unknown. We sought to explore perceptions of vaping amongst CYP with a chronic respiratory diagnosis attending our tertiary respiratory service.

Method A voluntary anonymous QR code questionnaire was provided to CYP (age 11-18 years) attending our cystic fibrosis (CF) and asthma clinics between November 2022 and April 2023. We also provided the same questionnaire to patients attending diabetes clinic, to explore if there were any differences between those with and without a chronic respiratory diagnosis.

Results 32 CYP responses were collated: 47% no respiratory condition, 34% CF, 12% asthma and 6% stated ‘another respiratory condition’. 3 patients (9%) vaped regularly, 6 patients (19%) had experimented with vapes and 72% did not vape. Of the 3 patients that vaped regularly 2 patients did not have a respiratory condition and 1 had ‘another respiratory condition’. Of the 6 patients who had tried a vape 3 had an underlying respiratory diagnosis. The perceived safety of vapes and cigarettes is shown in figure 1. There was no difference in the safety perception of vapes between those with and without a respiratory diagnosis.

Discussion Compared to data from ASH, a similar percentage of CYP in our service experiment with vaping. These limited data suggest that the safety perception of e-cigarettes amongst CYP in our clinic is not affected by having an underlying chronic respiratory condition. This may or may not be extrapolated into a personal decision whether or not to vape in this patient group – but does suggest that more work needs to be done to highlight the risks generally to CYP and in particular to those with an underlying respiratory condition.

REFERENCE

P62 HIGH FLOW (HF) THERAPY AT HOME – 7 YEARS OF EXPERIENCE FROM A TERTIARY PAEDIATRIC RESPIRATORY SERVICE

Aims To review the clinical characteristics and outcomes of children receiving home HF therapy at our tertiary centre.

Methods We conducted a retrospective review of children receiving home HF. Data captured included age, diagnoses, indications for HF, HF settings, treatment duration and outcomes.

Results 34 children were established on home HF between 2016 and 2022. Almost all patients used HF for nocturnal use only. 20 patients were male (59%). Median age at initiation of HF was 9 months (range 1–200). 2 patients received HF via tracheostomy. An ‘Airvo’ device was used in all patients; device cost was £2500 with monthly consumables approximately £300 per patient.

Indications for home HF are shown in table 1. 30 patients (88%) had multiple co-morbidities. 13 patients (38%) had been born prematurely, 10 of whom prior to 28 weeks gestation. 10 patients (29%) had congenital heart disease. 13 patients (38%) had failed to tolerate non-invasive ventilation (NIV).

Median HF settings were 1.3L/kg (range 0.1–2). Median FiO₂ was 35% (range 21–75). 21 patients (62%) required low flow oxygen when not using HF.

7 patients (20%) successfully weaned off HF; median duration of therapy in this group was 10 months (range 3–48). 4 patients failed to tolerate HF. 2 patients did not adhere to treatment. 3 patients progressed to ventilation via tracheostomy, 1 patient underwent lung transplantation and 4 patients died. 13 patients remain on HF. Median duration of HF for
Multicentre prospective cohort study of remote lung function testing in children: validation and comparison of supervised and unsupervised spirometry

**Methods**
Multicentre prospective cohort study conducted across England and Scotland between 2021–22. Part 1: n = 83 CYP (median age: 12 years (25th/75th centiles = 9.5, 13.9) (54% female), with and without a doctor diagnosed lung condition, sequentially performed supervised spirometry in the pulmonary function lab on hospital based PFT equipment and a portable spirometer, which was (either a Nuvoair or MIR Spirobank Smart). Randomisation was applied for device order and type of portable spirometer used. Part 2: 73 CYP, median age 12 years (25th/75th centiles = 9.4, 14.2) (49% female), with lung disease and previous experience with a home spirometer (3–24 months), performed 2 spirometry tests at home using a portable device. One test was remotely supervised by a healthcare professional, the other unsupervised. Data was analysed using Bland Altman analysis.

**Results**
Acceptable agreement was observed for FEV1, FVC and PEF when comparing portable devices to hospital PFT equipment with the mean bias very close to zero. For part 2, there was also acceptable agreement observed for FEV1, FVC and PEF when comparing unsupervised testing to remotely supervised with the mean bias also very close to zero (table 1).

**Conclusion**
Our findings indicate that the Nuvoair and MIR Spirobank Smart Bluetooth spirometers provide accurate measurements when compared with calibrated hospital based PFT equipment. However, the LOA may be out with acceptable variability in some younger patients. CYP with experience of using a home spirometer can produce unsupervised spirometry test results equivalent to those performed with a healthcare professional. This supports remote disease monitoring for patient-centred care.