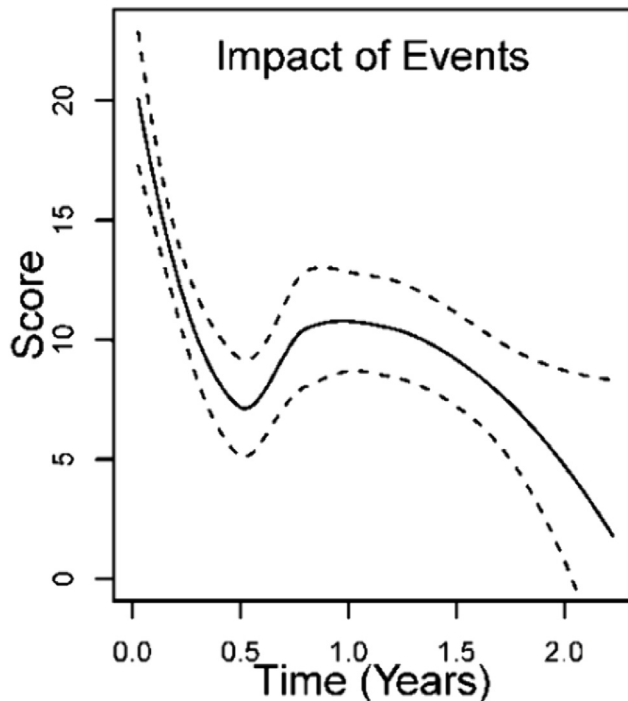




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Control variables were age, sex, smoking status, cancer type, treatment received, marital status, and education. **Results:** Stress significantly decreased with time since diagnosis. IES-R scores, which decreased from 16.9 to 11.1, exhibited non-linearity as shown by increases in stress at 6 months, followed by decreases at approximately 12 months (see Figure 1). Interactions between time and cancer treatment were found non-significant, such that the observed trends in stress did not vary due to cancer treatment. For covariates, only education was significantly associated. Patients with a high school education or above had roughly 7-8 points lower mean IES-R scores (less stress) compared to patients with less than high school education. IES-R scores were not significantly associated with survival.



Conclusion: This is the first study to describe the course of stress for patients with advanced NSCLC as they received new cancer therapies. It is possible that more frequent assessments of the IES-R would have revealed significant associations with survival. Future research is needed in order to fully understand psychological risk factors for premature mortality from NSCLC. **Keywords:** survival, joint modeling, stress

OA08.04

Providing Thoracic Prehabilitation during COVID-19: Review of a Virtual Model.



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Introduction: Prehabilitation in lung cancer surgery has shown to improve exercise capacity and reduce post-operative complication rates, morbidity and hospital length of stay (Rosero et al, 2019; Boujibar et al, 2018; Steffens et al, 2018). Prehabilitation is predominantly delivered via supervised exercise programmes, however since the COVID-19 pandemic, capacity to deliver face-to-face hospital appointments has significantly reduced. Therefore, we present preliminary data from a new, virtual prehabilitation service for patients undergoing

lung surgery at a busy National Health Service Trust in London. **Methods:** 20 patients were prospectively recruited from surgical lists over six weeks (15th June-30th July 2020). Each patient was offered a virtual prehabilitation assessment over video or phone. Assessment included outcomes that could be completed virtually: MRC Dyspnoea scale, physical activity levels (Godwin Leisure Time Exercise Questionnaire (GLTEQ)), dietary needs, mood (Hospital Anxiety and Depression Scale (HADS) and fatigue (FACIT-fatigue)). Exercise capacity was measured using the one minute sit to stand (STS) test. Following assessment, each patient received a personalised home-based exercise programme and a diary to monitor compliance. Written advice and counselling for specific symptom management was also provided. Virtual follow-up occurred weekly or fortnightly. An 'end of prehabilitation' (EOP) assessment was completed approximately three days before surgery to repeat outcome measures. Due to local policy changes during this pilot, some patients were permitted a one-off, face-to-face prehabilitation assessment, however intervention and follow-up continued virtually. **Results:** Baseline characteristics: 65% of the cohort were female, with an average: age 68 years; MRC Dyspnoea scale: 2; FEV1 %predicted: 87.9 and performance status: 1. 45% had ≥ 5 comorbidities, 70% had a smoking history and 15% were classified as 'vulnerable-mildly frail' using the Rockwood Clinical Frailty Score. A walking exercise tolerance $\geq 500m$ was present in 80% of the cohort, yet only 40% were classified as 'sufficiently active' on the GLTEQ. Uptake and technology: 35% of participants received a virtual prehabilitation assessment, whilst 65% had this delivered face-to-face. The uptake rates for patients approached for virtual or face-to-face assessments were 64% and 100% respectively. 75% of participants had access to email and video technology, whilst 25% could only receive telephone calls and written handouts. Inability to access emails and video was noted in all patients ≥ 80 years of age, yet there was no association between lack of technology and higher comorbidities or frailty. At EOP there was no change in average MRC-Dyspnoea scale, HADS or fatigue levels. However, GLTEQ scores changed by an average of +45.9 points, with 100% of the cohort meeting recommended levels of physical activity. We observed an average change in one minute STS test scores of +5.1, exceeding the minimum clinically important difference of +3 (Vaidya et al, 2016). **Conclusion:** Our findings demonstrate that virtual, home-based prehabilitation is feasible and may improve patients' pre-surgical physical activity levels and exercise capacity. This is pertinent given ongoing uncertainty surrounding COVID-19 and its impact on face-to-face healthcare delivery. Further consideration regarding the delivery of safe and effective virtual prehabilitation to more elderly or vulnerable patients may be required. **Keywords:** Prehabilitation, lung cancer, COVID-19

OA08.05

Illness Perception Profiles at Lung Cancer Diagnosis and Physical and Psychological Symptom Trajectories During Treatment



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Introduction: Advanced non-small cell lung cancer (NSCLC) takes an immense toll on patients' lives, including disabling physical symptoms and high levels of psychological distress. According to Howard Leventhal's Self-Regulatory Model of Illness Behavior, patients' perceptions of their illness (e.g., views about the extent to which the illness affects one's life, the expected duration of one's illness, and the ability to control one's illness with treatment) impact important physical and psychological outcomes. This study aimed to determine whether patterns (i.e., "profiles") of illness perceptions among patients newly diagnosed with advanced NSCLC explain variability in lung cancer symptom severity (e.g., cough, dyspnea, pain) and psychological distress (i.e., anxiety, depression) during treatment. **Methods:** Patients