Reducing low-value care for bronchiolitis patients

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Bronchiolitis is...

- a viral respiratory infection
- the leading cause of infant hospitalization in Canada

Unproven tests & medications increase costs, length of stay and do not improve patient outcomes. We aimed to:

- Provide pediatric emergency physicians with reports comparing their management of bronchiolitis to their peers
- Host a multi-disciplinary feedback session to identify opportunities & strategies for practice improvement

How we did it:

- Used administrative data for patients <12 months old with bronchiolitis seen by pediatric emergency physicians in Calgary emergency departments from April 2013 to March 2017.
- Presented physicians with practice data reports on medications & tests in the emergency department.
- Hosted a feedback session with physicians, respiratory therapists, nurses & in-patient physicians.

Our data showed:

| Low-value test and medication use for admitted & discharged bronchiolitis patients: |
|----------------------------------|------------------|-----------------|------------------|
|                                  | Chest X-ray      | Viral testing   | Bronchodilators  |
| Admitted patients                | 42.9%            | 63.9%           | 38.6%            |
| Discharged patients              | 14.7%            | 23.5%           | 22.7%            |

Reducing the number of low-value tests & medications in the ED has the potential to reduce costs & improve patient care.

Stakeholder identified strategies to reduce the use of these low-value tests:

- Development of care pathways
- Alignment with in-patient care
- Education
- Repeated data reports

Our research found that...

- tests & medications are being administered more than participants thought.
- there is significant variability between practice guidelines & current practice.

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