To: Erika Paterson, ENGL 301 Instructor

From: Michael Ly

Date: February 22nd, 2023

Subject: Formal Proposal for Enhancing Community Safe Medication Handling and Disposal Practices at a Local Pharmacy in Burnaby, BC

Introduction

Pharmacies have been the established location for purchasing medications, but are often not recognized as the location for proper community medication and sharps disposal. Even for individuals that are aware, many of them do not know the proper storage and handling of medication waste and sharps. In some instances, sharps are returned with needles attached or old medications returned in thin plastic bags instead of proper sealed containers. This formal report will help investigate the community knowledge of proper handling of medication waste and sharps. It will also assess the feasibility of a community medication waste campaign that includes increased access to personal sharps containers and medication waste bins.

Intended Audience

This will be a formal report addressed to Michael Lam, the pharmacy owner and manager at a local pharmacy in Burnaby, BC.

Statement of Problem

Not all residents in the community are aware of proper handling and disposal of used sharps and medication wastage. This can result in harmful medication waste and sharps being disposed of in the local sanitation system or landfills, which can negatively impact our environment and safety. The mishandling of medication and sharp waste may also increase the risk for unintentional ingestion of medication and harmful needlestick injuries. Pharmacies currently only provide personal sharps containers to the public but do not provide personal containers specifically for storage of medication waste.

Proposed Solution

The pharmacy can educate the local community about the proper handling and disposal of medication waste and sharps through an awareness campaign. This campaign can involve collaboration with other pharmacies within the company along with the local Fraser Health Authority. Pharmacies can work with its medical waste partners, such as the Health Products Stewardship Association (HPSA), to increase access to medication and sharps disposal containers and become recognized by the community as a resource for proper medical waste and sharps handling through this awareness campaign.

Scope

In order to investigate the need for a medication and sharps wastage awareness campaign in the community for this proposal, I intend to ask the following questions:

Pharmacist Online Survey:

- 1. What proportion of patients that make medication returns have improper storage of their medication waste or needles?
- 2. What proportion of patients receiving injectable medications or lancing devices are provided with a sealable personal sharps container?
- 3. Do patients report having a dedicated medication disposal or medical sharps container that is separate from garbage, compost, and recycling?
- 4. Would there be an interest in the addition of a dedicated medication disposal bin in personal households to safely store expired or old unused medications?
- 5. What proportion of patients are improperly storing medication beyond their expiration date?
- 6. How are patients storing and discarding old expired medications?
- 7. How are sharps, such as lancets or diabetic blood sugar monitoring patches, being discarded?

Methods

An anonymous online survey will be sent and conducted by all local pharmacists in the community to assess the knowledge and need for a medical wastage awareness campaign in the community. This survey will also help answer whether there is a need for increased access to specific medication or sharps disposal containers.

My Qualifications

I am a pharmacist with over five years of experience with proper handling, storage, and disposal of community based medications. I have working experience handling medication disposal and communicating with medication and medical waste companies.

Conclusion

With an increasingly aging population that consumes more medical resources and produces more medical waste, it is critical that proper handling and disposal procedures are in place to protect our environment and the safety of our community. By assessing if there is a knowledge gap on proper medication and medical waste disposal in the community, I can determine whether a medical wastage awareness campaign is feasible and if it is necessary to increase the accessibility of medical waste containers, such as sharps bins, by implementing separate personal medication waste containers beyond the regular recycling, compost, and garbage bins that households own.