was performed and standardised utilising the validated 'BLUE protocol', performed by the same operator. Domains included demographics, respiratory comorbidities, diagnoses, and management plans prior to, and following TUS.

Results Of fifty patients scanned, TUS altered overall management in 22 (44%). Primary diagnosis was changed in 26%, treatments in 34%, investigations in 28%, and all three aspects in 18%. TUS performed well in fluid balance decisions and identifying lung consolidation.

Patient groups where TUS would not alter management were identified, with reduced odds seen with pre-existing airways disease (odds ratio (OR) 0.37, 95% confidence interval (CI) 0.12–1.17), and in patients with airways disease and wheeze on auscultation (OR 0.08, 95%, CI 0.01–0.77).

Chest x-ray (CXR) reports differed from TUS findings in 12 (24%). 21 (42%) patients later underwent computed tomography (CT) examination with CT reports corresponding with positive TUS findings in 100%, with no further emendation of diagnoses (excluding incidental findings). Data was not collected to assess the time implications of performing ultrasound on the consultation, and we acknowledge that not all Respiratory physicians are ultrasound trained thus limiting the provision of thoracic ultrasound.

Discussion The use of TUS impacted significantly on decision-making on the Respiratory PTWR. Unnecessary radiology requests, ionising radiation, and cost were avoided. Within the constraints of the study group, TUS seems less useful when assessing patients with pre-existing airways disease. TUS has excellent correlation with CT findings, outperforms CXR, appearing to offer a comprehensive, streamlined respiratory assessment at the 'front-door'.

With ultrasound becoming more accessible to clinicians, and with increasing demands on CT departments, we welcome discussion regarding regular use of TUS on the PTWR. Further data would be desirable to assess whether its use early in admission is correlated with a reduced length of stay and improved patient outcomes.

P159 OUTCOME FROM INVASIVE VENTILATION FOR PATIENTS WITH LEARNING DISABILITY

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The annual learning disability mortality review (LeDeR)¹ highlights that patients with learning disability (LD) are twice as likely to die of avoidable causes, with inappropriate ceilings of treatment being instigated in patients with LD: 23% of 'Do Not Attempt Cardiopulmonary Resuscitation' forms documented inappropriate medical conditions such as a learning disability as the sole reason to not attempt resuscitation¹. The COVID19 pandemic has further highlighted this issue, with people with LD being at 6 times the risk of death from COVID19 than those without LD; people with LD aged 18–34 were 30 times more likely to die of COVID19.² However, there is little data out there to help support decision making around invasive ventilation in people with LD.

We aimed to explore the outcomes of patients with LD admitted to a single critical care unit for invasive ventilation

Methods We reviewed the notes of patients with learning disability requiring intubation and ventilation over a 5-year period (2016–2020). Data was retrospectively collected on survival, rates of tracheostomy insertion and requirement for long term ventilation (LTV) or cough augmentation.

Results 15 patients were identified with LD who required invasive ventilation. 93% survived critical care admission. 7% required tracheostomy with subsequent decannulation, whilst a further 7% required long term tracheostomy. 40% were commenced on LTV. 46% required long term cough augmentation via cough assist device. 46% have subsequently died, with a mean survival following critical care admission of 2.5 years. Mean duration from invasive ventilation in the survivor group is 5.5 years.

Conclusion We have demonstrated good outcomes in patients with LD admitted to critical care for invasive ventilation. Although there was a high requirement for LTV and cough augmentation following admission to critical care for invasive ventilation, we have demonstrated both good survival to discharge from critical care and good long term survival in this group. This small single centre study highlights the need for further research to aid decision making around escalation decisions in patients with LD.

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COMMUNITY RESPIRATORY STAFF IN-REACH INTO CARE HOMES FINDS UNMET NEED AND ALLOWS OPTIMIZATION OF PATIENT CARE PLUS CARE HOME STAFF EDUCATION

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Introduction During the Covid epidemic the care of patients in care homes to optimize their therapy and prevent admission has become a national Priority. In the Basildon and Brentwood CCG area staff normally working in the community respiratory service were redeployed to visit all the care homes in the area and review all patients with respiratory disease to optimize therapy, advise flu immunisation and support their care.

Methods All care homes in the area of Basildon, Brentwood, Billericay and Wickford were visited and a review carried out on all patients resident there with respiratory disease. This included reviewing both notes and patients to find patients with respiratory disease. Therapy was reviewed and optimised, including obtaining new inhalers, spacer devices and rescue packs.

Results 163 patients were reviewed, of whom 116 had evidence of respiratory disease. 31 of these were already known to the community respiratory services and 85 were not known. 75% of patients needed a new salbutamol inhaler or aero-chamber spacer device. 58% of patients did not have a rescue pack of antibiotics and steroids and this was provided. 85% of those not already known to the service required salbutamol, A spacer and a rescue pack.

These were all provided.

Conclusions In this area there was a large unmet need for treatment in patients in care homes with respiratory disease as one of their diagnoses. This project undertaken during the covid epidemic has demonstrated that it was possible to provide this in a covid-secure manner and found a need for education of care home staff and a need for a wider application of this project which is now being rolled out to the other CCG (Thurrock) in our area. Educational materials are being produced and distributed to all care homes in the area. The in-reach of community respiratory team staff into care homes can be used as an avenue to ensure good education of care home staff and increase vaccination of staff and residents and optimization of therapy for residents to reduce the risk of hospital admission

P161 UNDERSTANDING THE ROLE OF A PATIENT-LED PULMONARY FIBROSIS CHARITY ON ENABLING SUPPORT GROUPS TO THRIVE: A UK WIDE SURVEY OF SUPPORT GROUP LEADERS AND MEMBERS EXPERIENCES

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Introduction Pulmonary fibrosis is a devastating progressive lung scarring disease with poor prognosis. Evidence suggests that peer support, facilitated through disease-specific support groups, has a positive impact on patients and their carers. Charities can play a crucial role in setting up and sustaining such groups. We sought to understand the role of tailored support, provided by a patient-led pulmonary fibrosis charity, on support group leaders (SGLs) and their members.

Methods The charity offers tailored support to 75 independent support groups through grants, guidance and training which aims to empower, increase confidence and ensure quality.

Two surveys were conducted via a 10 minute web-based questionnaire. SGLs completed a 20-item survey and members completed a 12-item survey, requiring 4-point Likert scale and open-ended responses. All SGLs were invited to participate and to share the member survey with their group.

Results 22 SGLs and 81 members participated. 91% SGLs felt they had the necessary knowledge and skills to support their members but identified training needs in supporting people through loss and change (82%), and ways to keep positive and motivated (82%). 55% did not think they received ongoing referrals to their group and 86% felt that grants or initiatives to recruit new members or reach isolated patients were important.

Members felt the support group had helped them to feel part of a supportive community (94%); and more informed about pulmonary fibrosis (94%) and manage daily symptoms more effectively (90%).

Conclusions The survey results replicate previous findings that support groups have tangible benefits for patients and carers. Provided with tailored charity support, SGLs feel equipped to support their members, most of whom report a positive impact from being part of a group. Noting the difficulty gaining new members, new initiatives will be needed, working closely with healthcare professionals, to ensure patients can access this important support service.

Topics in thoracic malignancies

P162 PREPARING WALES FOR LUNG CANCER SCREENING – SELECTING A SEARCH STRATEGY FOR INCLUSION

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Introduction Lung Health Check (LHC) programmes have used varying invitation strategies, from contacting all patients in the target age range (Manchester), identifying ever-smokers from GP records (NHS England Targeted LHC programme), and inviting people recorded on GP records as a current smoker in the last 20 years (SUMMIT). We modelled the impact different inclusion criteria would have on a future Lung Health Check programme in Wales.

Methods GP records from 6 practices were included. Searches were run varying the age range (50–74 years, 55–74, 60–74) and smoking codes included. Four different search strategies for smoking codes were used: BROAD (including a wide range of current and ex-smoker codes), VOLUME (as for ‘BROAD’ but excluding the ‘trivial ex-smoker’ code), FOCUSED (looking for cigarette-related tobacco codes only), and RECENT (searching for current smoker codes recorded in the last 20 years, to capture current smokers and more recent ex-smokers). We compared the results of these search strategies and extrapolated to the Welsh population.

Results The included practices had a total population of 68,571, reflecting 2.17% of the Welsh population. There was negligible difference between the results for the BROAD, VOLUME and FOCUSED search strategies, with $\leq 0.1\%$ variation between the strategies. Just over half of patients would be eligible for a LHC using the BROAD strategy, whilst using the RECENT strategy reduced this to around a third. Full results and extrapolation across the Welsh population are shown in table 1.

Conclusions The selection criteria for a future LHC programme in Wales would profoundly influence the number of

Abstract P162 Table 1 Results of search strategies and extrapolation to Welsh population

Age (yrs)			BROAD search strategy		RECENT search strategy	
All ages						
Sample	68,571	Sample=2.2% of				
Wales	3,152,879	Wales population				
50-74						
Sample	20,406	29.8% of total	10,733	52.6% of	6,887	33.7% of
Wales	938,263	population	493,501	age group	316,663	age group
55-74						
Sample	15,766	23.0% of total	8,426	53.4% of	5,200	33.0% of
Wales	724,917	population	387,426	age group	239,095	age group
60-74						
Sample	11,031	16.1% of total	6,075	55.1% of	3,504	31.8% of
Wales	507,203	population	279,327	age group	161,113	age group