# NHS Nurses Create Eco-Friendly HydroBubble to Assist Lung Patients with Physiotherapy



NHS nurses have repurposed a hands-free water bottle into a device designed to assist cystic fibrosis (CF) and other lung patients with their physiotherapy. Named the HydroBubble, this eco-friendly, reusable device is expected to save the NHS approximately £200 per year per patient, while also reducing plastic waste and carbon footprint.

CF patients typically use Positive Expiratory Pressure (PEP) devices, which require blowing into a bottle of sterile water through tubing. After each session, the components are disposed of, contributing to environmental waste and financial costs. The HydroBubble, inspired by a water bottle from UK firm Hydrate for Health, eliminates these issues by being dishwasher-safe and reusable.

The initiative was spearheaded by nurses Yasmin Hussaini, Jane White, and Naomi Parsons from the South Warwickshire University NHS Foundation Trust (SWFT) and University Hospitals Coventry and Warwickshire NHS Trust (UHCW). Mark Moran MBE, the founder of Hydrate for Health, collaborated with the team to develop the HydroBubble.

The HydroBubble helps lung patients clear mucus by creating positive pressure through bubble blowing, making the physiotherapy process more enjoyable, especially for children. The device can be used for conditions like Bronchiectasis, COPD, and Primary Ciliary Dyskinesia (PCD).

The HydroBubble has received positive feedback from users since its launch in April 2024. For instance, three-year-old Ivan Wright, a CF patient, finds the device entertaining and effective. His mother, Rebecca Bott, highlighted how the device has improved his lung exercises and overall physiotherapy routine.

The HydroBubble demonstrates a successful collaboration between healthcare professionals and industry to enhance patient care while being mindful of environmental impacts.