

**Feasibility of conducting an internet-based Spirometry training for health care workers in Uganda: The Fresh Air Horizon 2020 experience**

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**Aim:** To explore the feasibility of providing an internet-based spirometry training to health care workers in Uganda

**Brief outline of context:** Spirometry is the "gold standard" measure of lung function, central to the diagnosis and management of chronic lung diseases (CLDs), such as Asthma and Chronic Obstructive Pulmonary Disease (COPD). However, patient access to this test is unavailable in most Low-Income Countries (LICs). Limiting factors include the lack of spirometers and the lack of training and feedback in performance and interpretation.

**Brief description of the intervention:** The University of Washington (UW) provided access to Spirometry 360, a comprehensive, interactive, and evidence-based training and feedback programme, which is delivered online enabling wide distribution. To overcome foreseeable challenges of internet connectivity and coordination and to ensure comprehension as well as skill acquisition, we planned a group training.

**Strategy for change:** Invitations were sent to health care workers (HCWs) across Uganda. A wide range participated in the training, from biomedical scientists to medical assistants. Attendees gathered in one room with a steady internet connection. To allow adequate comprehension of training materials, the 6-hour training was spread out across 5 days. Participants then emailed spirometry tests to UW for over 7 months and received monthly feedback.

**Effects of changes:** The training was well received; 80% reported the training as very good or excellent, and 100% would recommend the program to a colleague. The percentage of acceptable tests submitted was 73% in the first month of the feedback program, and increased to 98% by its conclusion. Participants appreciated the interactive nature of the training.

**Lessons learnt:** It is feasible to offer an internet-based training and feedback in settings with limited internet connectivity, and have the training well received.

**Message for others:** Training HCWs to perform high quality spirometry and interpretation of tests is a critical step in building capacity to diagnose CLDs in LICs.

**Declaration of Interest**

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**References and Clinical Trial Registry Information**

[www.spirometry360.org](http://www.spirometry360.org)