

Discontinued Medications: Are they really discontinued?

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Problem Statement

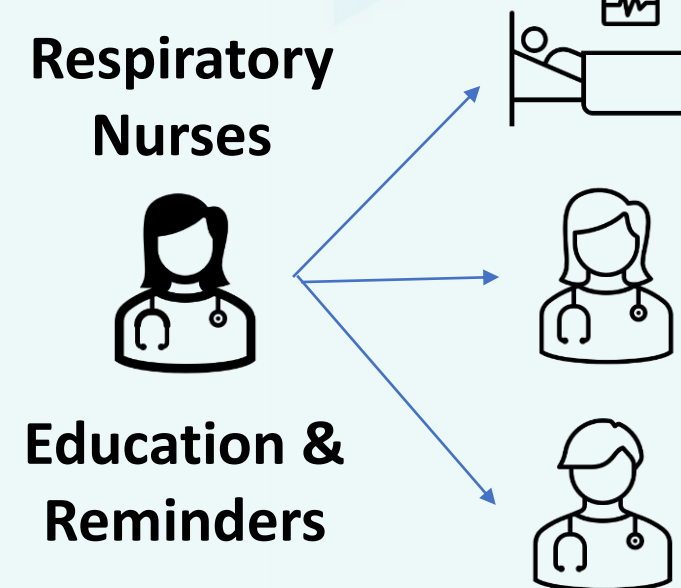
Chronic Obstructive Pulmonary Disease (COPD) or asthma patients often come to the emergency department when they have an acute exacerbation. Due to concerns of aerosolization of Covid-19, wet nebulizers were switched to dry nebulizers (Ipratropium with salbutamol).

These inhalers are commonly issued inpatient and bought home by patients upon discharge. However, ipratropium inhalers should not be used by patients at home, unless ordered by doctors. Patients might be unaware and continue to administer ipratropium after discharge resulting in adverse side effects.

Potential Solutions

A root cause analysis was performed and identified the lack of knowledge from both patients and healthcare workers as a key contributor to the problem. To address this, PDSA cycle 1 and 2 were conducted.

PDSA Cycle 1



Patients were counselled on the indications of ipratropium and to stop administration post-discharge

Ward nurses were informed to discard ipratropium upon discharge

Doctors were informed to discontinue ipratropium inhalers on discharge

PDSA Cycle 2

Workshops was conducted to educate nurses from medical wards on the appropriate use of ipratropium and side effects from excessive use to ensure that nurses understands the importance of discontinuing ipratropium if not required on discharge.

Reasons why patient should not bring back their ipratropium inhalers.

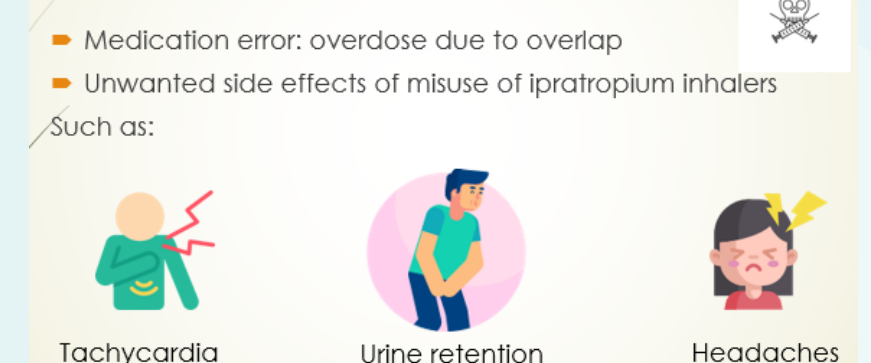


Fig 1: Slide from the workshop

Project Aim

To reduce the incidence of patients inappropriately discharged with ipratropium by 80% within 6 months.

Lessons Learnt

There were some difficulties in collaborating with various stakeholders. Fortunately, stakeholders were kept updated by the leader after meetings which ensured that everyone were on the same page.

Interpreting the data collected was another challenge faced which was overcome by consulting colleagues to assist in the data analysis.

Outcomes & Impacts

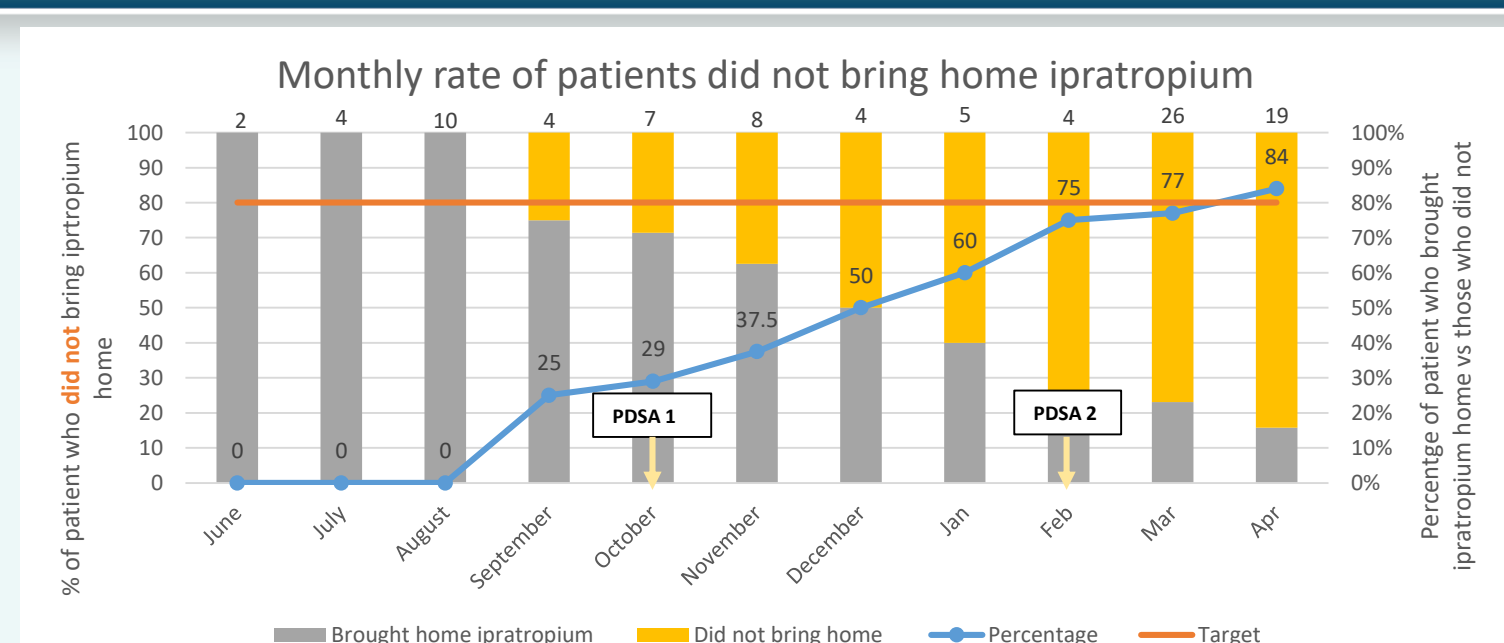


Chart 1: Monthly rate of patients who brought and did not bring home ipratropium

Before intervention in Oct 22, only 5% of patients did not bring home ipratropium and up to 46% of patients continued to use ipratropium post-discharge. Post-intervention, **84% of patient did not bring home ipratropium.**

The respiratory nurse-led interventions and workshops have reflected a significant change in practice. With ongoing respiratory workshops and reinforcement, the incidences of patients inappropriately discharged with ipratropium will be further reduced, minimizing the risk of unintended side effects.