**P17** PLANNING THORACIC SURGERY CAPACITY FOR LUNG CANCER SCREENING IN WALES

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**Introduction** Targeted lung cancer screening with low-dose CT (LDCT) reduces lung cancer mortality and has been recommended by the UK National Screening Committee. Successful implementation is dependent on sufficient capacity to manage screen-detected findings. Surgical resection is the preferred treatment for screen-detected early-stage lung cancer.

Thoracic surgery services in South Wales are planned to centralise to a single site in coming years. We modelled the projected impact the introduction of a national targeted lung cancer screening programme in Wales would have on demand for thoracic surgery in South Wales.

**Methods** Demand for thoracic surgery in South Wales from screening was estimated for the years 2027, 2032 and 2037. Estimates for each step of the pathway were made based on data from the NHS England Targeted Lung Health Check programme and other UK activity, relevant screening trials, ONS population and smoking data and projections, and trends in existing Welsh screening programmes. A discrete event simulation modelled ‘low impact’ (narrow age range, high risk threshold for CT, low uptake), ‘high impact’ and ‘most likely’ (phased implementation where age range widens, risk threshold lowers, and uptake increases over time) scenarios.

**Results** The projected demand for thoracic surgery from screening is summarised in figure 1.

In the most likely scenario, median demand was projected to increase from 89 to 205 cases annually over the first ten years of the programme. Non-lung cancer screen-detected findings were estimated to have a negligible effect on demand. Assuming screening would also cause a modest reduction in non-screen-detected lung cancer surgery (due to these cases becoming screen-detected), it was estimated that overall demand would increase by 40% compared to pre-screening activity.

**Discussion** In order to realise the benefits of screening, services must be equipped to deal with findings. Following these results, the planning team for thoracic surgery in South Wales have increased the scale of the proposed new thoracic surgery unit.

Please refer to page A288 for declarations of interest related to this abstract.

‘Walk this way’ – Innovations in pulmonary rehabilitation

**P18** BARRIERS AND FACILITATORS OF PHYSICAL ACTIVITY: PERCEPTIONS OF PEOPLE WITH COPD, WITHOUT COPD AND HEALTHCARE PROFESSIONALS IN SAUDI ARABIA

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**Introduction** Physical activity plays a crucial role in managing and improving health outcomes for people with chronic obstructive pulmonary disease (COPD). However, limited research has investigated specific barriers and facilitators of physical activity in Saudi Arabia. This qualitative study aims to explore the factors influencing physical activity engagement in people with COPD, without COPD, and Health Professionals (HPs) in Saudi Arabia.

**Methods** This qualitative research, included semi-structured online interviews with people with and without COPD and AHP’s from Riyadh, Saudi Arabia. The interview schedule was informed by the Social Cognitive Theory (SCT). Interviews were undertaken in Arabic, recorded, transcribed, and translated before being analysed thematically.

**Results** A total of 19 participants took part, 8 people with COPD and 5 people without COPD, and 6 HPs (3 physiotherapists, 2 respiratory therapists, and 1 physician). Preliminary findings identified barriers and facilitators recognised by all participants. COPD participants reported barriers such as lack of desire, COPD symptoms, financial constraints, and cultural factors (such as dress code). Motivational factors included social support, weight loss goals, and doctor’s advice. Non-COPD participants highlighted cultural norms barriers (such as absence of a culture of walking), lack of awareness of the importance of physical activity, and environmental

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Abstract P17 Figure 1  Projected annual thoracic surgery demand from lung cancer screening in South Wales, based on three different roll-out scenarios and at three time points (years 2027, 2032 and 2037). Box-plots demonstrate median estimates, first and third quartiles, and maximum and minimum estimates.