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## Background:

CFDigiCare is a community of practice using digital adherence data, FEV1 and BMI to inform clinical decision-making and comprehensive digital behaviour change tools to support patient self-care. The 16 UK adult CF centres that form CFDigiCare work together using improvement science to embed digital data into routine care. The collaborative uses the Dartmouth Microsystems approach to build quality improvement (QI) capability. Most CFDigiCare teams attended one day class-based QI training pre-COVID-19, with subsequent coaching delivered online.

We discuss digital QI refresher training and coaching to nationally dispersed improvement collaborative during the COVID crisis.

## Methodology:

1-hour QI refresher training was delivered via MS Teams. Dartmouth improvement ramp activities were undertaken during subsequent 3 sessions.

## Results:

Average attendance was 9 from 16 centres.

We explored two areas for improvement; teams participated in group 'fishbone' exercises, used silent brainstorming, discussed change ideas and planned PDSA cycles. See examples

Staff rated the meetings 9.4/10. See feedback received

Feel able to deliver it to the team

Useful QI demonstration and collaboration of ideas

Feedback received

Jamboard is a useful tool for gathering ideas

Good feedback for PDSAs

The complex block contains three main visual elements:

- Fishbone Diagram:** A process flow diagram with 'Processes' and 'Patients' as main categories. It details various steps like 'Daily adherence required to keep up to', 'Data entered on Nuvoair', and 'Patient not on CFHH'. It also includes notes like 'not all pts on CFHH' and 'start showing CFHH lung function graphs alongside adherence data in MDT meetings'.
- PDSA Cycle Planning Table:** A table with columns for 'Plan-Do-Study-Act Cycle Recording Temp', 'Measurements', 'Predictions', and 'ACT'. It includes specific goals like 'We aim to update CFHH every day for patients who have home spirometry devices by December 2020' and lists various interventions and measurements.
- Silent Brainstorming Cards:** A collection of sticky notes with ideas such as 'Visual reminders to adding data', 'IT linking', 'Change Ideas', 'motivation', 'Share adherence FEV1 and BMI graphs to the MDT', 'Form habit in daily routine to check and add data', 'Make it a daily task as more', 'reducing the bumps', 'Ensure all team members have login details to access CFHH', and 'Ensure members have shortcuts/have added as favourites key platforms'.

## Discussion:

Attendance was high with staff valuing practical interactive sessions using facilitated MS Teams calls and tools such as Google Jamboard. Virtual sessions connected clinicians from 16 centres providing a national "hive brain" perspective on system optimisation. The Dartmouth microsystems paradigm focused attention on specific aims, providing a structure to deliver iterative change. Virtual connectivity allowed QI to continue despite COVID-19. Familiarity with MS Teams increased over time with shared mastery of the technology a clear improvement outcome.

## Conclusion:

Digital technology not only supports the delivery of QI training and coaching but can enhance it; clinical teams quickly mastered platforms such as MS Teams and Google Jamboard.