

Behind the Scenes at the Newfoundland and Labrador Prescription Drug Program (NLPDP)

Conversion from Wet Nebulization to Dry Inhalation

NLPDP will soon be launching an initiative to encourage the conversion of wet nebulized therapy (WN) to metered-dose inhalers (MDI), with or without a spacer device, or dry powder inhalers (DPI). The development and implementation of this initiative will be a combined effort between government, physicians, pharmacists and the Lung Association of NL.

Why switch from Nebulization to MDIs or DPIs?

MDIs and DPIs are more efficient delivery systems for inhalation medications.

- The efficiency of nebulization is reported between 1-10%, but in practice is likely to be 5%, at best. To compensate for this inefficiency, a larger dose of medication is used.
- MDIs obtain approximately 10% deposition in the lungs. The addition of a spacer device increases the efficiency to 15-20%.
- DPIs, such as Diskhalers or Diskus, provide 6-15% deposition while the Turbuhalers can attain up to 30% delivery to the lungs. These devices, however, require the patient to generate a forceful inhalation for adequate delivery.

The clinical efficacy of MDIs or DPIs is equal to or greater than WN.

- MDIs and DPIs offer quick administration and faster reversal of bronchospasm as compared to WN.
- Canadian Consensus Guidelines for Asthma/ COPD support the use of MDIs and DPIs and state that WN is rarely indicated at any age. Nebulized solutions are only required for patients who are unable to coordinate an MDI, with or without a spacer, or a DPI.

MDIs and DPIs are more convenient and more cost effective.

- Nebulization equipment is not transportable, and is time consuming to use and maintain. Higher drug costs and the additional costs of supplies, such as masks and tubing, make WN more costly as compared to MDIs or DPIs.

The success of this initiative will require the cooperation of health care providers. The initiative will involve moving WN to special authorization under the NLPDP. In advance of this, the initiative will aim to achieve the following:

- Provide evidence-based educational material to patients and health care professionals.
- Partner with:
 - The Lung Association of NL to provide a toll-free support line, as well as to distribute posters supporting this initiative.
 - The NLMA to assist in development and implementation, provide live continuing education (CME), and assist in communicating information on this initiative.
 - The Pharmacist's Association of NL to assist in development and implementation, provide live continuing education (CE), and assist in communicating information on this initiative.
 - The Respiratory Association of NL to communicate details of the initiative to their membership.
 - The pharmaceutical manufacturers who market inhaled respiratory medications to ensure their representatives deliver a supportive message to health care professionals.

Common Drug Review Update

As mentioned in a previous issue, the Common Drug Review (CDR) is a common advisory process for assessing new drugs for potential coverage by federal/provincial/territorial drug plans in Canada (except Quebec). As the central component of CDR, the Canadian Expert Drug Advisory Committee (CEDAC) was recently appointed. Members of CEDAC are:

- Dr. Andrea Laupacis (MD)(chair): General Internist at Sunnybrook and Women's Health Sciences Center, Toronto; President and CEO of the Institute for Clinical Evaluative Sciences
- Dr. John Conly (MD) (vice-chair): Infectious Disease specialist; Head, Dept. of Medicine, Calgary Health Region and University of Calgary
- Dr. Ken Bassett (MD): Senior Medical Consultant, University of British Columbia Center for Health Services and Policy Research
- Dr. Margot Burnell(MD):Medical Oncologist, Atlantic Health Sciences Corp, St. John, NB
- Dr. Bruce Carleton (PharmD): Associate Professor and Chair, Division of Clinical Pharmacy, Faculty of Pharmaceutical Sciences, University of British Columbia
- Dr. Michael Evans (MD): Family Physician, Toronto Western Hospital
- Dr. Anne Holbrook: Clinical Pharmacologist and Internal Medicine Specialist, Center for Evaluation of Medicines, St. Joseph's Hospital and Hamilton Health Sciences Corp.
- Dr. Laurie Mallery (MD): Geriatrician; Acting Head, Division of Geriatric Medicine, Dalhousie University; Acting Director, Center for Health Care for the Elderly, Queen Elizabeth II Health Sciences Center
- Dr. Braden Manns (MD): Nephrologist, University of Calgary; Masters in Health Economics
- Dr. Tom Paton (PharmD): Director, Dept. of Pharmacy at Sunnybrook and Women's College Health Sciences Center, Toronto
- Dr. Dale Quest (PhD): Associate Member, College of Medicine/Pharmacology and College of Dentistry/ Biological, Diagnostic and Surgical Sciences.

Benefit Listing Update

Additions (open benefit): Crestor 10, 20, 40mg tablets; Biprel 4mg/1.25mg tablet; PMS-methylphenidate 5mg tablet (for recipients under 16 years of age: otherwise requires special authorization)

Deletions from Benefit list: nefazodone (Serzone and generics)