with parents who express hesitancy, lack of trust, or have refused to have their child vaccinated, possibly due to misinformation about vaccine safety learned from the Internet. This may present challenges for RNs, as they are not the only resource for health education, and they might be simultaneously trying to sense this emerging social media pattern while also providing contextual educational care to the family (Pat & Bass, 2015, p. 22; Ventola, 2014, p. 491). However, RNs are restricted by the economic context and influence within the healthcare system (Turkel & Ray, 2000, p. 307). Due to the "cost containment impact [on] healthcare structures and delivery of service", the value placed on nurse-patient relationships and relational caring is diminished as an outcome of time constraints (Turkel, 2007, p. 59; Turkel & Ray, 2000, p. 307). As a result, RNs

working with parents refusing or delaying vaccinations for their child might not have the time to develop a caring relationship with the family. Time constraints could hinder the RN from assessing parents' health literacy and where they received their information from, reducing the ability to provide vaccine education and thus, the ability to increase transparency of vaccine safety programs in place (Turkel & Ray, 2000, p. 309). Also, impacted by time constraints, patients feel the external economic forces within the system and the lack of time available to receive the care they deserve, possibly increasing distrust (MacDonald & Pickering, 2009, p. 1; Turkel & Ray, 2000, p. 309). In feeling that RNs do not have a lot of time or that they will be judged, parents may not divulge concerns they have about vaccine safety, which could further contribute to reliance on inaccurate social media as an educational tool. This time burden culture that has emerged due to cost saving measures has changed the way public healthcare is provided and can result in missed opportunities for childhood immunization (Shoup, 2015, pp. 302-303; Turkel & Ray, 2000, p. 307). Missed opportunities for immunization can be determined in hindsight as a possible outcome of the complex connection between the influence of social media and the economic corporatization of the healthcare system, which could possibly lead to consequences for the rest of the population.

Impact on Public Health

As increased social media use adds to the unexpected trend of parental refusal or delay of childhood vaccinations, the choice to not vaccinate on the grounds of individual agency creates a level of complexity to investigate and sense (Diekema, 2005, p. 1429; Malone & Hinman, 2003, p. 263). There is concern about the lack of transparency to the public regarding the importance of

herd immunity and the potential consequences of placing “family interest ahead of civic responsibility”, leading to higher rates of refusal or delay of vaccination (Diekema, 2005, p. 1429; MacDonald & Pickering, 2009, p. 1). If a parent is not aware of individual risk versus public benefit due to economic restraints on the healthcare system, the parent may feel more comfortable exercising their individual liberty to refuse vaccination for their child. Healthcare providers, including RNs, are just one contributing factor in this trend, as lack of time to provide patient education could result in parental inability to understand the magnitude of their choice (Born et al., 2014; Malone & Hinman, 2003, p. 263). Exercising civic responsibility is a complex choice that evolves from consideration of many factors and influence from the economic nature of the healthcare system, which can decrease ability for educational caring to inform parents’ choice. If parents chose not to vaccinate their child, the lack of immunization can have an effect on public health, which is another dynamic component to sense. While vaccinations are consented to and given on an individual basis, there is a significant public health benefit through herd immunity, protecting those who remain susceptible and those who cannot be immunized due to medical conditions (Diekema, 2005, p. 1429; Schuchat, 2011, pp. 122-123). For this reason, parents who refuse or delay having their children vaccinated present potential harm to people who are unable to be immunized, and to the healthcare system, especially if the unimmunized child contracts a vaccine-preventable disease. It is estimated that among children born during 1994-2013, the public health benefit through vaccinations will result in a “net savings of \$295 billion in direct costs and \$1.38 trillion in total societal costs” (Whitney et al., 2014, p. 352). From these estimates, it can be suggested that if children remain unimmunized, there is a potential for

increase in hospitalizations, disability from disease, and death rates, resulting in additional economic burden in the healthcare system (Schuchat, 2011, pp. 122-123; Turkel & Ray, 2000, p. 307). However, it would be difficult to determine exactly how this trend could negatively cost the healthcare system and society in the long run (Whitney et al., 2014, p. 352). Since this trend holds unpredictability for its evolution in the future, it is uncertain how it could further increase economic scarcity and reduce nurses' ability to relationally care within the healthcare system. From this analysis of social media influence on the choice to vaccinate and the complex repercussions this individual choice can have on public health, recommendations can be suggested in response to these emerging patterns.

Future Recommendations

Registered Nurse Role

Through analysis of social media influence on the evolving trend of parental refusal or delay of childhood vaccinations, an upstream recommendation for RNs to respond with is to utilize reliable social media within their practice to the parents' advantage (Shoup, 2015, pp. 302-303; Ventola, 2014, p. 495). While its use has possible risks, social media can also be used as a resource for public health education and advocacy, as reliable and accurate health websites are present on the Internet in contrast of the inaccurate websites (Diekema, 2005, p. 1430; Shoup, 2015, pp. 302-302; Ventola, 2014, p. 495). As an initial step in this recommendation, RNs should take initiative to educate themselves and become aware of both unreliable and trustworthy social media that exists, including websites that bring transparency to common vaccine safety concerns and public health benefits. If RNs are engaged in understanding the vaccine information both types of social media present, they would be better

informed and knowledgeable to then facilitate relational caring with parents under time constraints (MacDonald & Pickering, 2009, p. 1; Silversides & Sullivan, 2012, para. 7). As a second step in this recommendation, RNs should then use their knowledge and understanding of vaccine related social media to attempt engagement with parents that are expressing vaccine refusal or delay in an honest, focused, and non-judgemental manner. By remaining non-judgemental and focused, parents may be more comfortable sharing their narrative of reasoning and source of knowledge behind their concerns, allowing RNs to respond with succinct patient education, and thus, maximizing time constraints (MacDonald & Pickering, 2009, p. 1; Silversides & Sullivan, 2012, para. 7). As a final step in this recommendation, RNs should offer suggestions of specific trustworthy and comprehensive social media tools for parents to rely on for additional vaccine education. These suggestions could be made through verbal communication, a pamphlet handout list, or pointing out a poster located in a health clinic with social media links to websites such as Immunization Alberta Health and Immunize Canada (<http://immunizealberta.ca>; <http://immunize.ca/en/default.aspx>). The suggestions would make navigation through the plethora of online sources easier, encouraging parents to take an active and empowered role to improve their health literacy in areas of concern, such as vaccine safety (Shoup, 2015, p. 308; Ventola, 2014, p. 495). Recommending social media tools to parents can also empower RNs practicing with economic barriers to caring, as this would utilize time more effectively when there is a shortage (Silversides & Sullivan, 2012, para. 7; Ventola, 2014, pp. 494-495). These three suggestions should encourage RNs to demonstrate an educational context of caring to hesitant parents in a way that balances some effects of the economic

contextual burden present within the healthcare system. While the steps within this recommendation are simple, small changes have the ability to generate larger consequences within a complex system, with the hopes that this recommendation has an effect on parents' knowledge, attitude, and, ultimately, their behaviour within the healthcare system (Van Beurden et al., 2013, p. 74). As this RN recommendation has the goal of parents choosing vaccination for their child, economic and educational caring dimensions are taken into consideration, which is also the case for healthcare system recommendations.

Healthcare System

As a future strategy in responding to this trend, the healthcare system should focus on incorporating vaccine related education into existing programs and classes offered to parents, and implementing new vaccine classes for the public. This can include adding information into pre-natal and parenting classes regarding vaccine schedules, specific types of vaccines, common myths about vaccine safety, how to use social media as a resource for vaccine education, and importance of collective responsibility. Having health education presented frequently and in a group setting should be relied on to increase chances for parents to share their vaccine concerns and questions with other parents and healthcare providers, such as RNs (Ragan & Duffy, 2012, p. 25; Ventola, 2014, p. 495). This addition could encourage parents to begin thinking and actively learning about the importance of vaccination for not only their child, but for other members of the population, with the goal of overcoming possible fears (Ragan & Duffy, 2012, p. 25). Targeting specific milestones at times of access to the healthcare system during pregnancy, birth, and childhood, through existing programs and classes can

help increase vaccine transparency and trust within the healthcare system (MacDonald & Pickering, 2009, p. 1; Ragan & Duffy, 2012, p. 25; Shoup, 2015, pp. 302-303).

In addition to supplementing existing programs and classes with additional material, a session or class should be developed and offered at various health clinics to educate parents about vaccines. This session or class should be comprehensive and transparent of all relevant information related to vaccines, limited to a couple hours long, and offered during different times to accommodate parents with busy schedules. Promotion and awareness of this class can be enhanced by being listed on reliable social media, such as on the Alberta Health Services website, and through word of mouth from RNs during parent contact with the healthcare system (<http://www.albertahealthservices.ca>). While the economic context within the healthcare system is one of scarcity, funding and allocation from administration for this health promotion program would be necessary (Schuchat, 2011, pp. 122-123; Turkel & Ray, 2000, p. 310). However, the goal of health promotion programs and classes within a complex healthcare system is to trigger an upstream shift through small changes in public health literacy and resulting health behaviour (Van Beurden et al., 2013, pp. 74-75). For this reason, the economic investment needed to develop and implement this class might lead to decreased vaccine refusal, resulting in cost-saving benefits from increased vaccine coverage rates in the long run (Schuchat, 2011, pp. 122-123; Turkel & Ray, 2000, pp. 310-311). This recommendation is to encourage administrators to take an active role in decreasing the complex trend of parental refusal or delay of childhood vaccinations, and relies on working within an economic context to create opportunity for relational educational caring in the healthcare system.

Conclusion

Upon investigation of parental refusal or delay of childhood vaccinations, analysis through the Cynefin Framework complex component in an economic and educational context allows patterns to emerge that suggest recommendations of change for the RN role and healthcare system. Probing reveals that as there is a lack of vaccine transparency to the public, and as individual disease risk has decreased, parents are instead becoming concerned about the safety of vaccines. As this trend is resulting in decreased vaccination rates, sensing is done to analyze how education from unreliable social media can propel vaccine concerns and how individual liberty associated with vaccine refusal or delay can impact public health economically. From sensing, common patterns then begin to emerge, in which RNs should respond by utilizing reliable social media within their practice to parents' advantage. The healthcare system should respond to emerging patterns in an upstream approach by incorporating vaccine information into existing programs and classes, and implementing accessible vaccine educational classes for parents to attend at health clinics.

References

- Born, K., Yiu, V., & Sullivan, T. (2014, May 22). Provinces divided over mandatory vaccination for school children. *Healthy Debate*. Retrieved from <http://healthydebate.ca>
- Capron, A. M. (2015). Personal beliefs exemption from mandatory immunization of children for school entry. *Journal Of Law, Medicine & Ethics*, 43, 12-21. doi: 10.1111/jlme.12262
- Diekema, D. S. (2005). Responding to parental refusals of immunization of children. *Pediatrics*, 115(5), 1428-1431. doi: 10.1542/peds.2005-0316

- Lang, S. (2014). Measles: A tale of birth cohorts and herd immunity. *Practice Nursing, 25*(12), 611-614. doi: 10.12968/pnur.2014.25.12.611
- Leib, S., Liberatos, P., & Edwards, K. (2011). Pediatricians' experience with and response to parental vaccine safety concerns and vaccine refusals: A survey of Connecticut pediatricians. *Public Health Reports, 126*, 13-23. Retrieved from <http://www.jstor.org/stable/41639281>
- MacDonald, N., & Pickering, L. (2009). Canada's vaccine safety program. *Paediatrics & Child Health, 14*(9), 605-608. Retrieved from <http://www.cps.ca/pch>
- Malone, K. M., & Hinman, A. R. (2003). Vaccination mandates: The public health imperative and individual rights [PDF]. Retrieved from http://www.cdc.gov/vaccines/imz-managers/guides-pubs/downloads/vacc_mandates_chptr13.pdf
- Pat, F., & Bass, I. (2015). Vaccine refusal. *Contemporary Pediatrics, 32*(7), 20-23. Retrieved from <http://contemporarypediatrics.modernmedicine.com>
- Public Health Agency of Canada. (2014). *Vaccine coverage amongst adult Canadians: Results from the 2012 adult national immunization coverage (anic) survey*. Retrieved from <http://www.phac-aspc.gc.ca/im/nics-enva/vcac-cvac-eng.php>
- Public Health Agency of Canada. (2015). *Canada adverse events following immunization surveillance system (CAEFISS)*. Retrieved from <http://www.phac-aspc.gc.ca/im/vs-sv/index-eng.php>
- Ragan, P., & Duffy, D. (2012). Vaccines in childhood: Strategies to address the concerns of parents. *Journal of the American Academy of Physician Assistants, 25*(10), 22-26. doi: 10.1097/01720610-201210000-00006
- Ray, M. A. (1989). The theory of bureaucratic caring for nursing practice in the organizational culture. *Nursing*

- Administration Quarterly*, 13(2), 31-42. doi: 10.1097/00006216-198901320-00007
- Ray, M. A. (1998). Complexity and nursing science. *Nursing Science Quarterly*, 11(3), 91-93. doi: 10.1177/089431849801100302
- Ray, M. A., & Turkel, M. C. (2010). Marilyn Anne Ray's theory of bureaucratic caring. In M. E. Parker & M. C. Smith (Eds.), *Nursing theories & nursing practice* (3rd ed., pp. 472-491). Philadelphia, PA: F. A. Davis Company
- Schuchat, A. (2011). Human vaccines and their importance to public health. *Procedia in Vaccinology*, 5, 120-126. doi: 10.1016/j.provac.2011.10.008
- Shoup, J. A., Wagner, N. M., Kraus, C. R., Narwaney, K. J., Goddard, K. S., & Glanz, J. M. (2015). Development of an interactive social media tool for parents with concerns about vaccines. *Health Education & Behavior*, 42(3), 302-312. doi: 10.1177/1090198114557129
- Silversides, A., & Sullivan, T. (2012). Promoting vaccine benefits: Public health officials call for a rethink of communication with parents. *Healthy Debate*. Retrieved from <http://healthydebate.ca>
- Snowden, D. J., & Boone, M. E. (2007). A leader's framework for decision making. *Harvard Business Review OnPoint*, 85(11), 68-76. Retrieved from <https://hbr.org>
- Sturmberg, J. P., & Martin, C. M. (2008). Knowing – in medicine. *Journal of Evaluation in Clinical Practice*, 14(5), 767-770. doi: 10.1111/j.1365-2753.2008.01011.x
- Tremblay, M. C., & Richard, L. (2011). Complexity: A potential paradigm for a health promotion discipline. *Health Promotion International*, 29(2), 378-388. doi: 10.1093/heapro/daro54
- Turkel, M. C. (2007). Dr. Marilyn Ray's theory of bureaucratic caring. *International Journal for Human*

- Caring*, 11(4), 57-74. Retrieved from <http://www.humancaring.org/journal/index.htm>
- Turkel, M. C., & Ray, M. A. (2000). Relational complexity: A theory of the nurse-patient relationship within an economic context. *Nursing Science Quarterly*, 13(4), 307-313. doi: 10.1177/08943180022107843
- Ubelacker, S. (2015, November 12). Canada whooping cough outbreak hits several provinces. *The Huffington Post Canada*. Retrieved from <http://www.huffingtonpost.ca>
- Van Beurden, E. K., Kia, A. M., Zask, A., Dietrich, U., & Rose, L. (2013). Making sense in a complex landscape: How the Cynefin framework from complex adaptive systems theory can inform health promotion practice. *Health Promotion International*, 28(1), 73-83. doi:10.1093/heapro/dar089
- Ventola, C. L. (2014). Social media and health care professionals: Benefits, risks, and best practices. *P&T: A Peer-Reviewed Journal For Formulary Management*, 39(7), 491-520. Retrieved from <http://www.ptcommunity.com>
- Whitney, C. G., Zhou, F., Singleton, J., & Schuchat, A. (2014). Benefits from immunization during the vaccines for children program era – United States, 1994-2013. *Morbidity and Mortality Weekly Report*, 63(16), 352-355. Retrieved from <http://www.cdc.gov/mmwr/index.html>
- Winsa, P. (2015, March 12). Ontario failing to meet national vaccination targets. *The Hamilton Spectator*. Retrieved from <http://www.thespec.com/hamilton/>