

EvidenceBoost

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A series of essays highlighting evidence-informed management and policy options

IMPROVE IMMUNIZATION RATES WITH PATIENT REMINDER AND RECALL SYSTEMS

The Problem: Many patients think they are immunized but are not

If you asked any 12-year-old what shots she has received, she would probably wince and point to a dog-eared immunization record, received in early childhood and updated dutifully at every school immunization day. For people without such records — including most adults — the answer would be a shrug of the shoulders.

In fact, many patients think their immunizations are up to date, but they are either missing vaccinations or are behind schedule on their booster shots. Recent estimates of immunization coverage in Canada reveal that some Canadians are not in line with recommendations from the National Advisory Committee on Immunization.ⁱ For example, 98 percent of respondents to a 2002 national telephone survey thought their children were immunized, but only half were immunized according to the recommendations.ⁱ In the same survey, only half of parents with two-year-olds and one-third of parents with seven-year-olds reported their child had received all of the recommended doses of diphtheria, pertussis, tetanus, polio, measles, mumps, rubella, and Haemophilus influenzae, type B (Hib) vaccines.ⁱ

Given the complexity of immunization schedules and the sheer number of recommended vaccines, it's no wonder that patients get mixed up or forget their (or their children's) schedules altogether.ⁱⁱ That's why some immunization advocates support effective yet controversial changes to ensure high immunization levels, such as the expansion of school-entry criteria and similar requirements.

However, other solutions are more easily implemented within the status quo in Canada, where the onus for providing immunizations is on primary healthcare providers.ⁱⁱⁱ In particular, few providers use systems to remind patients of upcoming or overdue vaccinations.^{iv} These systems — known as patient reminder and recall systems — have been widely recommended,^{v-ix} as they have been shown to improve dramatically rates of immunization coverage.^{vi}

which improves the health of individual patients as well as the population by decreasing the likelihood of outbreaks. In addition, reminders can decrease costs to the system.^{x, xi, xii} In fact, immunization is among the most cost-effective public health strategies ever.^{xiii}

Strategy for Change

Nowadays, most people get immunized at their doctor's office.^{i, iv} Others go to public health clinics or, in Quebec, the Centres Local de Services Communautaires (CLSCs).^{iv} Regardless of the setting, all types of reminder and recall systems are successful at improving the number of people who are immunized.^{vi} In fact, patients who receive reminders about due or overdue vaccines are always more likely (than those not receiving reminders) to be immunized or, at the least, have up-to-date vaccinations according to national recommendations.^{vi}

Reminders can be provided through various channels, including telephone calls, letters, postcards, or in person.^{vi} They can be generic or personalized, include single or multiple reminders, and can come from individual practitioners or public health agencies, such as local clinics.^{vi}

Research Base

In almost all healthcare settings where patient reminder and recall interventions have been evaluated, they were effective at improving immunization rates.^{v-ix} When these systems are used in primary care, they also have "spill-over effects" in improving preventive care for patients more generally.^{xiv}

Reminder and recall interventions are effective in all types of settings, from family practices to academic medical centres to public health clinics.^{vi} In the research consulted, reminders increased immunization by 12^{xv} to 24 percent.^{xvi} They work by prompting parents to bring in their children for routine vaccinations as well as targeted immunizations, such as flu vaccines.^{vi} In every case, the more often reminders are provided, the more effective they are in improving coverage levels.^{vi} In addition, the more

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personalized the contact is with patients, the more successful it is likely to be.^{vi} For instance, a personal phone call works better than one by an autodialer.^{vi} In addition, a personalized letter works better than an anonymous postcard.^{vi}

Since all reminder systems have some level of success, providers can tailor the systems they use to their own needs and abilities.^{vi} For example, a large high-tech practice with electronic patient databases could use software packages that allow for a choice of reminder systems, including automated postcards and other options that might suit the preferences of the providers. On the other hand, a small practice would probably be better off using a paper-based system, beginning by issuing wallet-sized cards directly to patients with previous and upcoming dates of vaccinations.

While the onus for providing immunization in Canada lies squarely with providers,ⁱⁱⁱ their efforts would no doubt be assisted by larger registries, such as those already underway in some Canadian jurisdictions and nationally.^{xvii} Since

patients may move or choose to access health services from multiple providers, a tracking system for keeping centralized records would be beneficial, allowing those who administer vaccines to link into this central registry each time they administer a vaccine.^{iii, vi}

Conclusion

The prevention of illness is a cornerstone of effective primary healthcare.^{xviii} Immunization plays a key role because it protects not only those who are vaccinated, but also the general population by preventing the spread of disease.^{vi}

Increasing immunization rates through patient reminder and recall systems is one of the simplest ways providers can improve preventive care and increase their contribution to population health.^{vi}

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