ELIMINATING NEBULISERS

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INTRODUCTION

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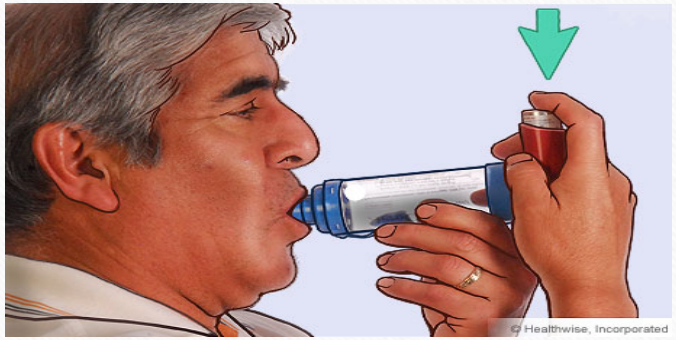
- Dunedin-2009: Stopped routinely using nebulisers for Short Acting Beta 2 Agonists SABA, salbutamol in our Hospital
- Used for other medications e.g antibiotics
- Changed to MDI via spacer



What are your experiences?

- What do you do in your area?
- If you have changed to MDI via spacer, did you encounter any barriers?
- If you have not changed to MDI via spacer, what are the reasons for this/barriers, what do you think is needed in your area to achieve this?

Why change from Nebulisers to MDI via spacer?

Research of the time, and recent research still shows:

- High doses of Short Acting Beta 2 agonists may cause long term adverse effects. Patients can become dependent on salbutamol
- MDI via spacer just as effective as nebulised bronchodilators in adults and more effective than nebulised bronchodilators in children
- Nebulisers give high doses of Short Acting Beta 2 agonists (SABA) , 2.5**mg** to 5**mg** of salbutamol ,versus 100**mcg** per puff of MDI
- Side effects: decreased K+, tremors, tachycardia, anxiety

Why change from Nebulisers to MDI via spacer?

- Delay in seeking medical attention
- Patients can become dependent on nebulisers both physically and psychologically
- MDI via spacer much more portable, this means patients do not need to be restricted to home, and they become more mobile
- Expense for patients, and health providers, cost of machine plus maintenance
- Nebulising machines are a breeding ground for bacteria

How we eliminated nebulisers

- Multi-disciplinary approach, involving Drs, Respiratory Nurse Educators, nurses on the floor, Physiotherapists, G.P.s, patients and patients' Whanau
- Drs and Physiotherapists, keen and on board
- Nurses were educated and engaged through a survey and participation in programme
- Patients and Whanau were engaged through teaching, rehab programs and individual management plans. Respiratory Pathways where up dated to reflect changes
- G.P.s engaged through letters sent out to them

How we eliminated nebulisers

A Survey of nurses showed nurses were confident that inhaling bronchodilator via spacer was just as effective as a nebuliser

Concerns of nurses:

- Patients would not be well enough to use spacer
- Patients who believed they needed their nebulisers would be hard to manage
- Patients on Non Invasive Ventilation (NIV), would need inline nebulisers

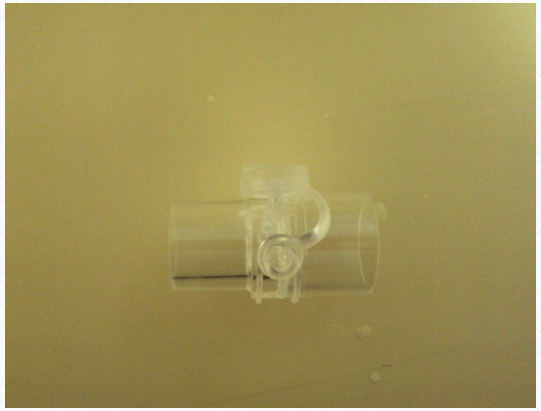
How we eliminated nebulisers

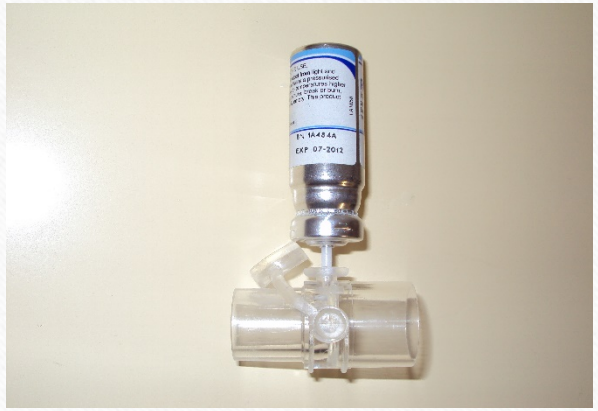
To answer these concerns:

- Nurses to help patients with spacer if required
- Nurses to use their usual respiratory nurse skills to reassure patients
- Patients could use MDI via spacer when having breaks off NIV(non invasive ventilation)
- Later found we could give MDI inline if this was required

How we eliminated nebulisers

Clear link inline inhaler device to give inhaler inline when using NIV





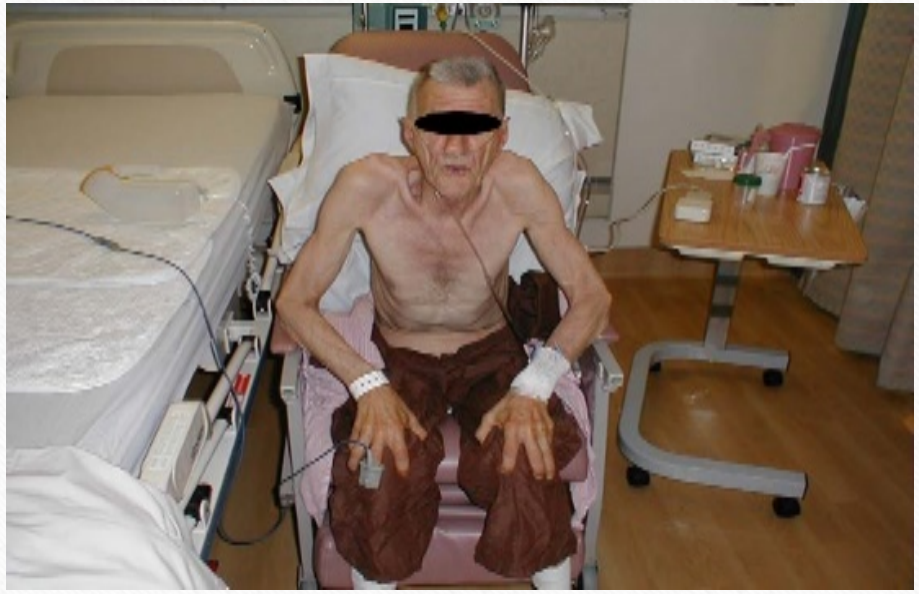
Eliminating nebulisers:
A respiratory nurse's point of view

A respiratory nurse's point of view

- Challenging at first, patients and whanau demanding nebulisers
- Explanations, education
- Easier once, ED on board, and most of our regular clients educated
- Used respiratory nurse skills, individual nurses had their own particular ways to help patients
- Ways of breathing, positioning, reassurance, confidence, usual adjunct treatments as charted, e.g Morphine, prednisone, antibiotics, NIV, spacer masks for some patients

MASKS FOR SPACERS

A respiratory nurse's point of view
POSITIONING

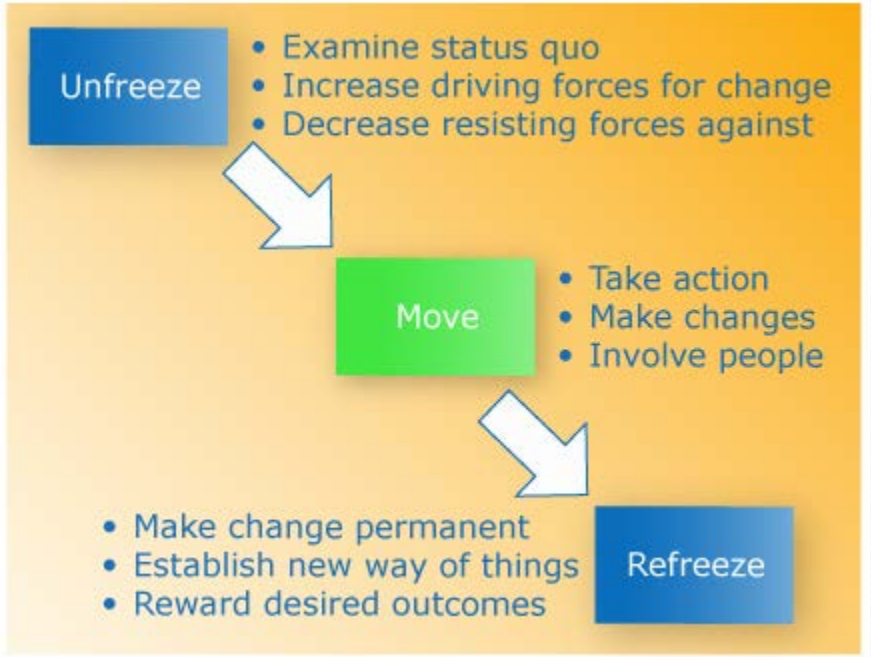


The Walrus

CONCLUSION
To eliminate nebulisers we:

1. Agreed eliminating nebulisers is best practice
2. Used a multidisciplinary approach
3. Engaged all stake holders including patients and their Whanau
4. Educated all stakeholders
5. Provided rehabilitation programmes, respiratory pathways and individual management plans
6. Used our respiratory nurse skills to enable patients to transition to MDI via spacer
7. Audited and evaluated change in practice

Change Model
Kert Lewin (1947)



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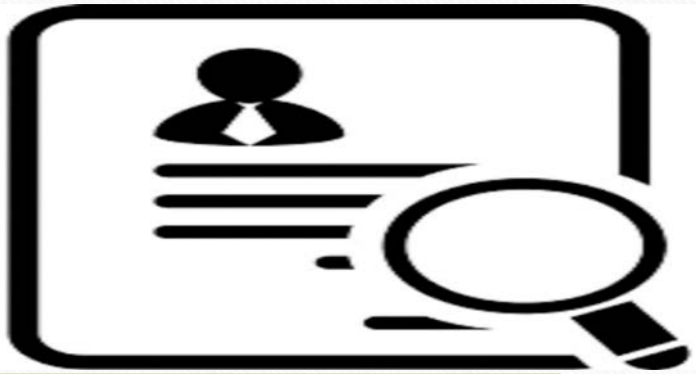

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Thank you!


THANKS

QUESTIONS?