

Tuesday, October 7 Sessions			
Time	Session	Description	Objectives
8:00 a.m.	Welcome & Announcements	MSRC and industry announcements	
8:15 a.m.	Workplace Violence	Workplace Violence- safety training which will include early intervention & de-escalation tips, educate on situational awareness, and what to do if active attacker.	<ol style="list-style-type: none"> <li>1. Understand types of workplace violence</li> <li>2. Safety training, tips, situational awareness, early intervention/de-escalation, review active attacker scenarios</li> <li>3. Discuss resources to HC workers, training available, future state</li> </ol>
9:15 a.m.	Implementing Quality Improvement in Respiratory Care	Participants in this interactive session will have the opportunity to brainstorm a quality improvement project they can introduce in their department. Participants will learn how to identify QI opportunities and develop a basic plan for a QI project.	<ol style="list-style-type: none"> <li>1. Identify and prioritize at least two potential quality improvement opportunities within your respiratory care department.</li> <li>2. Develop a basic, measurable aim statement for a quality improvement project.</li> <li>3. Outline key steps for initiating a QI project, including identifying stakeholders and potential interventions.</li> </ol>
9:15 a.m.	NAVA- Innovating mechanical ventilation techniques in the NICU	Discussing the methodology, application, statistical/quality metrics impact, and future perspective of Neurally Adjusted Ventilatory Assist (NAVA) in the NICU	Understand the functional applicability of NAVA, Evaluate comparative data of NAVA with other available modes of mechanical ventilation, Discuss the anticipation of future technology growth and accessibility expansion of NAVA .
9:15 a.m.	Oscillating Airway Clearance and Lung Expansion Therapies	An overview of oscillation therapies for airway clearance and lung expansion in acute and home care settings.	Define the role of shared decision making and patient engagement in developing effective, patient-centered care plans
9:15 a.m.	Using Oscillometry to Evaluate Breathing	Oscillometry is easy to understand and is one of the many tools available to evaluate pulmonary function. One of the primary advantages of oscillometry is that it only requires tidal (normal) breathing to assess how easy it is to move air in and out of the airways. Matt explains the key parameters and a demonstration.	<ol style="list-style-type: none"> <li>1. Name two parameters related to oscillometry.</li> <li>2. Demonstrate how an oscillometry measurement is performed.</li> <li>3. Describe applications / populations to use this diagnostic tool.</li> </ol>
10:45 a.m.	Diagnosing Asthma. Spirometry is Normal, Now What?	Asthma is one of the most prevalent chronic respiratory conditions globally. Ensuring that patients have the right diagnosis is the first step in improving the lives of millions of people who struggle with the	*Discuss the role of bronchial challenge testing in the diagnosis of asthma

		<p>disease. Research and international guidelines, including the American Thoracic Society and European Respiratory Society, tell us we should not diagnose asthma based on symptoms alone. Yet, research also shows that many asthma patients are diagnosed on symptoms alone. An example of this discrepancy is from a 2017 multi-center study in Canada, where approximately 50% of study participants had never had objective testing prior to being diagnosis with asthma. Which objective tests should be utilized? Spirometry pre and post bronchodilator challenge is the first test. When the results are normal and the patient is still reporting symptoms, what action comes next? Direct and indirect bronchial challenge tests provide valuable objective information and should be included, when indicated, to diagnose patients. Bronchial challenge tests are objective and evidence-based measures of airway hyperresponsiveness and inflammation. Both are key features of asthma. The right diagnosis is key.</p>	<p>*Identify the differences between direct and indirect bronchial challenge tests and when to utilize each</p> <p>*Recognize and discuss the technical standards and guidelines for performing bronchial challenge tests</p>
10:45 a.m.	Diseases made easy for the RT student	<p>This presentation will review obstructive and restrictive lung diseases. The presentation aims to help students easily categorize respiratory disease with acronyms and review findings in PFT results and vent settings (including measurements and graphics)</p>	<ol style="list-style-type: none"> <li>1) Compare and contrast obstructive lung diseases versus restrictive lung diseases</li> <li>2) Evaluate findings for PFT results in obstructive and restrictive lung diseases</li> <li>3) Evaluate ventilator data and findings in ventilator graphics for obstructive and restrictive lung disease</li> </ol>
10:45 a.m.	Growth Development with Implementing NAVA with BPD patients	<p>This presentation covers how nutrition and NAVA ventilation strategies coincide for this specific population.</p>	<ol style="list-style-type: none"> <li>1. Evaluates how different means of nourishment benefit the patient alongside ventilation strategies.</li> <li>2. Insight on how powerful the RT role is with these patients and increase knowledge on nutritional benefits to BPD patients.</li> <li>3. Identify where research has shown improvement with managing BPD patients alongside possibilities for more research to be conducted.</li> </ol>

10:45 a.m.	Sync or Sink: Assisting Our Patients with Ventilator Asynchrony	Using ventilator waveforms to adjust and optimize settings for patient ventilator asynchrony.	Describing and identifying patient ventilator asynchrony. Demonstrating tools to reduce asynchrony. Discussing current medical literature on patient ventilator asynchrony.
1:00 p.m.	Pig Heart & Lung Dissection	Participants will experience hands on dissection and examination of lung specimen to obtain a greater understanding of the anatomy and physiology of the lungs and heart.	Identify anatomical structures in the lungs and heart. Compare recruited lung tissue to atelectatic lungs. Compare recruitment of lungs using PEEP vs increased tidal volume.
1:00 p.m.	NICU Respiratory Management Strategies for Critical Inter-facility Transport	Dive into new and upcoming trends, technologies, and best-practice guidelines for critically ill neonatal patients in the inter-facility transport setting.	Discuss common causes of and solutions for airway compromise of neonatal patients during ground and air transport Plan respiratory management strategies for critically ill neonates based on diagnosis Discuss adjunct airway devices, ventilator monitoring, and troubleshooting in the mobile environment
1:00 p.m.	NIPPV in adult hypoventilatory disorders: patient selection and settings	Discuss chronic hypoventilation and its adverse consequences if left untreated. Review NIPPV modes, machines, and the use if NIV in the 4 subtypes of hypoventilation along with ATS and CHEST guidelines. Lastly, will review the new Medicare guidelines on chronic NIV use in COPD.	Patient selection and NIPPV settings in OHS Patient selection and NIPPV settings in COPD Patient selection and NIPPV settings in neuromuscular disease and restrictive chest wall disorders
1:00 p.m.	PFT: Vitalness of Vital Capacity	Vital Capacity is the essential PFT parameter that solidifies testing session results are accurate and reliable.	Address common mistakes/misconceptions about tracheostomies
2:00 p.m.	What is FeNO and How Can it Help Asthma Patients?	Fractional exhaled nitric oxide (FeNO) is a measurement of the level of inflammatory markers in exhaled breath. FeNO is proving to be an increasingly important marker for airway inflammation. The measurements can be used to support the diagnoses of allergic and eosinophilic asthma and provide individualized therapy. Providing physicians with a quick, non-invasive measurement of airway inflammation, FeNO can help ensure that patients receive the correct diagnosis, medications and	Following this presentation the learner will: *Define and discuss what fractional exhaled nitric oxide (FeNO) is and what it reveals *Identify the indications for FeNO measurements both in diagnostics and management *Recognize guideline support FeNO usage

		treatment needed. Respiratory Therapists can utilize FeNO measurements when educating patients on why medication adherence, avoiding triggers and maintaining a healthy life-style is essential.	
2:00 p.m.	Leveraging Student Networks and Healthcare Professionals to Improve Awareness and Access to Lung Cancer Screening	During this presentation, we will be discussing the importance of lung cancer screening as well as the work of the American Lung Cancer Screening Initiative to increase access to screening for high-risk populations, including the utilization of students and healthcare professional.s	Describe the current landscape of lung cancer screening, discuss the importance of lung cancer screening, and demonstrate the significance of education surrounding lung cancer and lung cancer screening.
2:00 p.m.	It is Loud, Chaotic and We Can't Oxygenate/Ventilate-Pediatric Considerations in Aeromedical Transport	It is Loud, Chaotic and We Can't Oxygenate/Ventilate-Pediatric Considerations in Aeromedical Transport In this case-based presentation we will discuss the essential role of checklists, team cross-checks and open communication when caring for decompensating critically ill or injured children. We will outline primary, secondary and tertiary assessment findings that lead to the development of differentials and decisions that establish clinical and transport priorities of care.	Describe how the use of checklists in aviation has migrated into emergency procedures and care. Discuss how team dynamics and mutual decision-making models can impact the flow, tempo and effectiveness of patient care. Outline the clinical impact of point of care ultrasound, transport blood gas analysis and flight nurse initiated surgical procedures when resuscitating pediatric patients.