

HOMEVEND

Home Ventilation in the age of Digital care

KEYWORDS

Home Mechanical Ventilation, Chronic Ventilation, Chronic Respiratory Failure, Telemedicine, E-health, Registry, Cohorts

DURATION

36 months

ABSTRACT

Home Mechanical Ventilation is the provision of mechanical ventilation at home often for long periods of time or even lifelong to patients with chronic respiratory failure. Last decades, a steep increase in the number of patients needing long-term home mechanical ventilation challenged health care systems all over the world because healthcare resources for this complex group of patients, both in-hospital resources and resources for home care, did not match the increase in patient numbers and complexity. Gaining momentum during the COVID-19 pandemic, which accelerated the drive for innovative solutions for e-health and remote monitoring of care, clinicians in many countries started to re-organize Home Mechanical Ventilation care using innovative digital care solutions so that less resources were needed to provide equally effective but more home-based and patient centred care. The significant increase of patients seeking diagnosis and effective treatment, along with increasing shortages healthcare resources, has stressed the importance of changing practices to ensure good quality care. However, Home Mechanical Ventilation care in general and more specific the transformation of care systems using e-health to initiate and adjust therapy during long periods of care at home is extremely variable throughout the world. Also, healthcare services need to guide industry e-health solutions to ensure that they are matched to the needs of the healthcare system and patient utilising these systems. Therefore, it is now the time to gain knowledge about international practices in Home Mechanical Ventilation care and to harmonise innovative e-health solutions in different contexts and on a larger scale. To get insight into changing practices in Europe, quality of care, use of digital health and to ensure that key research priorities are addressed, we aim to build the first international Home Mechanical Ventilation registry. By building an international registry in collaboration with our international network of home mechanical ventilation expertise centres, patient experts, patient organisations and industry partners, gives the opportunity to get data about regional and national practices. We will make use of data from existing large registries, and supplement these with prospective data from additional centres. By doing so, we can address key priorities in this field, in particular to, 1) study current digital health use and disparities among European countries, 2) compare outcomes, specifically patient-related outcomes, based on differential treatment approaches and use of digital health 3) promote and harmonise the use of digital health in Home Mechanical Ventilation with guidelines, educational material for patients, primary care, home care, clinicians and hospitals, and models for implementation of successful e-health solutions, all supported by providers of devices and techniques. This will promote and harmonise the use of e-health in this field, make treatment more efficient, cost-effective and accessible (even in times of a pandemic) and thereby promote sustainability and health equity.

PARTNERS

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