MELodica Orchestra for DYspnea (MELODY): A Randomized Safety, Feasibility, and Efficacy Pilot

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Background

Chronic obstructive pulmonary disease (COPD) is highly prevalent among Veterans. Patients with COPD commonly experience dyspnea, which can be debilitating and may limit daily activities leading to a reduced quality of life. Pulmonary rehabilitation often includes teaching pursed lip breathing as a method to reduce dyspnea. However, patients with COPD, including Veterans, have limited access to pulmonary rehabilitation due to transportation constraints and lack of referrals by physicians.

Methods

MELodica Orchestra for DYspnea (MELODY) is a randomized controlled clinical trial designed to assess the safety, feasibility, and efficacy of a music-based approach to teach pursed lip breathing to Veterans with COPD experiencing dyspnea. Patients will be randomized in a 1:1:1 ratio to the intervention group, education only control group, and usual care control group using block randomization. Patients in the intervention group will meet twice weekly over twelve weeks for instruction on how to play the melodica and to participate in group music-making. The program also includes education about COPD, pursed lip breathing, tobacco cessation, and other relevant topics. Each participant will receive quantitative assessments (e.g., exercise endurance and dyspnea scales) and participate in qualitative interviews.

Anticipated Results

We expect the intervention to be safe and feasible. We hypothesize that patients in the intervention group will achieve the greatest reduction in dyspnea compared with patients in either control group.

Potential Impact

If pilot data demonstrates efficacy, then a multiple-site randomized control trial will be conducted with intent to introduce the program into routine clinical practice.