

Collaborative Approach on Medication Administration in Community Care

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What Is The Issue?

With a greater push for keeping seniors safe and healthy at home, medication management has taken on greater emphasis. As seniors age, many develop a progressively complex mix of health conditions that require a growing number of medications to prevent the development of more serious illness. A survey released by Medco Health Solution in December 2009, highlighted that more than 50% of the seniors polled took at least 5 different prescription drugs regularly and 25% of seniors took between 10 to 19 pills each day¹. This is four times more over the counter medications than any other age group. With many seniors taking multiple drugs on a daily basis, the risk of potential drug interactions or adverse drug events increases.

The statistics related to medication-related adverse events is even more striking. A study by Wu, Bell and Wodchis² showed that in 2007, \$13.6 million spent in Ontario was related to adverse drug event related emergency department visits and subsequent hospitalization in seniors. Furthermore, the Safety at Home study³ conducted by the Canadian Patient Safety Institute showed that medication-related adverse events were one of the top three reasons for hospitalizations and were responsible for an incidence rate of 2 clients per 10,000 client-days. Therefore, to keep seniors living independently at home, it is crucial that medication management is a key component to quality patient centered care.

Preventable Medication related adverse events occurring in home settings include the inadvertent omission of needed home medications, failure to restart home medications following transfer and discharge, duplicate therapy at discharge resulting from brand/generic combinations or formulary substitutions, and errors associated with incorrect doses or dosage forms.

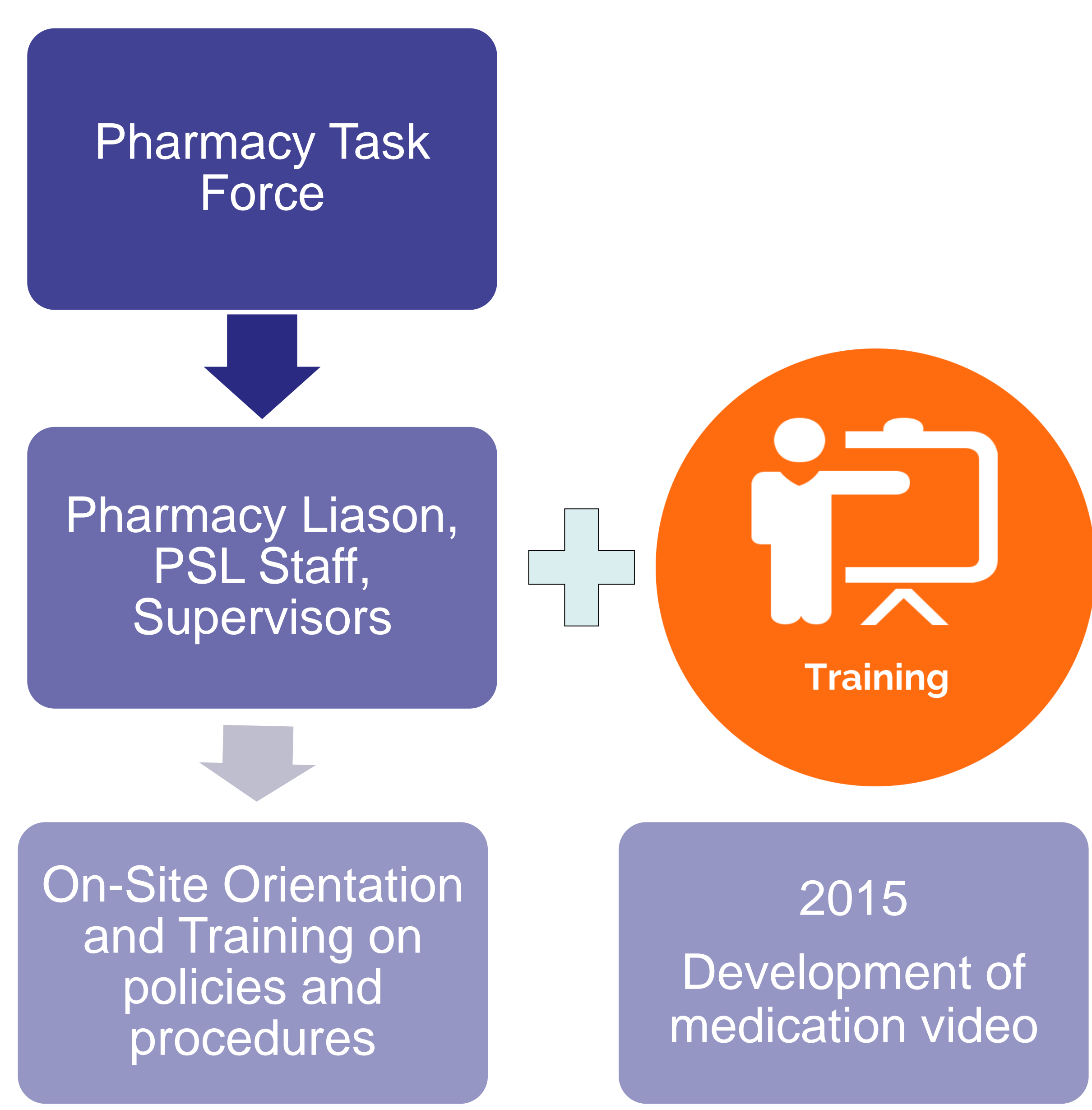
What Are We Trying To Accomplish?

In September 2013, Peel Senior Link (PSL) developed an RFP for our medication management program to identify an exclusive pharmacy vendor that had the capacity and proven knowledge to develop an innovative and evidence based medication program. Furthermore, with 11 distinct neighbourhoods across the Region of Peel, PSL needed to develop a common systematic approach to medication management that could be implemented across all service locations. Training and ongoing access to professional pharmacy support was critical in identifying the right partner.

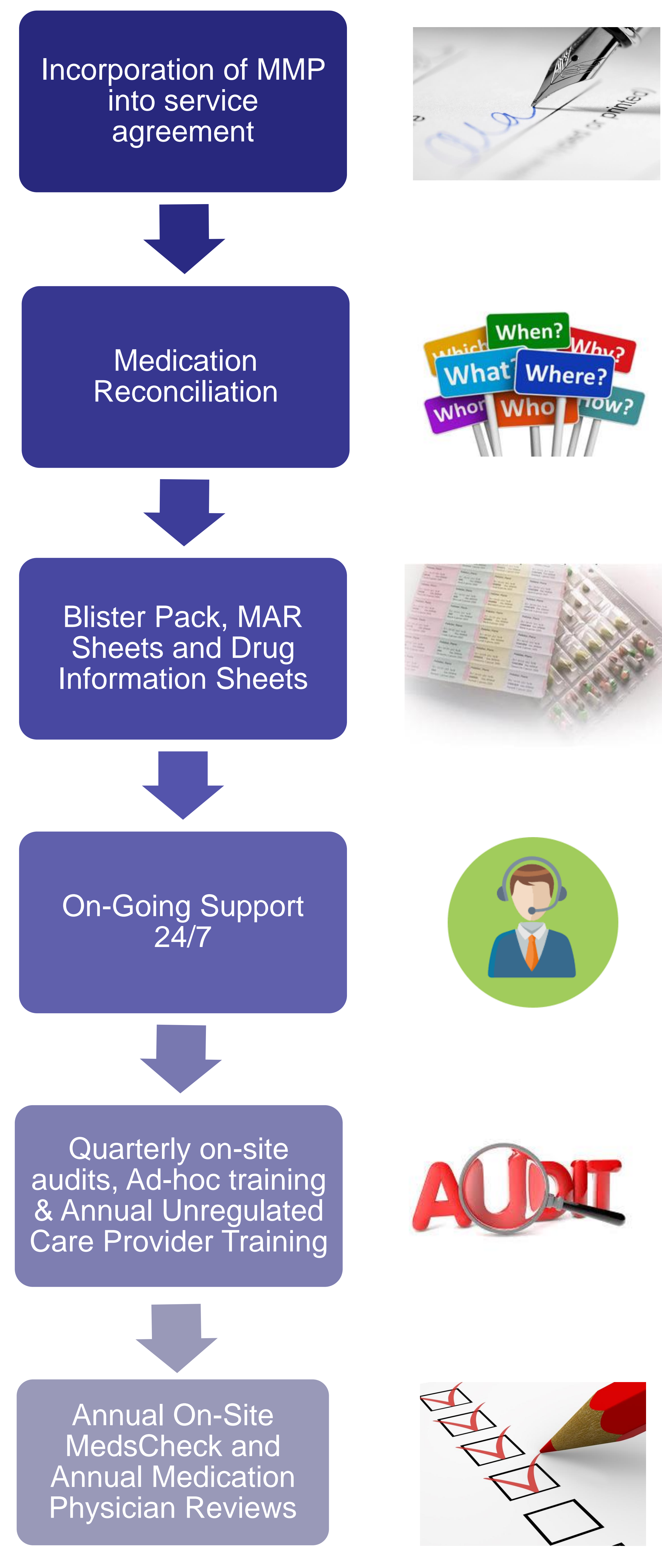
Peel Senior Link partnered with Resident Care Pharmacy to provide medication management services to PSL clients. The objective of this Medication management program was to reduce medication related errors, reduce hospitalization rates and ensure continued independence for seniors.

How Did We Deliver The Program?

Pre-Implementation



Implementation



What Did We Measure?

The primary measurement was client medication errors per 10,000 resident days. Medication errors were defined as “any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the health care professional, patient, or consumer”⁴. In the community setting context, an error occurred if the following principles weren’t adhered to – right client, right medication, right time, right dose, and right route.

What Did We Find?

Prior to 2010, the number of client medication errors per 10,000 resident days was 2.85. Following the implementation of the medication management program, the number reduced to 2.68 and 2.37 in 2010 and 2011 respectively. In March 2016, the number of client medication errors hit a nadir of 1.20. This reduction is supported by literature, which shows that health care aides were significantly less likely to cause errors of moderate severity than other nursing staff in a long-term care environment.

Conclusions

Medication management can be safely implemented within a community care model by establishing a strong collaborative relationship with a pharmacy. A structured approach to procurement and delivery of services will led to decreased hospitalization rates and ultimately keep seniors independent in their homes for longer durations.

References

1. Medco Health Solution survey December 2009
2. Wu C, Bell CM, Wodchis WP. Incidence and Economic Burden of Adverse Drug Reactions among Elderly Patients in Ontario Emergency Departments: A Retrospective Study. Drug Safety. 2012;35(9):769-781. doi:10.1007/BF03261973.
3. Safety at Home – A Pan-Canadian Home Care Safety Study. Canadian Patient Safety Institute. 2013.
4. Canadian Patient Safety Institute. <http://www.patientsafetyinstitute.ca>.