

A parking-lot injection clinic: An adaptation to the COVID-19 pandemic

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Introduction

Since the World Health Organization declared COVID-19 a global pandemic, Canadian physicians have transformed how they provide care to patients. Family physicians have transitioned most appointments to virtual care in order to reduce potential transmission of infection (1). In-person encounters have been rethought to ensure that patients spend minimal time in a waiting room, are distanced from staff, and that surfaces are regularly cleaned. With any booking of an in-person appointment, the necessity for an actual office visit is weighed against the risk of exposure to infection for both patients and staff (2).

Prior to the COVID-19 pandemic, many of our patients were receiving injectable medications on regular schedules. With the rapid transition to virtual care, our family health team began cancelling many of these appointments. We realized, however, that if we did not find a way to offer injections as scheduled, patients could suffer adverse consequences. Our team developed a protocol that allows nurses to continue to provide these injections in the clinic parking lot.

Indications

Patients are eligible for the parking-lot injection clinic if they require an injectable medication which does not involve an in-office assessment. Many of these injectable medications have a pre-set schedule. Examples of such medications include depo-medroxyprogesterone, denosumab (Prolia), allergy desensitization shots, and cancer treatments such as goserelin (Zoladex) and leuprolide (Eligard.) We expanded the service to also provide vitamin B12 injections, tuberculin skin tests, hormone injections for patients undergoing gender transition, adult immunizations, and some pediatric immunizations. We found there were only a few patients not eligible to receive their injections in this type of outdoor setting. One example would be a patient with a previous serious reaction to an allergy shot. Routine newborn immunizations have been provided as traditional in-office visits rather than outdoors, mainly because of provider preference. However, a small number of immunizations have been administered in the outdoor injection clinic for children older than 12 months of age.

Description

Some of the details of the parking-lot injection clinic are as follows:

- Our injection clinic is located near the side entrance to our building.
- Patients are advised to wear a short-sleeved shirt, and to bring their medication for injection with them if we do not have it already.
- Patients are contacted the day before their appointment to be screened for any potential symptoms of COVID-19. If any symptoms are present, the patient is advised to be tested, and the appointment is rescheduled.
- Supplies for the outdoor injection clinic include needles and syringes, alcohol wipes, bandages, sharps container, gloves, hand sanitizer, goggles or face shield, and epinephrine (Figure 1.) Any medication, immunization, or allergy serum requiring refrigeration is kept in a cooler bag with ice packs. This bag was obtained from the local public health department and ensures that the cold chain is maintained. Regular trips are made to return allergy serum and retrieve immunizations from the clinic refrigerator. Staff wear appropriate personal protective equipment (PPE) during appointments.

- Signs direct patients towards clearly marked parking spots reserved for the injection clinic. After confirming patient identity, the injection is prepared and administered while the patient is seated in their car (Figure 2.) Patients are advised to wait the appropriate time after the injection and to honk their horn if they have any symptoms or concerns. To date there have been no serious adverse reactions although we are prepared for such an event.
- Allergy desensitization shots were initially continued at a maintenance dose. We have begun increasing the dose for some patients according to their allergy shot schedule. If a patient is booking an allergy shot with a dose increase, they are asked to bring a family member or support person with them to their appointment.

This parking-lot injection clinic requires minimal additional equipment beyond supplies already required for administering injections indoors. We found it helpful to create signage to direct patients, and traffic cones to mark the reserved parking spots. The cost for these was minimal. We purchased a tent to provide shelter from rain or sun, but this is not required.

Discussion

Between March 20, 2020 and June 19, 2020, we have been able to provide 668 injections in our parking-lot injection clinic. We operate this program two mornings per week. Feedback has been extremely positive. Patients have appreciated the lower risk of exposure to infection and the convenience of the 'drive-in' outdoor location.

One obvious limitation of this approach is unfavourable weather. Another limitation is that only patients with cars have received parking-lot injections. However, the outdoor injection process could easily be adapted for patients who use other means of transportation. Some practices may not be able to implement this approach if their physical layout precludes it and they may need to continue providing these injections during traditional in-office appointments.

To the best of our knowledge ours is the first practice to describe this type of medical care provided in an outdoor setting. There are several reports of outdoor testing for COVID-19 (3) (4) (5). However, we did not find any accounts of injections or any other care provided outdoors. We foresee other primary care practices adapting the outdoor setting to provide influenza immunizations and possibly other aspects of primary care. In our practice, we have found the parking-lot injection clinic to be a solution to one of the many challenges of the COVID-19 pandemic. It is an easily implemented, patient-centered option that allows for continuity of treatment while also reducing infection transmission risk.

Outdoor injection clinic supplies



Administration of an injection in the outdoor clinic



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