To: Erika Paterson, ENGL 301 Instructor

From: Michael Ly

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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 injection device disposal. Even for individuals that are aware, many of them do not know the proper storage and handling of medication waste and in some instances return their injectable devices with needles attached or old medications in thin plastic bags instead of in proper sealed containers. This formal report will help investigate the community knowledge of proper handling of medication waste and assess the feasibility for a community medication waste campaign and 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 of a pharmacy chain in Burnaby, BC.

# **Statement of Problem**

Not all residents in the community are aware of proper medication wastage handling and disposal. This can result in harmful medical and medication waste being disposed of into the local sanitation system or landfills, which can negatively impact our environment. 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 sharps containers to the public and do not provide containers specifically for personal storage of medication waste.

### **Proposed Solution**

The pharmacy can enhance the education of its local community about the proper handling and disposal of medical waste 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 handling through this awareness campaign.

## Scope

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

- 1. Where do you normally store the medications that you purchase?
- 2. How long do you store your medications and do the medications go beyond their expiration date?
- 3. How do you normally dispose of your medications?
- 4. What do you use to store and dispose of tablets and capsules?
- 5. What do you use to store and dispose of solutions and suspensions?

- 6. What do you use to store and dispose of creams and ointments?
- 7. What do you use to store and dispose of used sharps and injectable medications?
- 8. How do you dispose of old medication devices such as lancets, diabetic blood sugar monitoring patches?
- 9. If you use injectable medications or lancing devices, do you own a sealable personal sharps or old medication container?
- 10. Do you have a medication disposal or medical sharps container that is separate from garbage, compost and recycling?
- 11. Would you be interested in having an additional medication disposal bin in place to safely store expired or unused medications?

### **Methods**

A convenience survey will be conducted with local residents in the community who attend the pharmacy 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 medical 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. By assessing if there is a knowledge gap on proper medical waste disposal in the community, I can determine whether it is feasible for a medical wastage awareness campaign and if it is necessary to increase the accessibility of medical waste containers such as sharps bins and implementation of separate personal medication waste containers beyond the regular recycling, compost and garbage bins households own.