

CLIMATE CONSCIOUS INHALER PRACTICES IN INPATIENT CARE

Tamper Sealing the Inhaler Cap: A step-by-step guide



This step-by-step guide was developed by the Critical Air Project, led by Dr. Valeria Stoyanova and Dr. Celia Culley at Island Health in Victoria, British Columbia. The steps in this guide are contextualized by the worked examples and recommendations from the Critical Air Project team.

Use the Notes section to brainstorm who to engage, ideas for action, and to check off completed steps!

1

Engage with pharmacy staff about the history and rationale for the current tamper seal location

Context

The team reached out to pharmacists and pharmacy technicians at all inpatient hospitals across Vancouver Island to enquire about their tamper seal practice. At the two tertiary centers, the tamper seal is located across a plastic bag that contains the inhaler. Infection control concerns were cited as the underlying motive to tamper seal the plastic bag rather than the cap.

Notes

2

Assess any unintended consequences from the tamper seal location, such as device disposal

Context

At the tertiary care center, inhalers with the tamper seal located on the plastic bag containing them are often removed to fit in the patient-specific medication drawer, thereby breaking the tamper seal.

- Once the tamper seal is broken, there is no reliable way to determine whether the inhaler has been used by the patient. Therefore, each inhaler without a tamper seal will be sent for disposal at the end of a patient's hospital stay, whether it has been in contact with the patient or not.
- This leads to waste of unused inhalers that could otherwise be repurposed, increased pharmaceutical disposal costs and significant climate impact.

Notes

3

Consider alternate tamper seal strategies and consult relevant stakeholders

Context

The team spoke with the head of infection control at Island Health who reviewed the two different tamper seal locations. Infection control had no concerns about changing the location of the tamper seal to the inhaler cap, which was a crucial step to alleviate staff concern.

Notes

4

Engage front line providers and staff in the change process

Context

The team considered the impact of technician workflow including applying the tamper seal and the ease of determining whether the tamper seal is intact. They also considered the logistics of returning an inhaler to the pharmacy from the nursing perspective, and how to safely repurpose the unused inhaler from an infection control standpoint.

Notes

5

Prepare the case for change

Context

The team prepared a briefing note using the approved template at their site that identified the tamper seal location, the unintended consequences, and proposed alternative solution(s).

Notes

6

Present the case for change and determine next steps

Context

The team discussed their findings and reviewed the briefing note with the pharmacy operations manager, pharmacy operations coordinators, and lead pharmacy technician supervisors to assess steps for implementation.

Notes

For more resources, view the Climate Conscious Inhaler Practices in Inpatient Care playbook at cascadescanada.ca/resources/inhalers/

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