Background Our community paediatrics service serves a diverse inner-city population of approximately 70,000 children and young people, with high rates of deprivation. During the COVID-19 pandemic, we shifted rapidly from face-to-face assessments to video assessments, with unknown implications on quality of care. Lack of guidelines and preventable technical problems led to incomplete assessments and precious time wasted. This could lead to adverse health, developmental, educational and long-term social outcomes.

Objectives By June 2020, to reduce avoidable technical problems with video clinics from 100% to less than 20%, in order to minimise time wasted, improve quality of video assessments, patient safety and satisfaction.

Methods All staff were trained to use video consultations by virtual workshops, online demonstration, one-to-one trouble-shooting and practice runs (NHS England Attend Anywhere platform, 2020). We engaged stakeholders through regular online Skype Huddles, email and Whatsapp updates to ensure ongoing dynamic learning, ensure clear communication and discuss improvement strategies.

Our primary measure was the number of preventable technical problems (e.g. patient not receiving instructions, child moving camera, interpreter not booked). Outcome measures included patient outcomes following video consultations (discharge or follow up required), qualitative patient satisfaction feedback and clinician reported quality of consultation – satisfactory (yes/partly/no). The number of ‘Did not Attend’ episodes (DNAs) was a balancing measure.

Results Team Skype meetings and plan-do-study-act (PDSA) cycles shared learning from video consultations. In April 2020, we reviewed 188 patients (69% by video, 31% by telephone), increasing to 267 (82% by video, 18% by telephone) in May 2020, showing a sustained increase in number of video consultations. Avoidable technical problems reduced from 100% to 20% from March to mid-April, which was sustained. We were able to discharge 44% of patients following their initial video consultation, the others requiring follow up in specialty clinics or face-to-face follow-up to complete the assessment. Clinician feedback was encouraging; 55% of consultations were fully satisfactory, 35% partly (unable to examine child, poor internet connection, time consuming) and 10% were not satisfactory. Over 2/3 of patients preferred having a video consultation to face-to-face and the majority were thankful for contact, discussion and plans made. Qualitative patient feedback included: ‘This conversation is amazing, we were able to address a lot of issues despite being a video consultation.’ Some patients who forgot about the appointment were still contactable by phone and able to engage with the video consultation, due to the flexibility conferred by remote consultations. However, the overall rate of DNAs doubled from 7% in April/May 2019 to 14% in April/May 2020. This is likely due to initial challenges with instructions and accessibility of video consultations to our high number of vulnerable families, experiencing digital poverty, learning difficulties or language barriers.

Conclusions The pandemic has brought dramatic changes to all our lives and accelerated the need for development in video consultations, which will remain an integral part of our service. Quality improvement is effective in optimising video consultation compared to telephone. Further work is required to better understand and manage accessibility and risk of video consultations, as well as virtual multidisciplinary working.