All patients with COPD should be offered the annual influenza vaccine. Careful consideration is required in offering the pneumococcal vaccine to COPD patients, given that the indications and contraindications are similar to those for other chronic respiratory conditions. Patients who have mild, moderate, or severe COPD, as defined by the NICE criteria (NICE, 2019), require a single dose of this vaccine (Salisbury et al., 2013). The practice met the target standard for offering all COPD patients the PPV and annual influenza vaccines. The practice offered the PPV to 95% of COPD patients and the annual influenza vaccine to more than 90% of COPD patients (Cimen et al., 2016).

The pneumococcal polysaccharide vaccine was felt to be associated with a 50% reduction in Accident & Emergency visits and hospital admissions in COPD patients (Cimen et al., 2014). The pneumococcal vaccine requires a single dose of this vaccine (Salisbury et al., 2013). The compliance of the practice in offering COPD patients the PPV and annual influenza vaccines according to NICE guidelines is in line with target standards due to the use of disease severity to dictate patient care and implementing disease severity to ensure that patients are receiving the appropriate vaccinations.

Recommendations to address the high rates of patients declining to take vaccines such as the COVID-19 vaccine are provided in the audit needs to be adapted to be offered to COPD patients. Providers may be hesitant to offer the vaccinations if they see evidence of the patient declining them at their last review appointment. However, this decision could have changed especially if they have undergone patient education about vaccines should be offered to patients with COPD telephone reviews.

CONCLUSION
The compliance of the practice in offering COPD patients the PPV and annual influenza vaccines according to NICE guidelines is in line with target standards due to the use of the COPD EMIS template. However, their compliance to conducting reviews was lower than the target standards which is likely due to the COVID-19 restrictions.

Recommendations to address the high rates of patients declining to take vaccines such as the COVID-19 vaccine are provided in the audit needs to be adapted to be offered to COPD patients. Providers may be hesitant to offer the vaccinations if they see evidence of the patient declining them at their last review appointment. However, this decision could have changed especially if they have undergone patient education about vaccines should be offered to patients with COPD telephone reviews.

DISCUSSION
The high rates of patients declining to take the PPV and annual influenza vaccines. The practice met the target standard for offering all COPD patients the PPV and annual influenza vaccines, the patient rejection rates were higher than the national rejection rates. The practice has higher than expected rates of COPD patients declining to take the PPV and annual influenza vaccines. Although the practice met the target standard for offering all COPD patients the PPV and annual influenza vaccine, the patient rejection rates were higher than the national rejection rates.

The COVID-19 pandemic made COPD patients isolate at home due to government regulations classifying them as high-risk for worse outcomes if they contracted the disease (Public Health England, 2021). Although they could seek medical care, the patients may be apprehensive about traveling to the practice due to the risk of being exposed to COVID-19. Also, the majority of COPD patients at the practice were over 70 years old (60%) who, combined with the disease burden of COPD, are likely to be frail and unable to travel to the practice for their annual reviews. The majority of GP appointments were also switched to telephone consultations with in-person consultations being reserved for complex issues or acutely unwell patients which would further reduce the patient attendance for their annual review. Due to the COVID-19 restrictions, it may not be possible to use the results of this audit to gauge practice performance.

Although the target standards were adjusted from national data, they may have been set too low according to clinical experience. The COVID-19 restrictions have been lifted in order to allow for in person reviews of COPD to continue to assess the true compliance of the practice with NICE guidelines.

In the withdrawal of coronavirus vaccines vaccine uptake.

The practice met the target standard for offering all COPD patients the PPV and annual influenza vaccines. The practice met the target standard for offering all COPD patients the PPV and annual influenza vaccines. The practice met the target standard for offering all COPD patients the PPV and annual influenza vaccines. The practice met the target standard for offering all COPD patients the PPV and annual influenza vaccines. The practice met the target standard for offering all COPD patients the PPV and annual influenza vaccines. The practice met the target standard for offering all COPD patients the PPV and annual influenza vaccines. The practice met the target standard for offering all COPD patients the PPV and annual influenza vaccines. The practice met the target standard for offering all COPD patients the PPV and annual influenza vaccines. The practice met the target standard for offering all COPD patients the PPV and annual influenza vaccines. The practice met the target standard for offering all COPD patients the PPV and annual influenza vaccines. The practice met the target standard for offering all COPD patients the PPV and annual influenza vaccines. The practice met the target standard for offering all COPD patients the PPV and annual influenza vaccines. The practice met the target standard for offering all COPD patients the PPV and annual influenza vaccines. The practice met the target standard for offering all COPD patients the PPV and annual influenza vaccines. The practice met the target standard for offering all COPD patients the PPV and annual influenza vaccines. The practice met the target standard for offering all COPD patients the PPV and annual influenza vaccines.