Pharmaceuticals Returned to the PH:ARM Medicine Return Pilot in Washington

Study Results for a Sustainable Future

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Local HW Management Program in King County

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Outline

• How much do customers bring in?
• Return program oversight guidelines
• What do customers bring in?
• What do we watch out for and how?
• Segregation recommendations and cost-saving opportunities

These recommendations address technical perspectives and study findings only.
Pilot Basics

Group Health, 2 years
Clinical pharmacies (25)

Bartell Drugs, 7 months
Retail pharmacies (12 in pilot, 9 of 12 in study)
Clinical Pharmacy Customer Demand

Median: 1.2 pounds per pharmacy per business day (equivalent to 0.75 gallons)

Range: 0.2 to 4.2 pounds per pharmacy per business day (equivalent to 0.1 to 2.5 gallons)
Drug Categories Study

Method: random sample study

Method: safety check of all material
Drug Categories: Group Health

Method: random sample study

Sample size: 1,951 lbs (12%)

- Prescription (legend) 53.6%
- Over-the-counter 18.7%
- Nutritional supplement 13.6%
- Unknown drug 4.9%
- Other materials 9.2%

Method: safety check of all material

- Prescription (legend) 94.2%
- Over-the-counter
- Nutritional supplement
- Unknown drug
- Other materials 5.8%

Prescription drug subcategories

- Antibiotics 8.0%
- Chemotherapy 0.2%
- Hormones 1.0%
- Inhalers 1.7%
- Professional samples 1.8%
# Drug Categories: Bartell Drugs

<table>
<thead>
<tr>
<th>Method: study of all material</th>
<th>Method: Safety check of all material</th>
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</thead>
<tbody>
<tr>
<td>Sample size: 710 lbs (100 %)</td>
<td>710 lbs</td>
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</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Prescription (legend)</td>
<td>55.3 %</td>
</tr>
<tr>
<td>Over-the-counter</td>
<td>25.8 %</td>
</tr>
<tr>
<td>Nutritional supplement</td>
<td>11.1 %</td>
</tr>
<tr>
<td>Unknown drug</td>
<td>1.2 %</td>
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<tr>
<td>Other materials</td>
<td>6.7 %</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prescription drug subcategories</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antibiotics</td>
<td>3.9 %</td>
</tr>
<tr>
<td>Chemotherapy</td>
<td>0.1 %</td>
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<tr>
<td>Hormones</td>
<td>1.0 %</td>
</tr>
<tr>
<td>Inhalers (gas)</td>
<td>1.6 %</td>
</tr>
<tr>
<td>Professional samples</td>
<td>2.3 %</td>
</tr>
</tbody>
</table>

Prescription (legend)          93.3 %
Over-the-counter               93.3 %
Nutritional supplement         93.3 %
Unknown drug                   93.3 %
Other materials (smaller than it looks) 6.7 %
Overseeing a Sustainable Medicine Return Program

- Trained staff check customers’ drugs
- Prepared for minor contingencies
- Prepared to direct customers who have materials not accepted (or program disposes)

Today’s Focus

- Collected securely; tracked securely
- Drugs incinerated at permitted HW site
- Patient information protected

*These recommendations address technical perspectives and study findings only.*
Trained staff check drugs

Piloted at Bartell Drugs

Pharmacy staff check with the customer present, customer keeps material not accepted.

Equipment:

bin

tongs or scoop
gloves available if needed
Trained staff check drugs

Piloted at Group Health

Warehouse staff check material and properly dispose of material not accepted.

Equipment:

- contained work area
- large hemostats to examine or pick up items
- gloves, safety glasses and lab coat
- disposal containers for segregated materials
Preparedness

• Sorbent pad inside box liner
• Appropriate tools and safety gear nearby
• Direct customer to
  – Sharps container and disposal
  – Household hazardous waste site
  – Mercury thermometer take-back program
  – Ewaste take-back program for glucose meters
Acceptance Strategies

• Keep it simple, complexity increases time to check items (cost) and error risk
• Focus on requirements for safe disposal and transportation
• Volume or weight reductions to cut disposal cost need to be balanced against training cost and time to screen

These recommendations address technical perspectives and study findings only.
Accept (study findings)

- Prescription drugs (legend drugs)
- Over-the-counter drugs
- Nutritional supplements, herbs, vitamins
- Veterinary and human drugs
- Inhalers with compressed gas
- IV bags with drug
- Chemotherapy (household only)
- Solid, liquid, semi-solid, gas (inhalingers only)
- Prepackaged syringes with needles (not used, needle not exposed)

Criteria for safe transportation and disposal based on study findings.
Accept (study findings)
Do Not Accept (study findings)

- Sharps (used needles or lancets)
- Biohazardous waste
- Aerosol cans
- Mercury-containing drugs, thermometers, etc.
- Electronics such as glucose meters
- Disinfectant cleaners
- Pesticides and insect repellants
- Acids, bases, oxidizers, poisons; even when used medicinally

Criteria for safe transportation and disposal based on study findings.
Diabetics Need Help with their Wastes

Glucose meters, test strips, calibration standard, lancets, insulin injectors
Accept only drugs, no aerosol cans, avoid hydrogen peroxide
Volume or Weight Reductions
Cost Saving Opportunities

- Saline solutions, Electrolyte
- Lactulose
- Fiber products
- Personal care products
- Personal pet care products
- Food (meal replacement)
- Empty pill bottles
- Medical equipment/supplies

Potential cost savings based on study findings.
Cost Saving Opportunities
Questions?