

MID-YEAR PROGRESS REPORT OF THE COPD FOUNDATION NEBULIZER CONSORTIUM



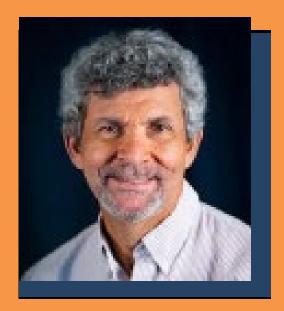




A COPD Foundation Led Consortium

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David Mannino, MD
COPD Foundation (Co-Chair)



Karmon Johnson, PharmD
Theravance Biopharma, Founding
Industry Partner (Co-Chair)

Dear CNC Members,

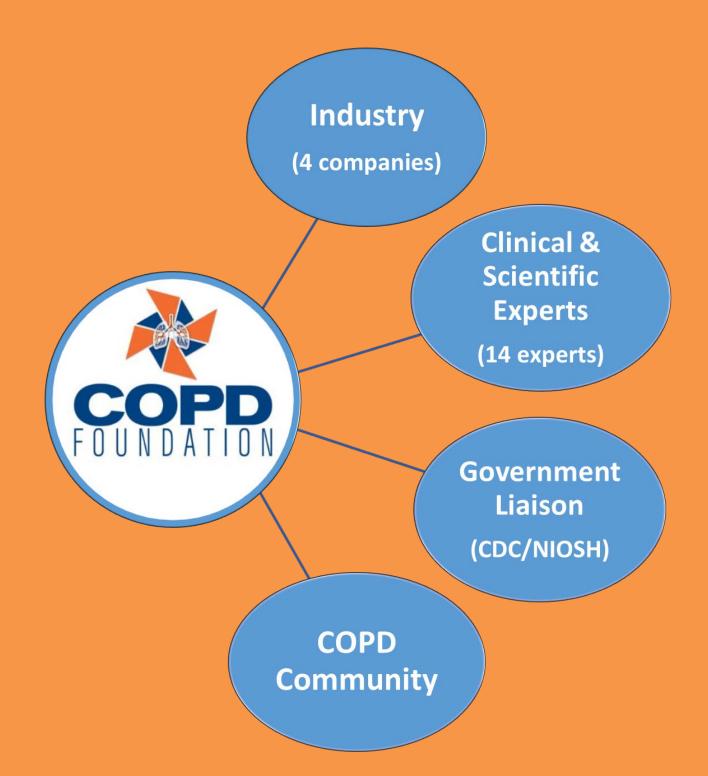
We are pleased to share with you our mid-year progress report, which highlights the excellent work we have accomplished in the past six months since the formation of the COPD Foundation (COPDF) Nebulizer Consortium (CNC). The CNC was established as a result of the COVID-19 pandemic to improve the understanding of and develop solutions to mitigate any potential aerosolized infection risks associated with the administration of nebulized therapy.

We are fortunate for the collaboration between pharmaceutical companies, nebulizer device manufacturers, and aerosol experts that came together to pool expertise and funds with the goal to better understand and address any potential risks of nebulization amid the COVID-19 pandemic and beyond.

In the next six months, we look forward to exciting and important activities we have planned. Thank you for your continued support and commitment to the CNC thus far as we go into the second half of 2021, and we look forward to another great year together in 2022.

Sincerely,

David and Karmon



MISSION

The COPD Foundation-led (COPDF)

Nebulizer Consortium (CNC) was established as a result of the COVID-19 pandemic to improve the understanding of any infection risks that may be associated with the administration of nebulized therapy and to develop solutions that ensure the safety and education of patients, caregivers, and health care professionals.

The CNC is focused on three strategy pillars: Research, Education and Guidance.



RESEARCH

- Basic science
- Conduct clinical & patient-focused research
- Review evidence and address gaps
- Produce joint publications



EDUCATION

- Promote community awareness
- Advocacy
- Educational programs targeted to HCPs, patients & caregivers (I.e., Blog posts, Webinars, Newsletters, Social Media, FB Live events)



GUIDANCE

- Develop guidelines
- Promote any new/updated guidelines

COLLABORATION



CNC Members:

14 4 3 1
Academic Industry Patient Government Experts Partners Advocates Liaison

THANK YOU, INDUSTRY SPONSORS









Theravance Biopharma Inc.

- Karmon Johnson, PharmD (Industry Co-Chair)
- Lauren Cochran, PharmD

Aerogen Limited

- Patricia A Dailey, MSc, RRT
- Brant Nave

PARI Inc.

- Lisa Cambridge, MSHS, RRT
- Rosina Ledermueller
- Nicholas Schwenck

Monaghan Medical

- Jason Suggett, PhD, BPharm, MBA
- Dom Coppolo, MBA, RRT, FAARC, AE-C
- Judy Schloss

COPD Foundation

- David Mannino, MD, Co-founder, Medical Director (Co-Chair)
- Ruth Tal-Singer PhD, President & Chief Scientific Officer
- Elisha Malanga, Chief Research Officer
- Debora Merrill, MBA, VP, CBQC & Project Manager
- Sergio Martinez, Project Manager
- Mike Hess, MPH, RRT, Senior Director of Patient Outreach and Education
- Julie Yates, BS, Senior Director COPD360 Clinical Investigations

Clinical and Scientific Experts

- Lewis J. Radonovich, MD, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, Resources for Human Development agency
- Phil Kuehl, PhD, Lovelace Biomedical
- David C. Christiani, MD, MPH, MS, Harvard Medical School; Massachusetts General Hospital
- Igor Barjaktarevic, MD, PhD, University of California Los Angeles
- Jill Ohar, MD, Wake Forest University
- Jie Li, PhD, RRT-NPS, RRT-ACCS, FAARC, Rush University
- M. Brad Drummond, MD, MHS, University of North Carolina at Chapel Hill
- **Donald Mahler, MD,** Valley Regional Hospital, Claremont, New Hampshire; Professor Emeritus at Dartmouth College
- Rajiv Dhand, MD, FCCP, FACP, FAARC, FRSM, ATSF, University of Tennessee Health Sciences Center
- Akshay Sood, MD, MPH, University of New Mexico School of Medicine
- Arzu Ari, PhD, RRT, PT, CPFT, FAARC, FCCP, Texas State University
- Sanjay Sethi, MD, University at Buffalo, State University of New York
- Brian Carlin, MD, Sleep Medicine and Lung Health Consultants, Pittsburgh, PA
- Donald Tashkin, MD, University of California Los Angeles
- Lisa Saunders, BAS, RRT, TTS, Kalamazoo, MI

We are pleased to announce that a representative from the American Thoracic Society (ATS) will be joining the CNC team in June.

COPD Foundation Patient Advocates

- Dan Kealing, COPD Foundation Texas State Captain
- Bonnie Truelsen, COPD Foundation Illinois State Captain
- Diane Walsh, COPD Foundation Missouri State Captain

The CNC has accomplished a great deal since its formation in December 2020. We are excited to share the progress that was made during the past six months.

ACCOMPLISHMENTS

Facebook Live Event "Nebulizers, COVID-19, and You!"

In January 2021, we launched an educational Facebook live event where Mike Hess, RRT, David Mannino, MD and Janice Cotton, BS, MA (COPD Foundation Illinois State Captain) discussed nebulizer use in the age of COVID-19 and the formation of the COPD Foundation Nebulizer Consortium (CNC).





PILLAR LEADS

In February 2021, we solidified the three main areas of focus: **Research**, **Education** and **Guidance**. For each strategy pillar, we identified a working group lead.

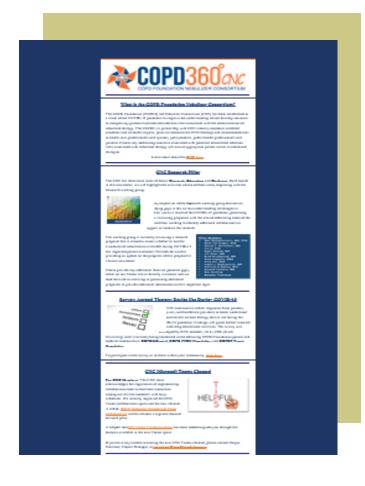
Once the working groups were underway, we updated the structure to in line with other consortia and added an industry co-lead.

	Academic Lead	Industry Co-Lead
Research	Igor Barjaktarevic, MD, PhD	Karmon Johnson, PharmD
Education	Lisa Saunders, BAS, RRT	Lauren Cochran, PharmD
Guidance	Philip Kuehl, PhD	Patricia A Dailey, MSc, RRT

MONTHLY NEWSLETTERS

In March 2021, we implemented a monthly electronic newsletter communication to ensure that every member of the growing consortium remained up to date. Since team meetings were held monthly and attendance was agenda driven, we created the newsletters to include updates on the work from the different working groups, as well as sharing announcements, outputs, and general

related material from the nebulizer consortium and other affiliated organizations.



CONDUCTED A SURVEY

From January and March 2021, we conducted a survey titled, "Aerosol Therapy Device Use During COVID-19", within the COPD Foundation's patient and medical communities (COPD360social, PPRN, Facebook, COPDF Praxis and CNC Newsletters) to better understand concerns for aerosol therapy device use during the COVID-19 pandemic.

Results are currently being summarized. Findings can potentially guide further research and will be used to develop education material.

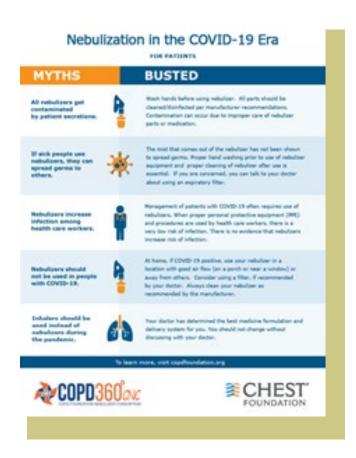


MYTHS BUSTED FOR PATIENTS

In May 2021, based on the "Myths Busted for Clinicians piece that CHEST and Theravance Biopharma released in March 2021, the CNC Education working group developed an educational "Myths Busted" infographic for patients.

That education material will be disseminated through social media in June and provides key information for patients on the safe use of

nebulization and addresses many common misconceptions.



LOOKING AHEAD

In the works?



"Helping the World to Breathe"

The CNC, in collaboration with ATS, has started to work on a video program that will shine light on the respiratory health community for World Lung Day, in September 2021.

CNC provides an example of excellence in multidisciplinary work and collaboration. The video program will highlight how the COPD Foundation, Pharmaceutical Companies, Device Manufacturers, Patients, Subject Matter Experts, Government representatives and Researchers all came together to address a medical need.

Guidance Working Group

The CNC Guidance working group is reviewing current guidance documents and working towards providing clear and consistent guidelines in addition to identifying opportunities for the research and education working groups.



Research Working Group

The CNC Research working group is working on identifying potential gaps with regards to

safe nebulizer use for patients and healthcare providers and then generating data to address them.



Education Working Group

The CNC Education working group is continuing

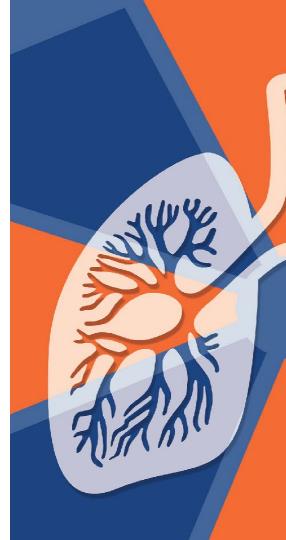
to share clear and consistent information about safe use of nebulization for patients and healthcare providers.



Great work CNC members!

We hope that you enjoyed seeing what we have all accomplished together in just six months, and like us, are looking forward to completing what we have planned for the remaining of 2021.

While the CNC has completed many activities, a great deal of work remains. We will be reaching out to each Industry Sponsor regarding contract renewals by September and hope we can continue this important work together in 2022.





COPD Foundation 3300 Ponce De Leon Blvd Miami, FL 33134

CNC Webpage: https://www.copdfoundation.org/Research/Projects-and-Consortia/COPD-Foundation-Nebulizer-Consortium.aspx