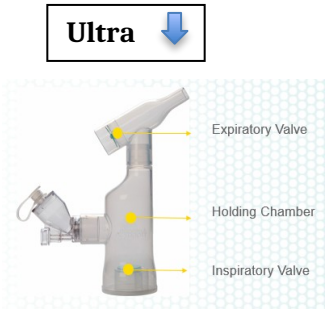
WRHN Pediatric
Aerogen Ultra Trial Overview

Aerogen is the gold standard in aerosol drug delivery and has supported the treatment of millions of patients worldwide across acute care settings. The Aerogen Ultra now brings that same vibrating mesh technology to spontaneously breathing patients in the Emergency Department, supporting efficient, high-quality aerosol delivery across the continuum of care.

Why Aerogen Ultra?

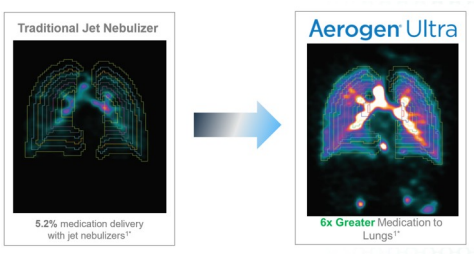


Designed for Acute Care Workflow

- Quick and simple setup
- Silent operation
- No added flow required
- Can be used with mouthpiece or mask
- Supports efficient aerosol medication delivery

Evidence-Based Aerosol Delivery (see QR code for supporting literature)

- **23–37 min reduction** in Emergency Department (ED) length of stay (LOS) (Dunne & Shortt, 2018; Moody et al., 2020)
- **30% reduction** in hospital admissions (Dunne & Shortt, 2018; Moody et al., 2020)
- **6× greater** aerosol delivery compared to traditional jet nebulizers (Dugernier et al., 2017)
- **30% higher** ED discharge rates (Dunne & Shortt, 2018; Moody et al., 2020)



Continuum of Care

- One system used throughout a patient's respiratory journey (Mechanical Ventilation, Non-Invasive Ventilation, High Flow and Self Ventilating), supporting continuity of care.

Ultra ED Trial

Start Dates	• **Staff Training-** August 24th • **Go Live-** August 31st **Note: 30-patient trial targeting pediatric populations.*

Aerogen

Patient Criteria

- Pediatric patients ages **1 to 17 years** of age
- Presents with cough and increased shortness of breath on exertion, with or without wheezing
- Increased use of their own MDI, with partial or no relief
- **Does not** require a previous diagnosis of asthma
- SpO2 **≤ 90%**
- Immediate Ultra Use**: PRAM score ≥ 6**
- Consider Ultra Use: **PRAM score 4–6** with failed MDI + AeroChamber trial or clinical discretion

Objectives of the Trial

- Standardize aerosol delivery across the continuum of care
- Reduce Emergency Department LOS, admissions, and medication utilization
- Evaluate impact on patient flow and escalation of care
- Improve staff workflow and overall user satisfaction

Education & Clinical Support

• Product education sessions • Bedside support • Implementation and workflow support • Continuing education

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Questions???
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Aerogen Controllers:

- 1 mounted in Room 4 in ED
- Stored in respiratory room (across from Rm 7 in ED) and to be placed on an IV pole when in use

Recommended weight-based dosing for nebulized treatments:

	Salbutamol (Ventolin)	Ipratropium (Atrovent)	Number of Treatments
Less than 20 kg	2.5 mg	250 mcg	x3 (q20 mins)
Greater than or equal to 20 kg	5 mg	500 mcg	x3 (q20 mins)

**Not all patients will require 3 doses to reach symptom control, so the RT will reassess the patient between doses.*