



Singapore Healthcare Management 2016

Optimizing Pharmacist Efficiency Without Compromising Patient Safety While Processing Outpatient Prescriptions in a General Hospital Pharmacy

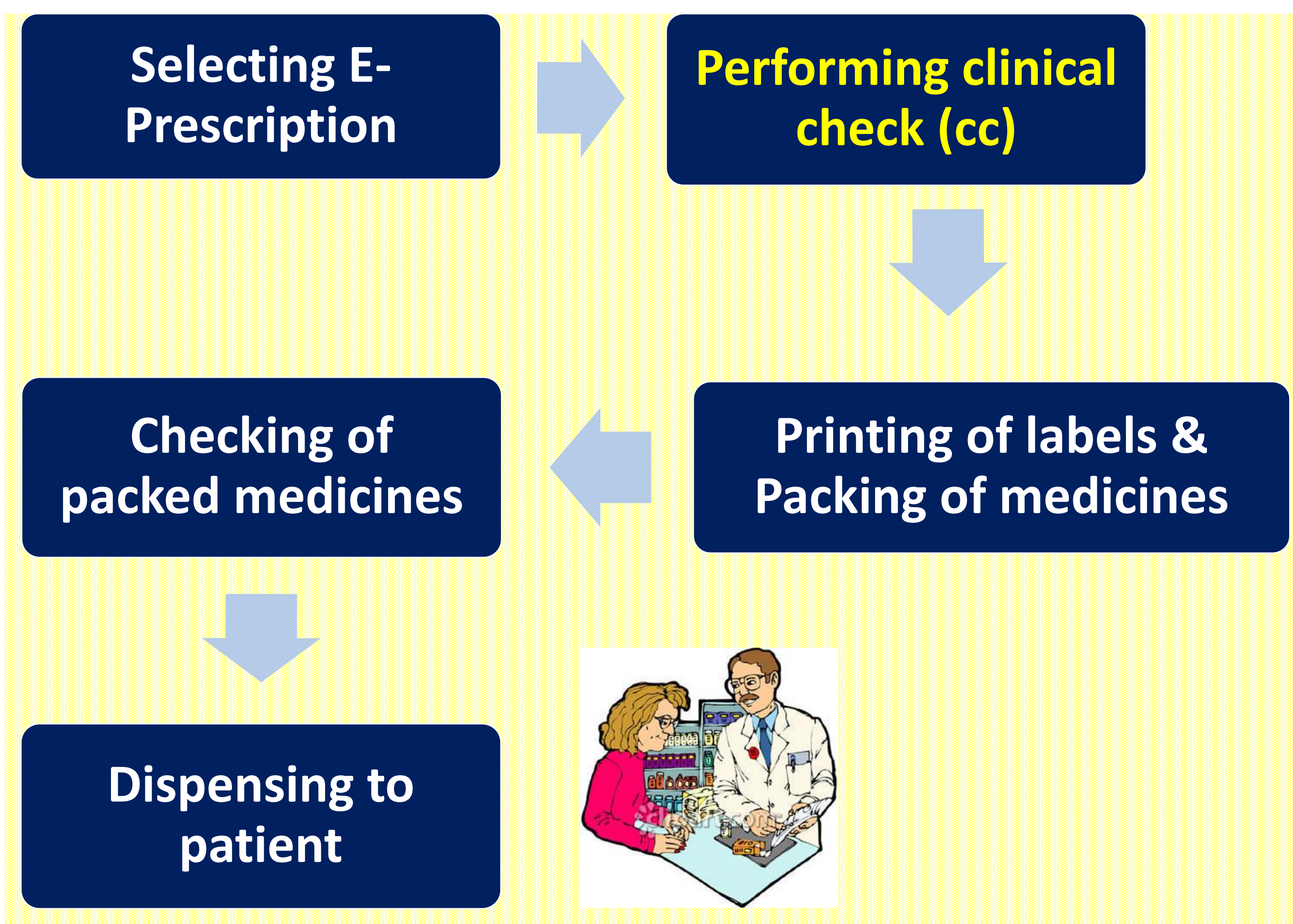
JurongHealth



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INTRODUCTION

1. Processing an outpatient prescription at Jurong Health involves a number of steps –



2. The clinical check (cc) step is a crucial part of the process, for it **ensures safety of the medication for the patient.**

PROBLEM IDENTIFIED

1. Observations on the ground reveal that there are **large variations in method and time used** by pharmacists when doing clinical checks.
2. This variation is contributed by a diverse mix of pharmacists, many with different training and experience, leading to differing practices and outcomes.
3. In order to serve 95% of outpatients within 20 minutes of their arrival at pharmacy, this step **must be carried out efficiently yet effectively.**

PROJECT AIMS

1. Use the four **Knowledge Management (KM) stages** (initiate, share, establish, exploit) to **capture and share tacit knowledge** used in the cc step.
2. **Standardize the cc step to optimize efficiency without compromising safety.**
3. Establish & implement cc guideline.



METHODOLOGY

1. A **qualitative approach** was used.
2. Pharmacists with 3-year experience and above were **observed** while processing prescriptions.
3. **Focus group interviews** were also conducted to establish **essential** steps to the clinical check component. Their responses and sharing of tacit knowledge in different instances were recorded.
4. Knowledge shared was deliberated and a standardized clinical check guideline was established and implemented.
5. The guideline was **tried** by pharmacists over 6 months with **post-implementation feedback** sought thereafter to determine usability and time saved.

RESULTS

ACCEPTABILITY & USABILITY

1. Post-implementation, with minor adjustments **100% of pharmacists surveyed agree** to the points in the guideline.
2. This guideline was found to be very usable with **90%** of surveyed pharmacists **using the guideline frequently on a daily basis.**

EFFICIENCY

1. **80%** of pharmacists who used this guideline found they **required less time to check a prescription for safety.**
2. 80% of pharmacists who used less time **saved about 1-3 minutes** while 20% **saved 4-6 minutes** in prescription processing time.
3. **Wait time target consistently met** in the 6 months following implementation.

CONCLUSION

KM stages can be used to tap on staffs' knowledge and skills, **to resolve arising operational issues** such as a progressively increasing workload.