

Implementing an integrated onsite Clinical Pharmacy Service to Quarantine Health Hotels

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Background

In December 2020 Alfred Health assumed clinical management of two quarantine health hotels, as a component of the Victorian Hotel Quarantine program for returning overseas travelers. The hotels received high-risk residents, including patients who were COVID-19 positive, suspected for COVID or with complex medical needs. The health service's EMR system was deployed to manage residents, in a similar manner to inpatients.

The high-risk nature of the residents of the COVID health hotel highlighted a role for an onsite pharmacy presence to support medical and nursing staff to deliver safe medication management. A 7-day a week onsite clinical pharmacy service was implemented in both health hotels, including a 24-hour on-call service. Given this is a new area of pharmacy practice, this research aims to provide insight into clinical pharmacy services within quarantine hotels and describe the roles and interventions of an onsite pharmacist in this setting.



Quarantine Hotel in Melbourne, VIC

Objectives

To describe the implementation of an onsite clinical pharmacy service and the role of the pharmacist within quarantine health hotels.

Methods

This retrospective, observational study was conducted within the Victorian Quarantine Hotels and included all residents admitted into the health hotels managed by Alfred Health from 1st December 2020 to 20th January 2022.

The development and implementation of the pharmacist role within the health hotels is described.

Data on the pharmacist interventions performed were collected at time of clinical review. Data on the number of patients, resident age, and number of medication orders were obtained retrospectively using the EMR system.

Evaluation

Clinical pharmacy service were provided by an onsite pharmacist, 8am to 5pm on weekdays, remote weekend service from 9am to 1pm, with a 24-hour on-call service. Key stakeholders collaborated to define the pharmacists role (Figure 1), develop medication workflows and define service priorities. These stakeholders included the Alfred Health Director of Pharmacy, Quarantine Hotel medical lead, nursing lead and the contracted community pharmacy. Six pharmacists were involved over the duration of this service.

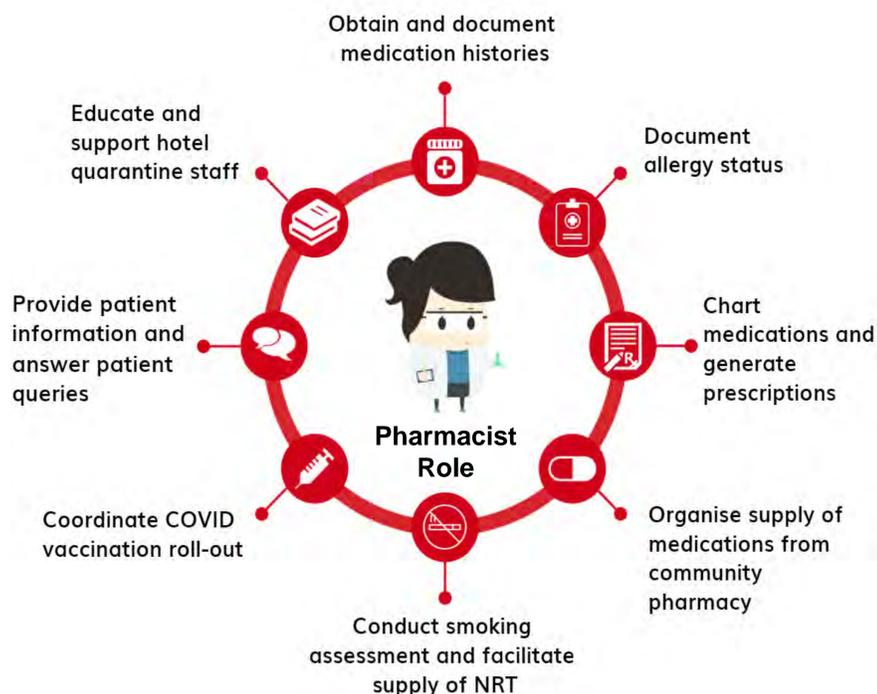


Figure 1: Pharmacist activities within Quarantine Hotels

Evaluation

Daily pharmacist activities included medication history interviews for all admitted residents, allergy documentation, partnered pharmacist medication charting (PPMC) of medications to accurately reflect resident's current medication regimen on EMR, provision of medication supply, provide education to residents on newly started medications, smoking assessments and NRT supply, and support staff to improve medication management within the hotels (Figure 1).

From the 1st of December 2020 to the 20th of January 2022, a total of 6786 patients (aged 6 weeks to 100 years) were admitted to the quarantine health hotels. During this time a total of 39,839 medication orders were placed, comprising 29,409 inpatient medication orders charted, and 10,430 prescriptions generated. Utilising the PPMC model, pharmacists charted 21,588 (74%) inpatient orders and generated 7738 (76%) prescriptions for health hotel residents (Figure 2). The PPMC model improved medication documentation on the EMR and facilitated safe and timely supply of medications.

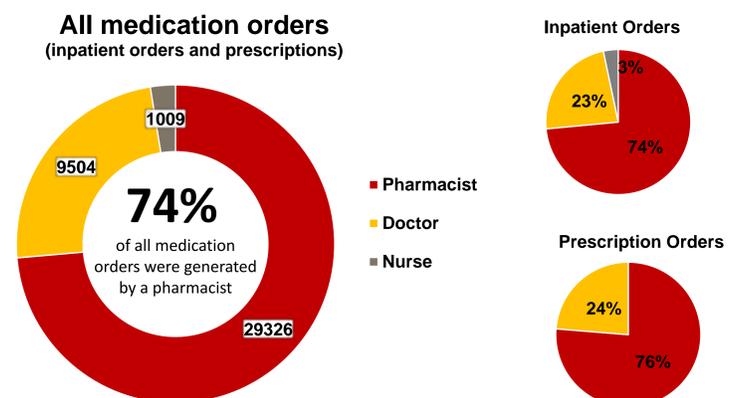


Figure 2: Medication orders charted by pharmacists, doctors and nurses

Pharmacists reviewed and advised on resident's medication management to provide best use of their medications and identify any suspected or potential medication-related problems. Medication noncompliance was a prominent theme, as many residents had been unable to obtain their regular medications overseas and had no access to healthcare. Pharmacists would liaise with the multi-disciplinary team to develop an appropriate medication plan and escalate high-risk residents that required closer clinical monitoring.

Diabetic patients were a patient cohort that required extensive pharmacist input, as many patients had extremely poor control. Pharmacists provided glucose testing machines and further education to improve hypo awareness, medication adherence and compliance to BSL monitoring.

If patients deteriorated and were transferred to hospital, the pharmacist provided handover to the pharmacist receiving the patient at the hospital.

Pharmacists played a central role in the COVID-19 vaccination roll-out for hotel quarantine staff: coordinated stock movement, sterile preparation of vaccinations from multi-dose vials, and minimised stock wastage by working with hotel staff to identify new staff bookings to replace cancellations. At the peak of vaccine hesitancy, pharmacists provided support and advice to allow staff to make educated decisions.



Pharmacist assisting COVID vaccinations

Pharmacists provided significant support to medical and nursing staff on the floor regarding medication management and other related issues.

Discussion

A clinical pharmacy service was successfully implemented within a new area of practice. The role of the clinical pharmacists onsite at the quarantine health hotels, within the multidisciplinary healthcare team, was extremely valuable and contributed to safe and timely medication management within a high-risk environment.