





Children's Out-Patients and Child Development Centre Reopening Rapid Quality Improvement

On March 23 the UK government announced a national lockdown to limit the spread of COVID-19. This meant all elective hospital activity was postponed. This is a brief outline of the challenges faced in restarting the Great North Children's Hospital (GNCH) outpatient department (COPD) and Children Development Centre (CDC) to accommodate government mandated social distancing to prevent the spread of COVID-19.





Reopening Children's Outpatients

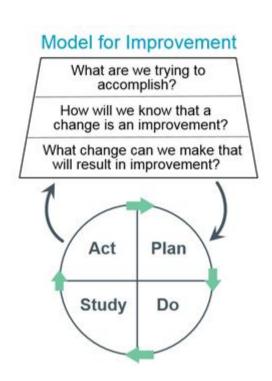
Aim

Re-engineer children's out-patient services for the COVID-19 era so patients

- 1) Are safe. Feel safe
- 2) Get the care they need

Major Stakeholders

- · Patients and their families
- Multi-disciplinary teams with their different needs who use this shared space
- Outpatient staff and management team



Outcome Measures

- Patient Feedback
- Waiting time from referral to consultation (face-to-face & remote) and to treatment

Process Measures

- Activity level
- Staff feedback

Balancing Measures

- 'Was Not Bought' rate
- Separate major pieces of work are being done by colleagues at GNCH looking at various side effects of lockdown on children. For example: Are children presenting to our ED later and more ill than before? Changing patterns of safeguarding referrals

Situation as of 26th June 2020





AIM PRIMARY DRIVERS SECONDARY DRIVERS CHANGE IDEAS Co-produce regional guidelines / pathways with secondary care partners, accessible on internet, to standardise care and reduce the need for tertiary face-to-face interactions **Driver diagram** a visual display of a Bring together guideline tean from across region team's theory of what Reduce new patients by increasing ability to access specialist advice by primary "drives," or contributes and secondary care teams to, the achievement of Patient experience feedback the project aim Rearrange clinic structure and timetabling to separate out face-to-face or remote (phone/video) clinics to enable social distancing Set up rapid feedback Clinician and MDT user Optimise reliability and speed of IT / computer infrastructure in Children's OPD to minimise disruption to timetabling and avoid bunching Re-engineering Face-to-face (F2F) OPD to comply with social distancing and safety Physical layout and flow pathways to permit social distancing in wait areas and in Signage and physical layout measures Ensure families have correct information on expectations before coming to clinic (e.g. arrive on time, one carer etc) Commission pharmacy home delivery service Remove unsuitable toys and play areas, and create individual craft packs to take Minimise need to physically come to tertiary hospital pharmacy to collect Re-engineer out-patient services for the COVID-19 era community pharmacy to prescribe and dispense 1) Feel safe 2) Get the care they need Set up reliable process for electronic OPD prescribing within and outwith clinic environment (SD) Collect data on home delivery prescriptions Encourage and enable working from home to free office space for remote consultations Create paediatric pharmacy hub for high risk medications prescribed and dispensed by children's hospital Set up reliable phone clinic Set up remote consultations as primary route of consultation (where appropriate) as alternative to face-to-face clinics Work with region's 4 Area Prescribing committee to increase paediatric shared care guidelines Set up lab results from any hospital across the region to be accessible online to facilitate remote clinics and Set up network of nurse procedure clinics (e.g. Work with primary care to do blood monitoring and measurements for suitable CYP phlebotomy, measurements, injections etc) to support remote consultations across the region Create usable policies, processes, patient information and safety netting to monitor





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Reallocation of COPD/CDC Capacity

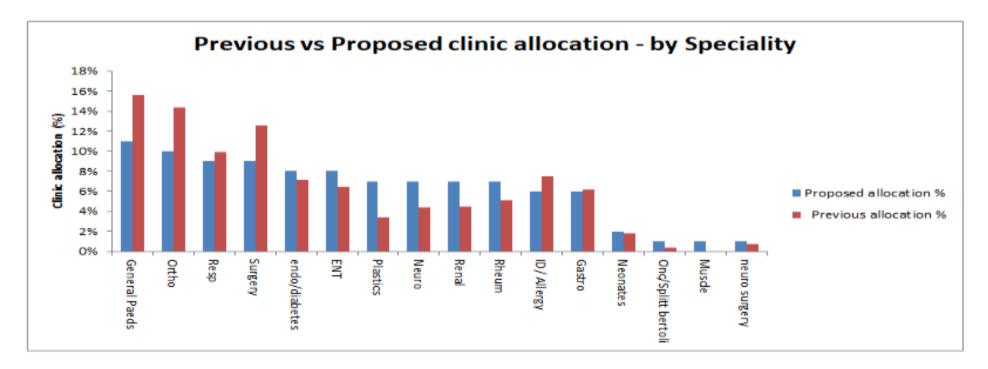
To fairly reallocate paediatric outpatient clinic slots, the previous level of outpatient activity by specialty was determined using pre-COVID clinic lists. From this we allocated similar total number of clinic slots to each specialty.

Previously the five clinic sub-areas (A, B, C, D and CDC) were mixed specialties with a lot of crowding. In the new structure each specialty amalgamated their weekly clinics in whole sub-area. Specialties were asked to re-organise and maximise clinic slots using a blend of remote (phone/video) and face-to-face encounters. In a short time re-organisation occurred in the background for multi-professional healthcare staff to alter their pre-existing busy schedules to fit into the new template.

Slots were staggered with sufficient gaps to prevent patient bunching in each sub-area. Approximately 180 patients could be seen per day (18 patients in AM and 15 per PM slot, per area) alongside the procedure clinic). Compared to pre-COVID, this was in a 55% reduction in face-to-face outpatient capacity.

	Outpatient clinics		Great north							
	Monday AM	Monday PM	Tuesday AM	Tuesday PM	Wednesday AM	Wednesday PM	Thursday AM	Thursday PM	Friday AM	Friday PM
Area	WEEK A A WEEK B	WEEK A A WEEK B	WEEK A A WEEK B	WEEK A A WEEK B	WEEK A A WEEK B	WEEK A A WEEK B	WEEK A A WEEK B	WEEK A A WEEK B	WEEK A A WEEK B	WEEK A A WEEK B
А	Rheum / Surgery	General Paeds / Surgery	Surgery / Surgery	Surgery / Surgery	Plastics /	. /	Endo/di abetes / Endo/di abetes	Gastro / Gastro	Surgery / Surgery	Rheum / Surgery
В	ENT / Rheum	Plastics / Plastics	Plastics / Plastics	Endo/di abetes / Endo/di abetes	ENT / ENT	Plastics / Gastro	Renal / Renal	Plastics / ENT	ENT / ENT	ENT / ENT
С	Renal / Resp	ID/ / ID/ Allergy / Allergy	Renal / Renal	Resp / Resp	Renal / Renal	Resp / Resp	Resp / Resp	Endo/di abetes / Endo/di abetes	Resp / Resp	General / Rheum
D	Ortho / General Paeds	Ortho / General paeds	General / ID/Aller Paeds / gy	General / General paeds	Rheum / Rheum	neral Pae / Gastro	Ortho / Ortho	Ortho / Ortho	Ortho / Ortho	Ortho / Ortho
CDC	Neuro / Neonat es	Neuro / Gastro	Neuro / Neuro	Neonat / itt	Neuro / Neuro	Gastro / Muscle	General / ID/ paeds / Allergy	Neuro / Rheum	General / General paeds	' / '

The updated GNCH COPD Clinic Schedule



Comparison of clinic allocation by specialty pre and post distancing measures



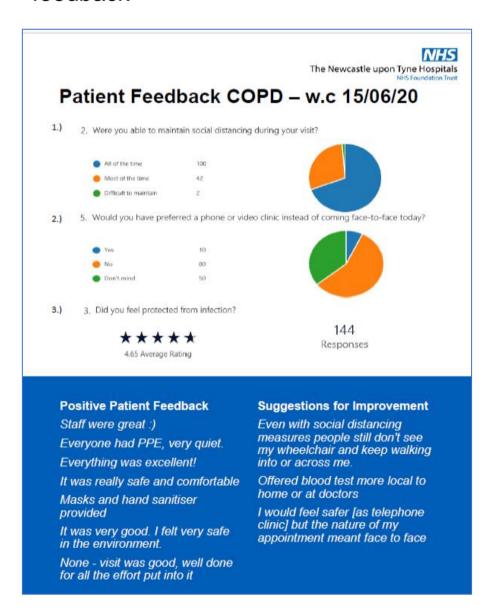


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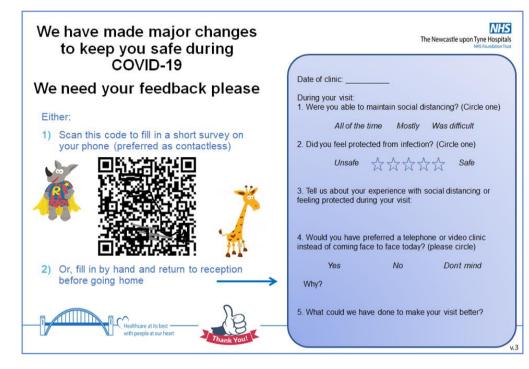
Measurement of Patient Feedback

To ensure patients felt safe and comfortable attending face-to-face appointments at the GNCH, all attending patients were invited to complete a short anonymous survey (right).

These were handed out at reception, a QR code was added linked to the online survey to enable touch-free responses online via smartphone. We found a combination of paper and online version captured the most feedback



(Above) Summary patient feedback data for week of 15 June

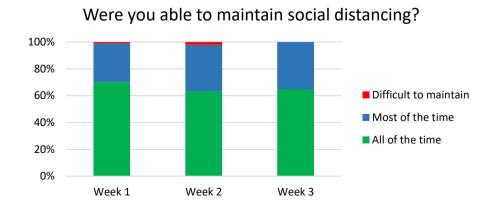


(Above) The survey distributed by staff to collect patient feedback

Responses were collated weekly and distributed to outpatient and management staff to rapidly inform improvements.

As of 25 June we received 169 responses from patients and parents over three weeks of data collection.

Feedback was positive and patients felt secure and safe from infection whilst attending face to face outpatient appointments. Data also reassured us that we had selected the right patients for faceto-face appointments.







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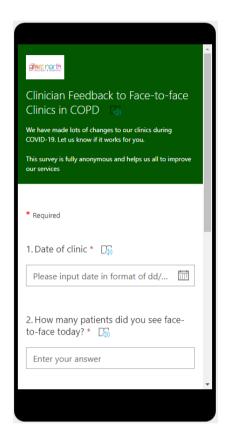
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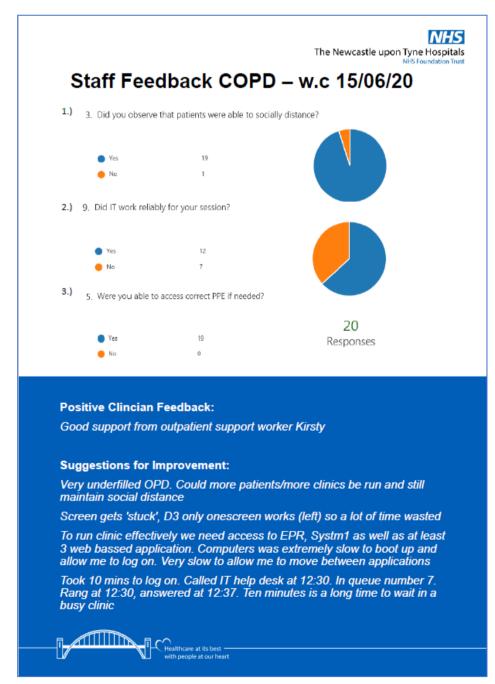
Measurement of Staff Feedback

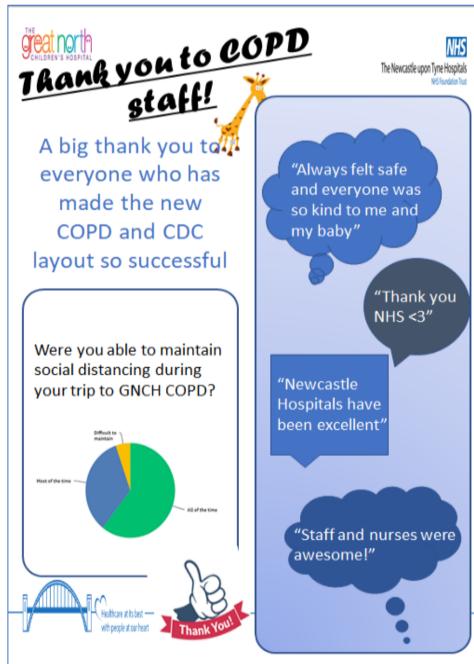
Equally important was feedback from the multi-disciplinary healthcare teams who use out-patients. A similar online survey link was emailed to all relevant clinical staff each week attached to the previous week's feedback. Paper copies were also available within the clinic rooms. This empowered users to suggest improvements and allow their voices to be heard during these rapid changes.

Staff feedback was collated weekly and directly informed efforts to improve both scheduling, layout and all processes. For example, it was identified that computer and IT delays impacted on patient flow and resulted in bunching – this was escalated as a priority and new computers are now being installed.

The many positive feedbacks was a great motivator to outpatient staff who owned the data and owned the change.





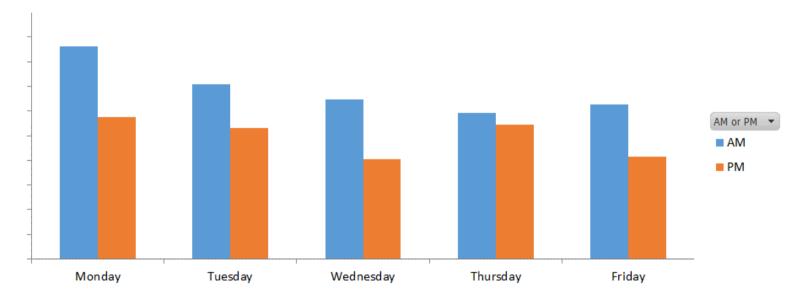




Activity Measures for Improvement

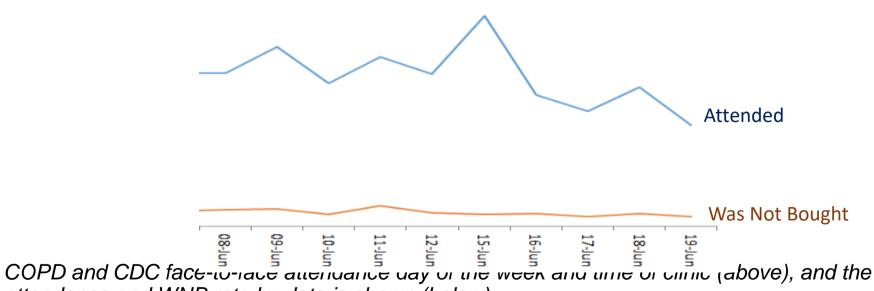
Useful data has always been automatically collected by our appointment systems and they can be used for improvement and refinement. An information service request was submitted after reopening and continues to be monitored. Activity level can rapidly be used to make fine adjustments to level quieter and busier times.

Face-to-face attendance by time and day of week



Reassuringly the 'Was Not Bought' remained low (see below) after reopening which indicates we are likely to be selecting the right patients to come face-to-face and that teams were being contacted by families if they wish to have a remote consultation instead. Equally important is that for some children, being seen face-to-face is important for safeguarding purposes.

'Was Not Bought' rate since reopening



attendance and WNB rate by date is shown (below).





What we have learnt so far:

- Outpatient never closed during COVID. Our staff worked very hard to keep essential and urgent face-to-face consultations before reopening and this needs to be acknowledged. Reopening just meant increasing activity in a planned way to maximise capacity.
- 2. Infrastructure to support remote consultations (especially regional nurse procedure clinics and home medication delivery) need to be in place and useable to create the capacity for face-to-face consultation
- 3. The change period was unsettling. Twice weekly, then weekly, GNCH COVID updates/consultations was a great enabler for a smooth restart
- 4. Listen to feedback from users (patients and staff) as they can see the barriers, and the solutions.
- 5. Live data collection enabled rapid improvements and real-time feedback

Thank you to:

All the clinical teams at Great North Children's Hospital for their patience and support. Special thanks to all staff in Children's Out-patients and Child Development Centre. Jo Fell and Becky George who made this all possible. Chris Vickers for facilitating the QI aspect and James Holt for QI data collection and analysis.

