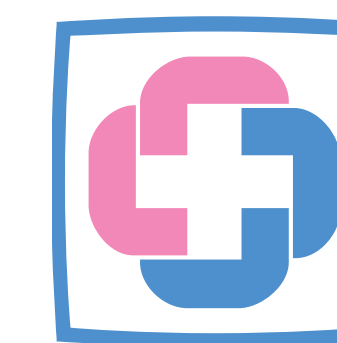




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# Inpatient Medication Reconciliation Training Programme for Pharmacy Technicians

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## INTRODUCTION

- Medication reconciliation (MR) is an integral part of medication safety initiative in all hospitals.
- Medication reconciliation refers to the process of comparing a patient's new medication orders to all of the medications that the patient is currently taking to avoid any discrepancies in therapy.<sup>1</sup>
- While current literature validates the essential role of pharmacist involvement in MR, time and manpower constraints are significant barriers to active pharmacist engagement. This, in turn, promotes opportunities for the expansion of roles of pharmacy technicians (PTs) to perform MR.<sup>2-5</sup>

## OBJECTIVE

- This training programme aims to empower inpatient PTs to take on expanded roles in performing MR with appropriate pharmacists' supervision so as to decrease medication discrepancies and improve transition of care.

## METHODS

- Full-time PTs from Women's Inpatient Pharmacy in KK Women's and Children's Hospital were enrolled in the training programme.

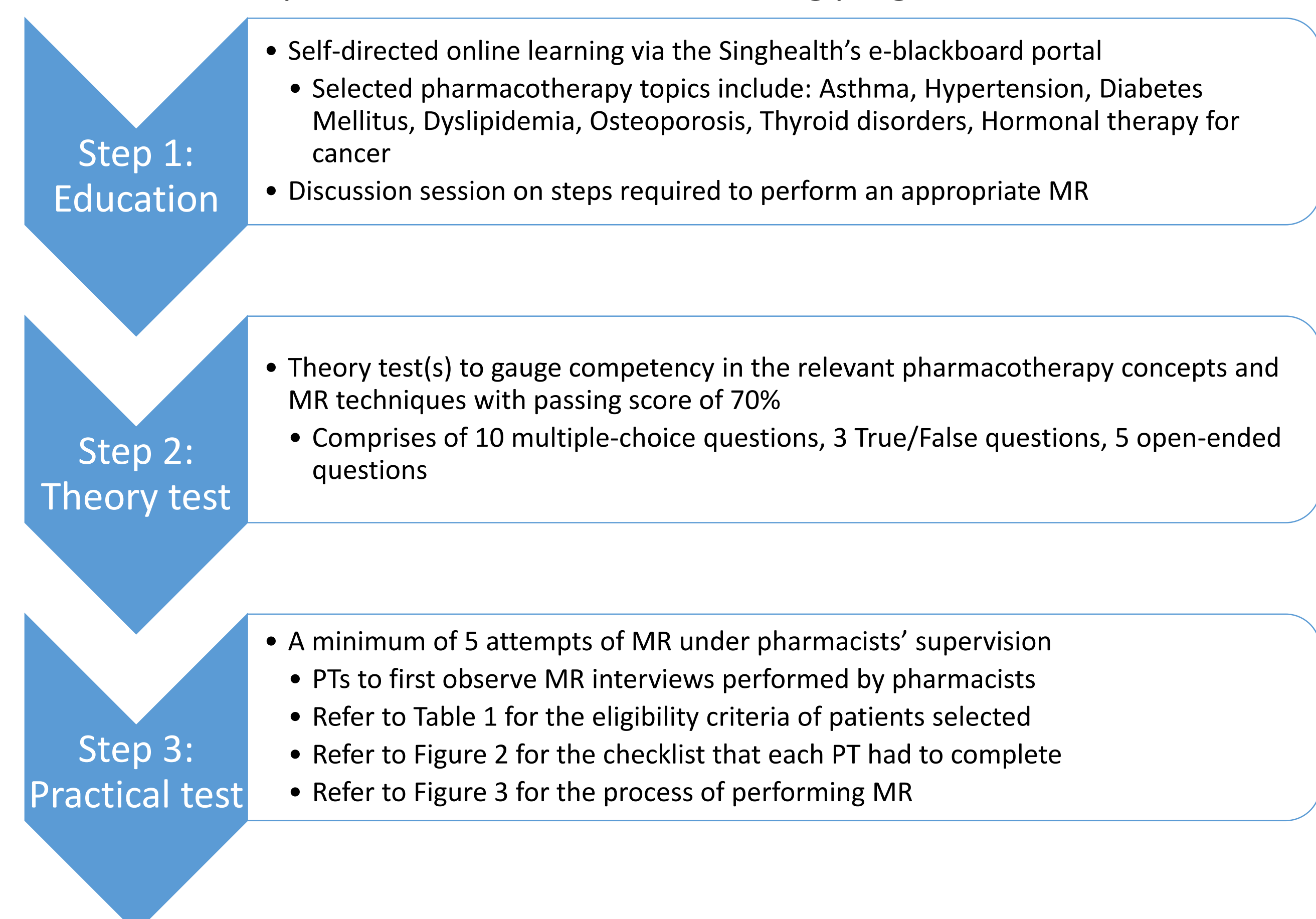


Figure 1. Overview of the training programme

Table 1. Patient inclusion and exclusion criteria

Inclusion criteria	Exclusion criteria
<ul style="list-style-type: none"> <li>Taking 5 or less chronic medications excluding supplements</li> <li>Taking selected classes of medications:               <ul style="list-style-type: none"> <li>Anti-asthma</li> <li>Cardiovascular (i.e. anti-hypertensives, anti-diabetic agents, drugs for dyslipidemia, anti-platelets)</li> <li>Drugs for osteoporosis</li> <li>Thyroid medications</li> <li>Medications for common gastrointestinal conditions</li> <li>Hormonal therapy for cancer (e.g. Tamoxifen, Letrozole, Megestrol)</li> <li>Vitamin and mineral supplements</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Patients with unstable/impaired renal or hepatic function</li> <li>Taking medications not mentioned in inclusion criteria (e.g. anticoagulants, immunosuppressants, psychiatric drugs, and anti-epileptic drugs etc.)</li> </ul>

Checklist for Medication Reconciliation (MR)		
Deadline	To complete	
31 <sup>st</sup> March 2018	Perform at least 5 Full Med Recon=> pharmacists to sign off competency checklist	
Types of MRs:	Completed & supervised by:	Date of completion:
Full (CVS) *Please indicate:		
Full (CVS) *Please indicate:		
Full (Asthma)		
Full (Osteoporosis)		
Full (Hormonal therapy for cancer)		

\*CVS includes anti-hypertensives, anti-diabetics, drugs for dyslipidemia, and anti-platelets. Please attempt FULL MRs with all classes of cardiovascular drugs.

\*Additional attempts may be required for any categories if is not satisfactory.

Figure 2. Competency checklist

- A post-training survey was also administered to gather feedback on the effectiveness of the programme.

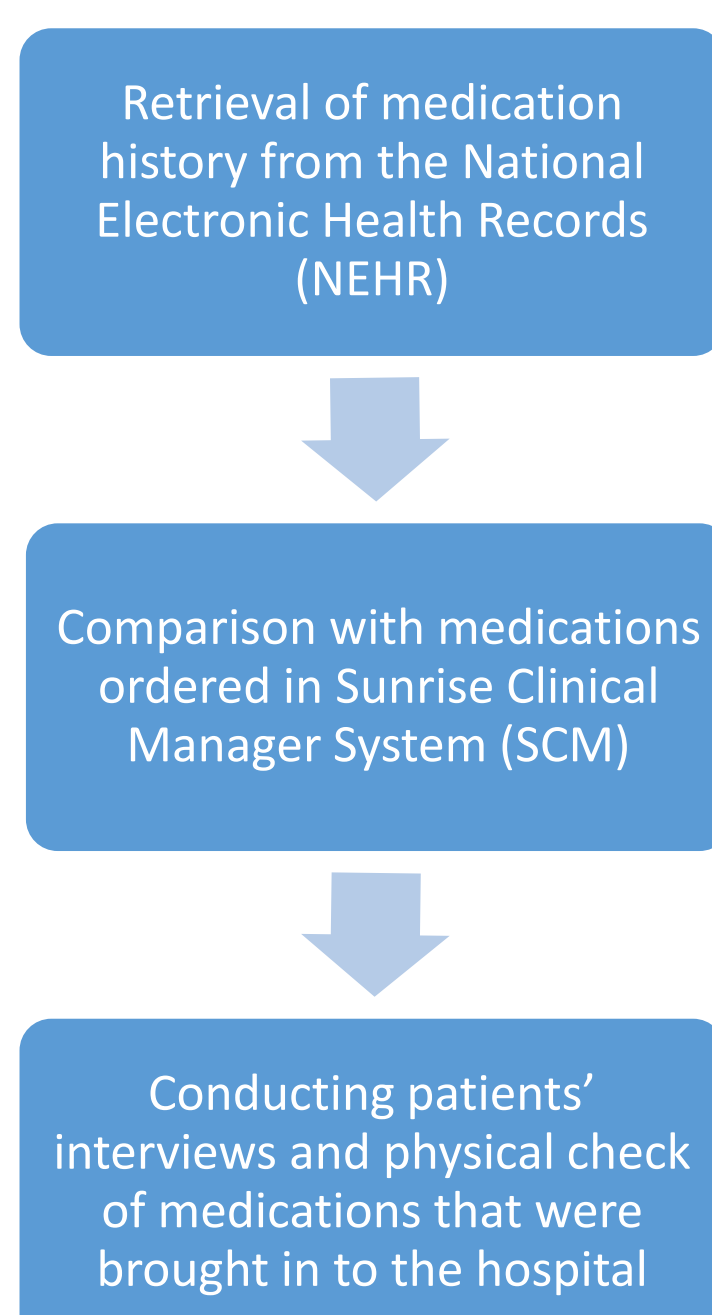


Figure 3. Process of MR

## RESULTS

- Five PTs were trained by 2 pharmacists from July 2017 to April 2018.
- Relevant learning materials were provided online and additional discussion sessions were held as needed. All passed the theory test(s) within 2 attempts.
- All had at least 5 attempts of MR assessed and deemed competent by pharmacists.
- Figures 4 to 6 below depict the results of the post-training survey, with 80% feeling satisfied with the training programme and confident in immediate application of what was learnt.

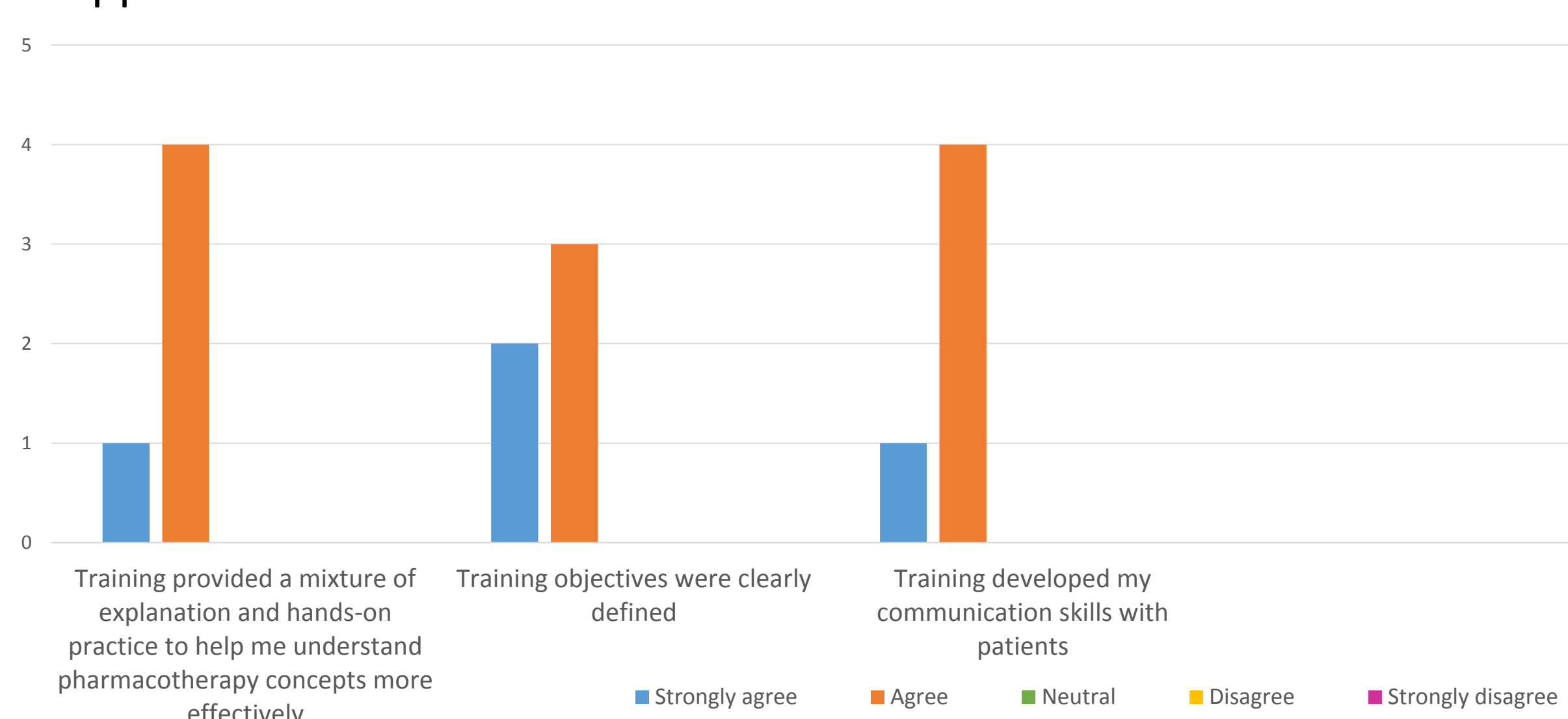


Figure 4. Post-training survey responses- Training objectives and quality

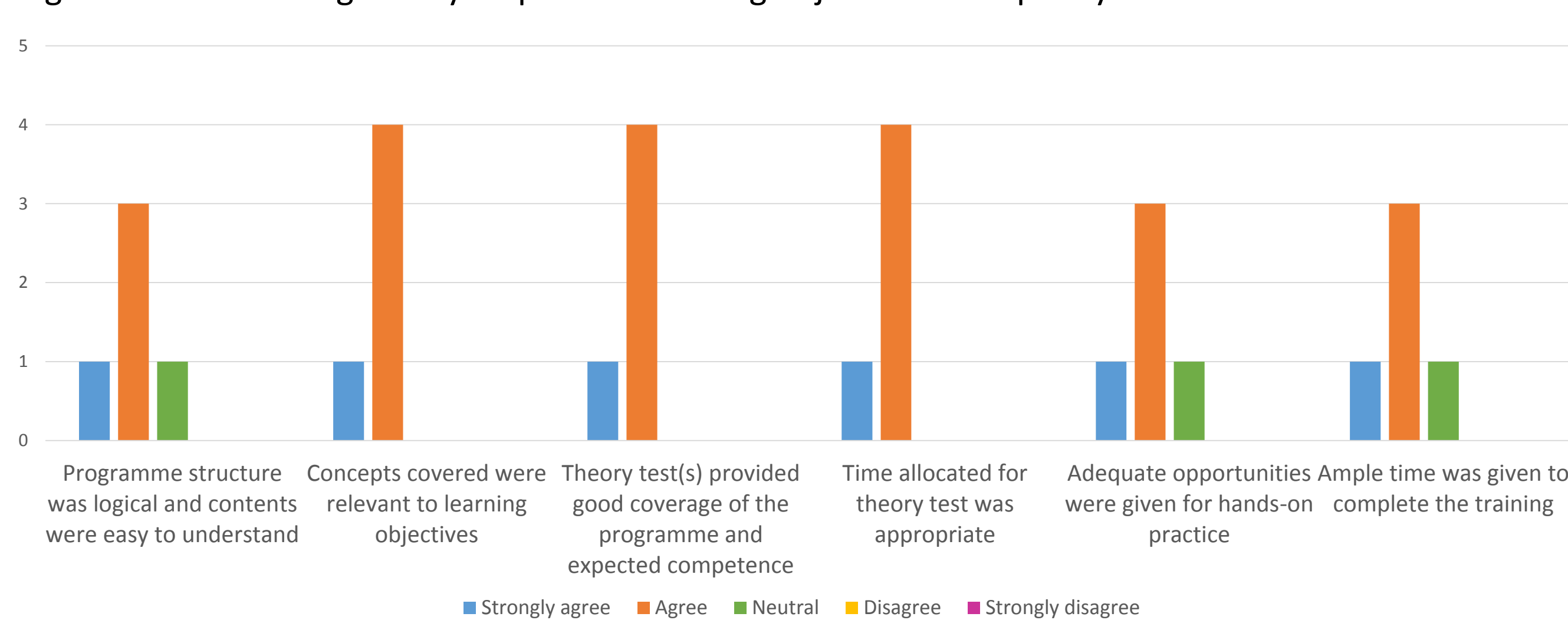


Figure 5. Post-training survey responses- Course content and assessment



Figure 6. Post-training survey responses-Evaluation of trainers

## CONCLUSION

- As the pharmacy profession continues to grow, the role of PTs needs to advance to support pharmacists accordingly. PTs can be empowered with opportunities to perform MR in place of pharmacists given their familiarity with the dosage forms, strengths, and usual dosing regimen of a wide range of medications.
- Trained PTs can play an important role through MR by obtaining accurate patients' medication histories to reduce medication discrepancies at transitions of care.
- We have designed an effective and feasible training programme which allows us to standardise the learning of performing MRs by PTs in our hospital.
- In future, this training could be extended to PTs in other sections or pre-registration pharmacists.

## REFERENCES

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