New publication highlights smartphone-based cough analysis for identifying acute exacerbations of COPD

Brisbane, Australia, 5 July 2021 – ResApp Health Limited (ASX:RAP), a leading digital health company developing smartphone applications for the diagnosis and management of respiratory disease, is pleased to announce the publication of acute exacerbation of chronic obstructive pulmonary disease (COPD) data from its Breathe Easy adult clinical study in the peer-reviewed Nature Partner Journal, *npj Digital Medicine*.

The publication, entitled "*Identification of acute exacerbations of chronic obstructive pulmonary disease using simple patient-reported symptoms and cough feature analysis*" builds on the preliminary top-line data from the study that was released on 23 April 2019. The study authors compared the accuracy of ResApp's cough-based algorithm to expert clinical assessment. In patients with known COPD, the algorithm correctly identified the presence of an acute exacerbation in 82.6% of subjects. The absence of an exacerbation was correctly identified in 91% of individuals. The authors noted that the high diagnostic agreement was also maintained in individuals with milder exacerbations, who typically comprise the cohort presenting to primary care and are 'hard to diagnose' cases.

COPD is the third leading cause of mortality worldwide, posing a huge global clinical burden. COPD typically results from high exposure to noxious gases (such as from smoking and air pollution), triggering airway or alveolar abnormalities. These abnormalities restrict airflow in the lungs, causing affected individuals to develop persistent and progressive COPD symptoms, such as wheezing, coughing, shortness of breath, and sputum production. Affected individuals can experience periods of acute worsening of their symptoms, known as an acute exacerbation of COPD, potentially needing antibiotic and steroid treatment.

Tony Keating, CEO and Managing Director said: "*We are pleased to see this research now published in a high impact, peer-reviewed journal. This data demonstrates that cough analysis provides a quick and simple acute exacerbation of COPD diagnostic test that has a high agreement with clinical diagnosis. These algorithms are incorporated into ResAppDx, our regulatory-approved, smartphone-based acute respiratory diagnostic tool giving telehealth clinicians an accurate way to assess their COPD patients remotely and improving patient outcomes.*"

About ResApp Health Limited
ResApp Health Limited (ASX: RAP) is a leading digital health company developing smartphone applications for the diagnosis and management of the respiratory disease. ResApp's machine learning algorithms use sound to diagnose and measure the severity of respiratory conditions without the need for additional accessories or hardware. ResApp's regulatory-approved and clinically validated products include ResAppDx, a smartphone-based acute respiratory disease diagnostic test for use in telehealth, emergency department and primary care settings; and

SleepCheck, a smartphone application which allows consumers to self-assess their risk of sleep apnoea. Both products are CE Marked in Europe and TGA approved in Australia. For more information, please visit www.resapphealth.com.au.

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This ASX announcement was approved and authorised for release by the board of directors of ResApp Health.