



Initial data from Hull collaboration project makes the case for nation-wide COPD diagnostic screening

- Results presented at the European Respiratory Society (ERS) Congress 2024 found that nearly 70% of people assessed through the FRONTIER project were diagnosed with chronic obstructive pulmonary disease (COPD) following a previous assessment via the Lung Health Check programme.¹
- Lung Health Checks can be an effective way of screening for lung diseases; however, COPD diagnostics were stopped during the COVID-19 pandemic and have not been reintroduced in many areas.^{2,3}
- COPD is severely under-diagnosed with many patients only being diagnosed upon acute admission in emergency care settings.⁴
- FRONTIER is a collaborative working project between Chiesi UK & Ireland and Hull University Teaching Hospitals NHS Trust (now part of NHS Humber Health Partnership).

Manchester, UK, 9th September 2024 – Chiesi UK & Ireland and Hull University Teaching Hospitals NHS Trust have, today, announced initial findings from a collaborative working project highlighting that screening programmes provide a valuable opportunity to identify people living with undiagnosed COPD and could help to address COPD underdiagnosis by facilitating access to diagnostic testing.¹ The data, presented at the European Respiratory Society (ERS) Congress 2024 in Austria, forms interim analysis from FRONTIER, a collaborative project in Hull, in which patients previously assessed via the NHS Lung Health Check programme and with symptoms of lung disease and/or emphysema on CT scan were identified and invited back for COPD testing. The analysis showed that 136 (68%) of 201 individuals seen through the programme were diagnosed with COPD.¹

"Our early findings clearly highlight the burden of undiagnosed COPD among those attending the Lung Health Check programme in Hull," said Professor Michael Crooks, Professor of Respiratory Medicine, Hull York Medical School, University of Hull. "Many of those diagnosed with COPD during FRONTIER were living with daily symptoms but had not been able to access treatment due to a lack of diagnosis. Identifying people attending Lung Health Checks that are at high risk of having undiagnosed COPD and offering diagnostic testing enables access to evidence-based COPD care that has potential to significantly improve health outcomes."

An estimated two million people have undiagnosed COPD in the UK.⁴ More than half of those who have a moderate form of the disease go undiagnosed, and one in five of those who are undiagnosed have severe or very severe forms of the disease.⁴ COPD causes 115,000 emergency admissions per year and 24,000 deaths.⁴ FRONTIER is a collaborative working project between Chiesi UK & Ireland and Hull University Teaching Hospitals NHS Trust. It aims to enable early COPD diagnosis and timely initiation of interventions to improve outcomes for patients including pharmacological and non-pharmacological treatment.

Commencing in September 2023, and due to run until September 2025, FRONTIER seeks to invite approximately 1,000 previous Lung Health Check participants for COPD





testing. Spirometry – the standard of care used to diagnose COPD – was previously included in Lung Health Checks but was stopped during the COVID-19 pandemic.³ These initial results reported the clinical characteristics and COPD diagnosis rate among the first 201 participants between October 2023 and January 2024.¹ Of the 136 (68%) who received a new COPD diagnosis, 77% had moderate emphysema, 12% had mild, 7% had none and 4% had severe.¹ The mean COPD assessment test (CAT) score was 16.7.¹

"These initial data tell a story of how a lack of COPD screening is playing out in the real world. With challenges in diagnosing COPD including lack of public awareness and engagement with healthcare professionals trained in respiratory diagnostics as well as common misdiagnoses, the value of screening for COPD is clear," said Shish Patel, Medical Director, Chiesi UK & Ireland. "While chronic, COPD can be effectively managed, and the earlier it is diagnosed the greater the opportunity for intervention, whether that be lifestyle changes, rehabilitation or treatment. The FRONTIER project represents Chiesi's commitment to improving the lives of people living with COPD, and we look forward to sharing the full outcomes of the collaboration with the community to inform planning for a nation-wide screening programme."

The FRONTIER poster is one of three data readouts being presented by Chiesi UK & Ireland at the ERS Congress 2024. These include the presentation of patient insights from a qualitative research study into decentralisation of a clinical trial in asthma (TANGO) and the sharing of key developments in the company's carbon minimal inhaler programme.⁵

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About FRONTIER

FRONTIER is a collaborative working project by Chiesi UK & Ireland and Hull University Teaching Hospitals NHS Trust. It aims to enable early COPD diagnosis and timely initiation of evidence-based pharmacological and nonpharmacological interventions to improve outcomes for patients. As part of the project, participants of the Hull Lung Health Check scheme who are identified as having a high risk of COPD based on symptoms, and/or imaging findings, are being invited to attend a one-stop diagnostic clinic comprising symptom assessment and objective measurement of airflow limitation. FRONTIER commenced in September 2023 and is due to run until September 2025.

About chronic obstructive pulmonary disease (COPD)

Chronic obstructive pulmonary disease, or COPD, is the collective term for conditions such as chronic bronchitis and emphysema, which prevent people from breathing properly because the flow of air into the lungs is obstructed. 6,7 1.4 million people aged 40 years or over are living with COPD, and around 500,000 are living undiagnosed in England. The main cause is smoking, but it can also be caused by past exposure to fumes, chemicals and dust at work.

About Chiesi Group

Chiesi is a research-oriented international biopharmaceutical group that develops and markets innovative therapeutic solutions in respiratory health, rare diseases, and specialty care. The company's mission is to improve people's quality of life and act responsibly towards both the community and the environment.

By changing its legal status to a Benefit Corporation in Italy, the US, and France, Chiesi's commitment to create shared value for society as a whole is legally binding and central to





company-wide decision-making. As a certified B Corp since 2019, we're part of a global community of businesses that meet high standards of social and environmental impact. The company aims to reach Net-Zero greenhouse gases (GHG) emissions by 2035.

With over 85 years of experience, Chiesi is headquartered in Parma (Italy), with 31 affiliates worldwide, and counts more than 7,000 employees. The Group's research and development centre in Parma works alongside 6 other important R&D hubs in France, the US, Canada, China, the UK, and Sweden.

For further information please visit www.chiesi.uk.com.

About NHS Humber Health Partnership

NHS Humber Health Partnership (NHSHHP) is made up of two Trusts – Hull University Teaching Hospitals NHS Trust (HUTH) and Northern Lincolnshire and Goole NHS Foundation Trust (NLAG). As one of the largest Groups in the NHS, with a budget of over £1.4 billion and 17,000 staff, NHSHHP is committed to delivering world-class services for the 1.65 million people it serves.

There are five main hospital sites; Castle Hill Hospital in Cottingham, Diana, Princess of Wales Hospital in Grimsby, Goole and District Hospital, Hull Royal Infirmary, and Scunthorpe General Hospital. A wide range of community services are also delivered across North and North East Lincolnshire, including district nursing, physiotherapy, psychology, podiatry and specialist dental services.

Staff see well over a million patients every year with around 275,000 attendances at emergency departments, 214,000 hospital admissions and more than a million outpatient appointments. Around 8,700 babies are delivered each year and community services provide vital healthcare to patients in their own homes.

As Teaching Hospitals working with the Hull York Medical School, NHSHHP is a UK leader in research and innovation. The two Trusts forming the Group have also been recognised for work to support veterans, newly qualified nurses and an international recruitment programme.

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³ Bradley C, Alexandris P, Baldwin DR et al. Measuring spirometry in a lung cancer screening cohort highlights possible underdiagnosis and misdiagnosis of COPD. *ERJ Open Res*. 2023;9(4):00203-2023.





- ⁴ NHS England. Overview of potential to reduce lives lost from Chronic Obstructive Pulmonary Disease (COPD). Available at https://www.england.nhs.uk/wp-content/uploads/2014/02/rm-fs-6.pdf. Last accessed September 2024.
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- ⁸ Stone PW, Osen M, Ellis A, Coaker R, Quint JK. Prevalence of Chronic Obstructive Pulmonary Disease in England from 2000 to 2019. *Int J Chron Obstruct Pulmon Dis*. 2023;18:1565-1574.