## **Quality Improvement In Your Practice**

Steps	Description	Examples
1. Determine the quality gap and clarify the problem	Understand the main issues you want to improve. Obtain this from reviewing baseline data (can use a small sample) to identify areas for improvement. Delve deeper into your problem with your team to find key drivers/reasons that explain your quality gap.	Review 10 charts of patients with bronchiolitis. If more than 8.8% (i.e., one) of your patients have salbutamol prescribed, you are above published benchmarks (see references) and have a quality gap! QI tools such as a fishbone diagram or pareto chart can be useful to understand this gap.
2. Develop a SMART aim	Consider the following elements: <b>S</b> : Specific <b>M</b> : Measurable <b>A</b> : Achievable <b>R</b> : Relevant <b>T</b> : Time-bound	"Reduce salbutamol usage in patients with bronchiolitis by 20% of baseline seasons by the end of April 2016." <sup>1</sup>
3. Implement a intervention(s)	Use a team approach to develop solutions that are specific and realistic to address identified barriers. Aim for solutions that have strong error-reduction strategies that rely less on human behaviour (i.e. relying on memory or education alone).	<ul> <li>Standardize management: adopt viral prescription for discharge, clinical order set, care pathway<sup>3</sup></li> <li>Increase caregiver understanding of disease: provide resources (video, infographic, leaflet)</li> <li>Improve provider knowledge: offer education sessions, identify front-line champions<sup>4</sup></li> <li>Increase clinician accountability: provide feedback on adherence compared to benchmarks, forcing functions or alerts in EMR<sup>5</sup></li> </ul>
<b>4. Identify a</b> <b>family of</b> <b>measures</b> (See benchmark table on second page)	Outcome measure: Assessing impact from intervention. Outcomes measures often focus on the patient impact Process measure: Assessing intervention(s) implemented (optional) Balancing measures: Unintended 'side effect' of the intervention	<ul> <li>Outcome:<sup>6</sup></li> <li>% of patients with bronchiolitis who receive salbutamol</li> <li>Process: <ul> <li>Number of viral prescriptions provided</li> <li>Number staff attended education session</li> <li>Number of family resources provided</li> </ul> </li> <li>Balancing: <ul> <li>Unplanned revisit or follow-up phone-call (either clinic/ED) within 72 hours</li> <li>ED length of stay</li> <li>Serious safety events</li> </ul> </li> </ul>
5. Implement change and track measures	Track progress and identify improvement opportunities.	When order set use increases, the team may realise providers frequently override alert not to use salbutamol. This may lead to removing salbutamol from order set altogether.

## Achievable Benchmarks in Care (ABCs) for Bronchiolitis

Non-evidence based interventions	Discharged from ED
CXR	7.3%
Viral testing	1.0%
Bronchodilators	8.8%
Steroids	2.3%
Antibiotics	0.7%

Ralston, S et al The Evolution of Quality Benchmarks for Bronchiolitis. Pediatrics 2021; 148(3):e2021050710

If in outpatient setting - aim for even lower targets

## **CME CREDITS**

- Quality improvement is a great way to obtain CME credits.
- · Meet QI requirements for licensure.
- Earn up to 5 Mainpro+® credits using a Linking Learning to Practice exercise to document how this tool has affected your practice.

## References

- 1. Tejedor-Sojo, J., Chan, K., Bailey, M., Williams, A., Killgore, M., Gillard, L., Campo, M., Hua, H. & Jain, S. (2019). Improving Bronchiolitis Care in Outpatient Settings Across a Health Care System. Pediatric Emergency Care, 35 (11), 791-798. doi: 10.1097/PEC.000000000001966
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- 6. Dunn M, Muthu N, Burlingame CC, et al. Reducing Albuterol Use in Children With Bronchiolitis. Pediatrics. 2020;145(1):e20190306. doi:10.1542/peds.2019-0306