

# Development of a Training Program for Hazardous Drugs Handling

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## INTRODUCTION

The WRHA Pharmacy Program (WRHAPP) has approximately 360 full-time equivalent unionized staff working at 8 healthcare facilities (approximately 2500 beds) and 6 affiliated clinics. The WRHAPP Practice Development (PD) Team develops, evaluates, and coordinates education and training for pharmacy staff.

In 2002, a change in Manitoba's workplace safety laws prompted WRHAPP managers to update and standardize procedures used for receiving, storage, preparation, distribution, administration and disposal of hazardous drugs, as well as chemicals used for extemporaneous compounding.

By 2007, new regional safe work procedures, job aids and tip sheets had been developed but pharmacy staff training processes & resources to support implementation did not exist. None was available from other sources.

Between 2007-2012, the PD Team created, evaluated and administered an effective, accessible, low-cost, sustainable, multi-faceted training program for pharmacy that could also be used by other disciplines.

## DESCRIPTION OF THE PROJECT

After conducting a needs assessment, the PD Team developed, field-tested, implemented and evaluated training program resources (Figure 1). Operating procedures for the training program were also developed.

Content of training program resources focused on how to use information in job aids, tip sheets and supplemental procedures that had been created by others (Figure 2).

Training resources were designed to meet organization and learner needs:

1. For initial roll out of training of existing staff: low-cost training that could be delivered quickly by 1-2 instructors to small or large groups of staff. We designed a 90 minutes Powerpoint® in-service with speaker notes.
2. For training of newly hired staff after initial roll out: accessible, easily updated materials that would integrate seamlessly into the existing staff orientation program. We designed a Self-Learning Package (SLP) posted with the tools referenced by the SLP (Figure 2) on an intranet website.
3. For ongoing, intermittent refresher training for existing staff after initial roll out: an effective, low cost, easily administered solution with a process to document that training was completed. We designed Refresher Quizzes as well as a Mock Spill Drill Toolkit.

Figure 1: Development & Implementation Milestones

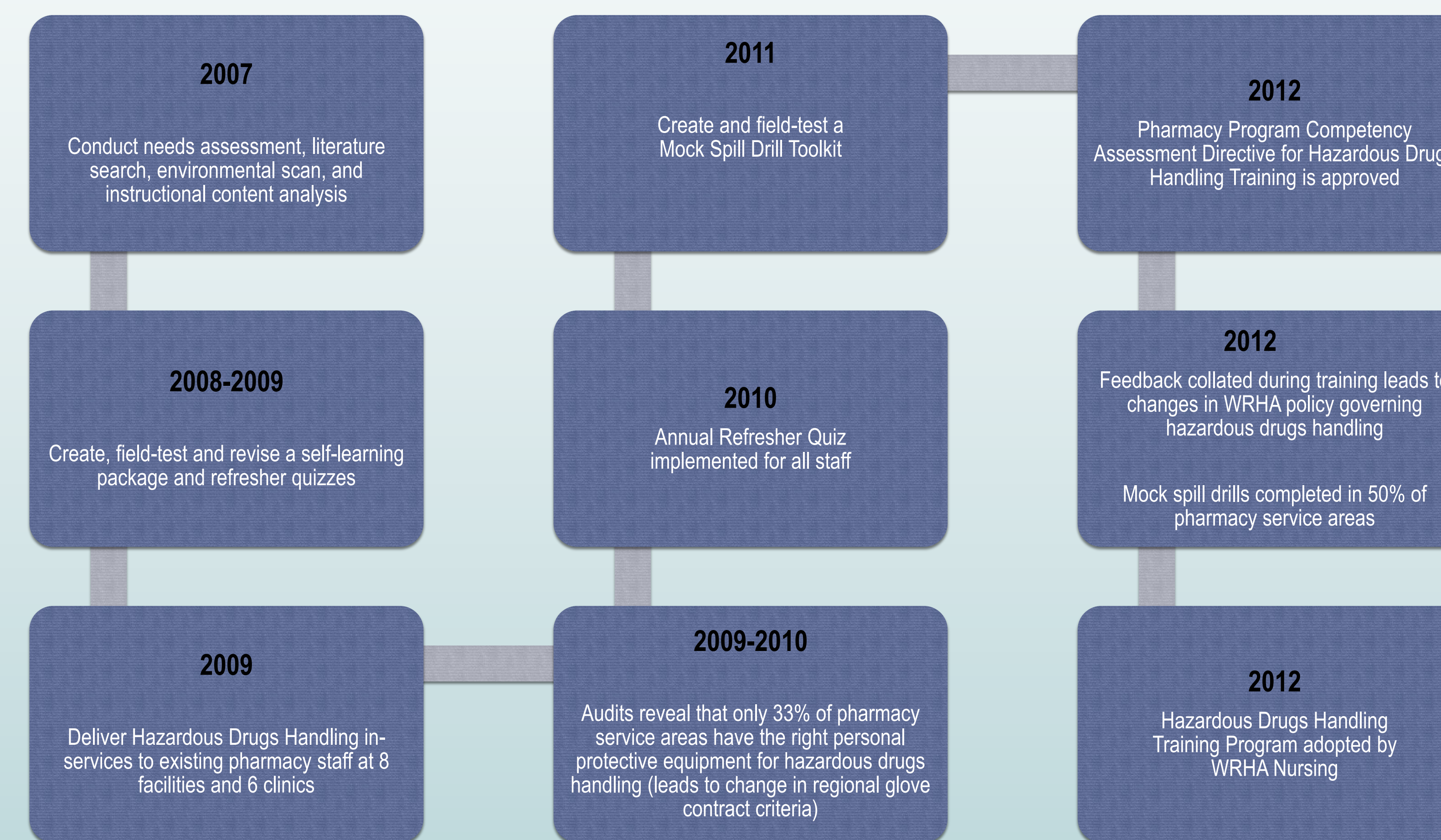
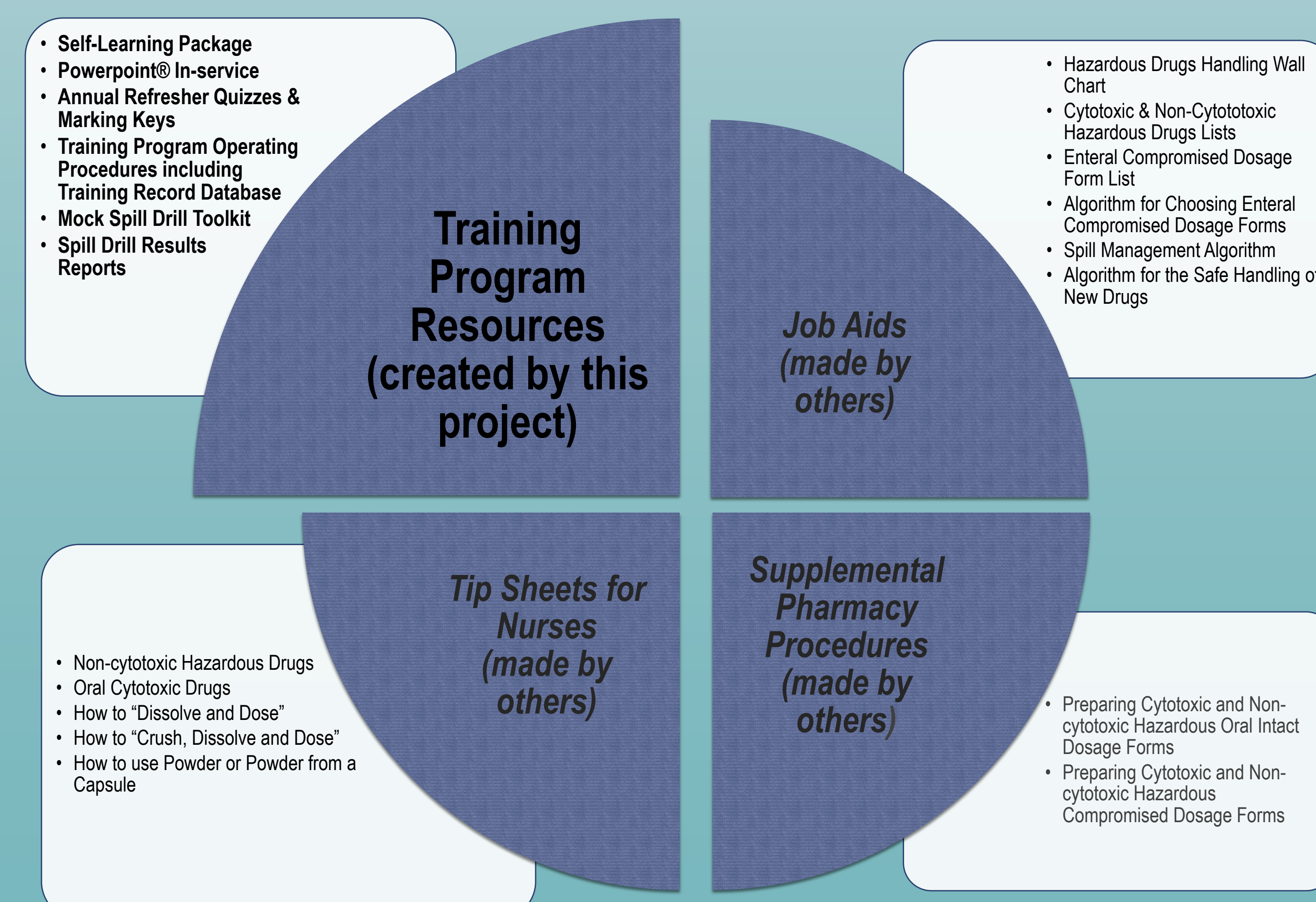


Figure 2: Training Program Resources



## EVALUATION OF THE PROGRAM

Most staff (66%) took 15-45 minutes to complete the SLP. Most (73%) agreed or strongly agreed that SLP content was organized, well written, and easy to follow.

Most staff (84%) took less than 20 minutes to complete the refresher quiz and 98% of staff passed on the first attempt. Pharmacists and pharmacy technicians did not differ in average score (98.8% vs 98.5% respectively). It took 2.5 minutes to score each quiz (est. 0.006 FTE administrative assistant per annum).

Initially, audits revealed that only 33% of service areas had stock of all required personal protective equipment for hazardous drugs handling. Further review showed that some general use contract gloves looked like "chemotherapy rated" gloves intended for hazardous drugs handling. This feedback helped to change WRHA Logistics criteria for glove contracts.

Mock spill drills took approximately 30 minutes for each of: preparing for the drill; conducting the drill; conducting the debriefing session; and, completing the documentation forms. Managers (100%) said toolkit contents were easily understood and used. Staff members said that the drill would help them use the right procedures when faced with an actual spill, but that spill kit replacement procedures, storage locations, and labeling should be improved.

## IMPLICATIONS FOR PRACTICE

Safe Work improvements require not only a policy and procedures, but also a comprehensive training program to ensure that procedures are translated fully into practice. We recommend that others embarking on a project of similar magnitude do the following:

1. Field-test new training materials and policy-related resources such as wall charts, job aids and practice guides with front-line workers. Content experts aren't necessarily knowledge translation experts!
2. Ensure a high degree of collaboration between the team responsible to create the training materials and the committees/policy-makers whose decisions affect the content and delivery of training.
3. Design resources with the broadest possible user-base in mind. In mid-2012, WRHA Nursing began training nurses region-wide using these resources, reaffirming pharmacy's role as medication safety leaders.

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