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Editorial

The COVID-19 pandemic has resulted in a substantial impact on the paediatric physiotherapy profession. During the very early stages of the pandemic, a working group within the APCP national committee was promptly created to explore members' experiences. An electronic survey was selected to collate this information and circulated to the membership in June 2020 (4th -17th). A total of 472 responses were collected during this 2-week period accounting for about 20% of the APCP membership.

The findings from the survey are now presented in this additional edition of the APCP journal. The working group have created a comprehensive report to explore the differing themes emerging from the survey. These include, Change in Role and Redeployment, Caseload Management, Technology, Continuing Professional Development, Research and Education, Well-being and Moving Forwards. Each theme has been given an independent section within the report to give the reader detailed analysis to digest.

Although not research, the working group have taken a methodical approach throughout the process. Face and content validity have been carefully considered when designing the survey and a framework analysis approach was used for the analysis.

I am extremely grateful to the working group leading on this survey for their tireless effort. The initiation of this process occurred at rapid pace and the group have continued to work hard to complete this report. I believe this report will be hugely valuable to the APCP membership to help reflect and learn from this challenging period. It will also help to inform the APCP moving forward to best help support its membership.

I would also like to thank the reviewing panel who have supported the peer-review process of this report within such a short timeframe.

Barry Johnstone

APCP Journal Editor

Association of Paediatric Chartered Physiotherapists COVID-19 Survey

Analysis: Introduction, Background and Methodological Approach

The Association of Paediatric Chartered Physiotherapists ([APCP](#)) was formed in 1973, providing a network for physiotherapists working with children (APCP). The association offered a forum for sharing ideas, provided appropriate training and gained recognition as a special interest group within the Chartered Society of Physiotherapy (CSP). The APCP is now one of the CSP's largest professional networks and continues to thrive, with a membership of over 2,300 paediatric physiotherapists (APCP 2020). The association strives to uphold the original aims set nearly half a century ago, guiding meaningful activity to support its members (APCP 2020). This has become vital during times of unprecedented change, experienced by clinicians in recent months.

The COVID-19 pandemic brought about significant changes across UK health and social care systems. Overwhelmed healthcare resources forced country-wide transformations in service delivery, shaped by redeployment of workers, altered triage and care pathways, cancellation of non-essential clinical provision and avoidance of hospital admissions (Elliott 2020). Enforcement of safety guidance, including social distancing and wider national lockdown measures brought about changes in healthcare interactions between individuals, teams and wider communities.

Healthcare professionals, including paediatric physiotherapists, were among frontline workers in the war against COVID-19, experiencing these changes first-hand. In response, the APCP National Committee identified the importance of sharing these experiences and to generate understanding of how members were affected, both personally and professionally. To achieve this, a project group was devised of 7 paediatric physiotherapists and National Committee members:

Project Group Lead:

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Project Group Members:

Jemma Bell – *Clinical Specialist Physiotherapist (Neonates), NIHR/HEE Pre-doctoral Clinical Academic Fellow, APCP National Committee Member.*

Rachel Evans – *Independent Paediatric Respiratory Physiotherapist, Chair APCP Respiratory Committee.*

Anna Hebda-Boon - *Extended Scope Physiotherapist in Neurodisability, PhD Candidate, Fellow of Higher Education Academy, APCP Education Officer.*

Lucy James – *Advanced Paediatric Physiotherapist, APCP Newsletter Editor.*

Rachel Knight Lozano – *Specialist Paediatric Physiotherapist, NIHR/HEE Pre-doctoral Clinical Academic Fellow, APCP Publication Officer.*

Project Aim

The overarching aim of this project was to capture the APCP members experiences during the initial period of COVID-19 national lockdown, seeking to provoke a conversation, to share and to learn. This work will inform many aspects of APCP's activity, policies and outputs (including educational events, training provision, research bursaries and communications).

Methodology

Design

An electronic survey design was selected to explore experiences and perspectives of paediatric physiotherapists during the first 3 months of the COVID-19 pandemic in the UK. The survey combined categorical data (demographics) and open-ended questions, exploring six key domains, developed with an awareness of the array of roles and practices within the APCP membership. The domains represented the myriad of ways in which the COVID-19 pandemic affected service provision and their users - *Caseload Management* ([Evans 2020](#)), and the extent of redeployment amongst paediatric physiotherapists, with perceived impact on their usual roles, services and practice - *Change in Role and Redeployment* ([Bell 2020](#)). This survey also explored the rapid digitalisation of service provision and education - *Technology* ([McGarrity 2020](#)), access to continuing professional development - *Continuing Professional Development* ([Hebda-Boon 2020a](#)) and perceived impact on members roles as educators or researchers during COVID-19 pandemic *Research and Education* ([Knight-Lozano 2020](#)). The final two domains explored the personal impact of these unprecedented changes - *Well-being* ([James 2020](#)) and provided opportunity for sharing reflections, final comments and to voice key learning points - *Moving Forwards* ([Walsh 2020](#)).

Respondent data was analysed using descriptive statistics and framework analysis (Ritchie 2014).

Ethics

The project was formally agreed by the APCP executive committee prior to commencement of data collection. Detailed information about the aims and outputs of the questionnaire were provided to respondents, highlighting the voluntary basis of their participation and possibility of withdrawal from the questionnaire at any point without coercion. This project was not a formative research design and so it was deemed by the executive committee to employ ethical principles but the project did not require formal ethical approval. Anonymity of the data was assured throughout data collection, analysis and discussion between members of the project team (Grinyer 2002, Ryen 2011, Wiles 2013).

Developing the survey

An electronic survey design was developed in three stages. In the first stage, shared experiences within the APCP working group informed in-depth discussion to establish priorities of professional experience during the COVID-19 pandemic. This included agreement of key survey domains: professional role, caseload management, technology, continuous professional development, research and education and wellbeing. These domains represented both the domains of the survey and the *a priori* framework for analysis. Initial questions were proposed, drafted, and agreed by all team members.

The second stage focused on optimising face and content validity (Taherdoost, 2016). The initial questions underwent review by two independent health professionals experienced in survey design. Minor changes were implemented, including language, grammatical structure and order of questions, to form the pilot survey.

In the final stage, the pilot survey was distributed to 12 paediatric physiotherapists from various subspecialties across experience levels. Initial analysis of responses resulted with further questionnaire re-design. The pilot responses were not included in the final data analysis.

Data Collection

The final survey questionnaire included 8 sections and 31 questions and was expected to take 10-15 minutes to complete.

The *Background* section included questions with predetermined categories (single answer, drop-down options) to gather information about respondents' demographics, gender, specialism, work setting, UK region. Further sections, *Change in Role and Redeployment*, *Caseload management*, *Technology*, *continuing professional development*, *Research and education*, *Well-being and Moving forwards* included open-ended questions about changes, challenges and opportunities that have been experienced by respondents during the first 3 months of COVID-19 pandemic ([Appendix 1](#)).

A final version of the survey was administered on-line via the Jot-Form platform from June 4th to June 17th 2020. The survey was distributed via an APCP members mailing list and newsletter, also shared on social media groups, including Facebook and Twitter.

Due to the qualitative nature of this project, the team members held frequent virtual meetings to discuss the findings, processes and ensure reflective analysis (Korstjens and Moser 2018, Hebda-Boon and Poole 2019).

Sample

All APCP members were invited to participate in the survey. The APCP currently has approximately 2300 active members. A total of 472 members completed the survey, accounting for approximately 20% of the APCP membership.

Data Analysis

Quantitative background data analysis has been completed using descriptive statistics.

The Framework Analysis approach was employed to analyse the open question data qualitatively. Framework analysis involves a staged process, supporting key steps of data management, abstraction and interpretation (Ritchie 2014). This design promotes an inductive ethos appropriate for synthesising qualitative data whilst maintaining a rigorous and transparent process of analysis (Hebda-Boon and Poole 2019). All team members had access to all responses across all domains, however due to the large dataset and the volume of information collected, each survey domain was assigned to subgroups for analysis. Each subgroup met independently during the process and shared findings with the whole project team during weekly meetings.

The active familiarisation stage aimed to systematically review the raw textual data, in order to immerse in data, to extract arising codes/labels and organise these into the coding matrix (separate for each domain) in Microsoft Excel (Poole and Hebda-Boon 2019). The data triangulation has been employed by the group members, who were coding independently then meeting to compare and discuss the codes to ensure rigour and transparency (Patton 2002, Braun and Clarke 2013).

Codes were sorted into initial frameworks of emergent themes and subthemes. Findings were presented during project meetings, employing peer review and in-depth discussion with the remaining authors before final conceptualisation of themes. This was followed by the phase of indexing of the raw data under appropriate set of themes/subthemes (separate for each domain). Two teams have utilised the NVivo 12 software to support data synthesis: *Research and Education* (Knight-Lozano 2020) and *Caseload domain* (Evans 2020). Findings of each domain are presented in Chapter 2-7 of this series.

Through sharing of findings and reflective discussions, the domains, themes and subthemes were brought together to enter the final stage – exploratory analysis in order to detect patterns of association and to develop explanations that represent the whole data-set via construction of the final conceptual model (Hebda-Boon 2020b).

Methodological Limitations

An online survey methodology was considered the safest and most feasible method to reach nation-wide perspectives of paediatric physiotherapists during the COVID-19 pandemic. However, the method itself introduces sampling bias. Digital distribution of the survey may have inadvertently skewed sample attributes towards a population with sufficient online access and experience (Evans and Mathur 2018). To minimise this impact, efforts were made to utilise a wide variety of well-established APCP communication channels, including the newsletter and email bulletins.

The sample represented members from all UK regions, paediatric specialities, settings, employers and bandings, yet the cohort may still differ from the wider paediatric physiotherapy population on a variety of

other characteristics. Furthermore, the method introduces a self-selection systematic bias, inhibiting generalisation about study findings to the wider population (Bethlehem 2010).

The timeframe of the survey limits experiences to the initial 3 months following the original peak of COVID-19 in the UK and does not reflect experiences beyond the closure of the survey in June 2020. However, this period captures professional and personal reactions to unprecedented transformations in healthcare and social care, including 'lockdown' measures, closure of non-essential children and young people services and virtual provision of clinical, educational and research activity.

Within the data analysis, an inherent limitation arises from qualitative data collection that it cannot be tested for validity using quantitative measures (Johnson 2004). However, the credibility and transferability of findings has been established by demonstrating methodological rigour, with triangulation methods used at several stages and assuring an auditability of processes.

This is the largest survey the APCP has conducted with a 20% response rate. Fincham 2008 suggests that 60% or more should be the goal of survey research. The authors are aware there is a non-response bias of 80%. However, this has been considered in conjunction with the short time frame that this survey was open to members for completion. Furthermore, the authors believe that the demographics of the respondents are representative from across the UK with a range of specialisms and banding represented and as such can provide useful information for the wider APCP membership. It has also previously been highlighted that this project was not a research project.

Finally, authors are paediatric physiotherapists and therefore have been directly affected by the COVID-19 pandemic. To overcome the risk of author bias and ensure the trustworthiness, findings were frequently shared within the working group for collective critical examination, peer discussion and de-brief meetings.

Membership Responses

472 respondents completed the online survey, representing 20% of the membership. The regional representation, banding and respondent's specialisms/areas of work are represented in Figs 1,2 and 3 below, representing a diverse cohort of paediatric physiotherapists. The majority of respondents were employed by the NHS (78%), although representation from independent/private sectors (13%), charity sectors (5%), and other fields 2% were noted. More than half of respondents worked in primary and community settings (64%), with the remainder of respondents split between secondary (13%), tertiary (16%) and other settings (5%). A wide breadth, inclusive of 11 geographical regions throughout England, Wales, Scotland and Northern Ireland were represented (figures 1-3).

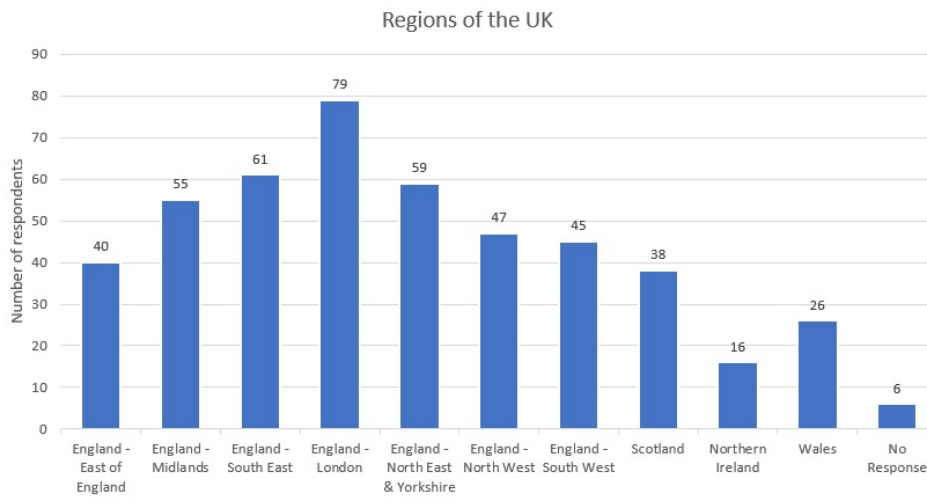


Figure 1: Regional representation of survey respondents

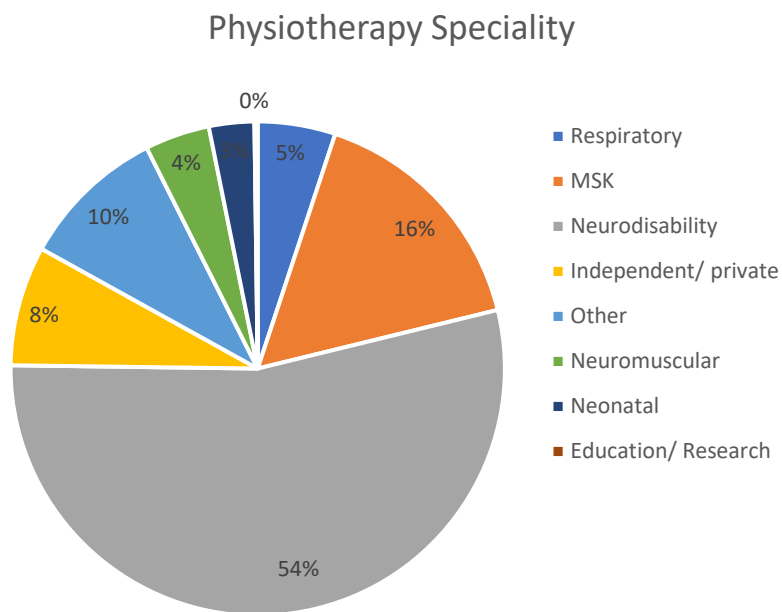


Figure 2: Survey respondents by physiotherapy sub-speciality

Employment banding

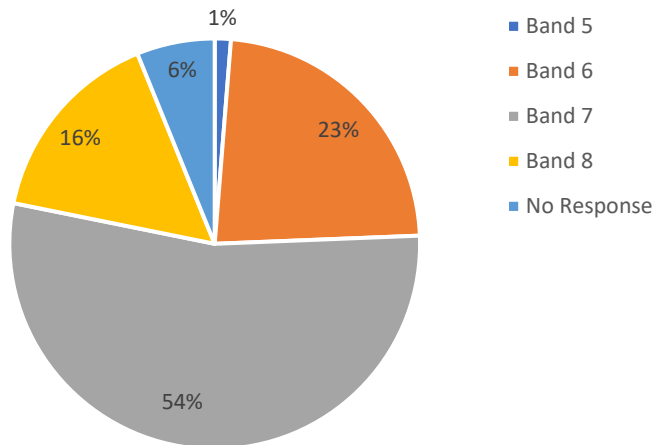


Figure 3: Survey respondents by grade/ band (or independent equivalent)

Conclusion

The response rate for this survey exceeded the initial expectations of the project group. By applying a rigorous analysis and robust methodological approach, it is hoped that the collective experience of respondents has been given due diligence. The aim of capturing APCP paediatric physiotherapists members experiences during the initial period of national COVID-19 lockdown has been achieved. It is intended that this report shares the real breadth of information from our membership so that future discourse, consultation, and learning can be affected.

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Association of Paediatric Chartered Physiotherapists COVID-19 Survey Analysis: Role

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Introduction

Physiotherapists, including those in paediatric specialities, have been key contributors within acute care, rehabilitation and public health support throughout the COVID-19 pandemic (The Chartered Society of Physiotherapy, 2020). Recent media coverage has highlighted admirable efforts from a breadth of specialties within the physiotherapy profession, demonstrating the diversity of roles which physiotherapists perform to support population health.

Role has been described as a dynamic social construct which is created through cultural patterns associated with a particular status and societal contribution (Sarangi, 2010). Physiotherapists fulfil a variety of roles across different sectors to support population health throughout the life-course (The Chartered Society of Physiotherapy, 2018). Within this collective purpose, paediatric physiotherapists have many essential roles within child and adolescent health. As a physiotherapy profession we seek to develop our roles with the underpinning value to be responsive to the needs of the population and to improve practice. Personal and professional development, alongside associated role changes, is embedded into our profession. However, the COVID-19 pandemic has forced many unwanted changes upon our professional roles.

To provide essential and safe care throughout the COVID-19 pandemic paediatric physiotherapists had to make sudden and unprecedented changes to their roles, whilst navigating extraordinary challenges. A BBC interview provided one example which explored the importance of adapting paediatric physiotherapy roles to support children and their families during the UK lockdown period (BBC Sounds, 2020). Furthermore, The Royal College of Paediatrics and Child Health (2020) highlighted that the paediatric workforce was drastically reduced during the initial stages of the COVID-19 pandemic. Paediatric physiotherapists were amongst many who were redeployed into entirely different roles. This rapid change in i) caseload needs ii) workforce structure and iii) the continuously evolving COVID-19 impact and response, has transformed many paediatric physiotherapy roles. Such rapid transformation in paediatric physiotherapy, both across the profession and within individual roles, warrants critical consideration.

Purpose

In view of the significant transformation, Role was selected as a broad a-priori theme to explore the impact of COVID-19 upon paediatric physiotherapy roles. Specifically, this domain aimed to explore i) role changes ii) barriers and facilitators to fulfilling roles and iii) future impact of role change.

Method Summary

An electronic survey was sent to all APCP members between June 4th and June 17th 2020. A qualitative approach utilising Framework Analysis (Ritchie 2014) has been applied. A detailed methodology of the design, development delivery and analysis of this electronic survey is reported in the introduction and methodology section of this series. Further consideration of methodological limitations within this project have been detailed in the [Introduction and methodology](#) section. This domain of the survey was explored through five key questions. these are presented in Table 1.

Table 1: Survey Questions	Type of question
1) Has your role changed as a result of COVID-19?	Closed (yes/no)
2) What have been the greatest challenges to the change in your role?	Open
3) What has been positive or worked well?	Open
4) Have you felt supported in your role during COVID-19?	Open
5) What were/are the implications of COVID-19 for your usual role?	Open

Findings

This domain had responses from 472 paediatric physiotherapists from a breadth of paediatric specialities and sectors. Descriptive statistics for participant Primary Speciality and Employers have been provided in Tables 2 and 3. The 472 participants also included a representation from all geographical regions and NHS Agenda for Change Banding.

Table 2: Descriptive Statistics for Primary Speciality Across Role Domain Responses	
Primary Speciality	N= number of participants (Total = 472)
Education/ Research	1
Independent/ Private Sector	37
Musculoskeletal	76
Neonatal	14
Neurodisability	275
Other	45
Respiratory	24

Employer	N= number of participants (Total = 472)
Academic	4
Charity	25
Independent/ Private Sector	63
NHS	368
Other	8
No answer provided	4

Four key themes emerged from the data analysis i) Role Transformation ii) Fulfilling New Roles iii) Common Barriers and Facilitators to Fulfilling Roles and iv) Impact of Role Change. The four themes have been summarised in Table 4.

Role Transformation	<ul style="list-style-type: none"> • Environment and professional responsibilities • Working conditions • Personal and employment circumstance
Fulfilling New Roles	<ul style="list-style-type: none"> • Role in supporting children, young people and their families • New caseloads • Adapting and transferring skills
Common Barriers and Facilitators to Fulfilling Roles	<ul style="list-style-type: none"> • Uncertainty • Communication and leadership • Team Support
Impact of Role Change	<ul style="list-style-type: none"> • Professional role restrictions and loss • Recovering and restarting • Collaboration

Theme One: Role Transformation

Environment and professional responsibilities

A large proportion of paediatric physiotherapists had, and still were, redeployed into entirely different professional roles. The majority of respondents who were redeployed reported being suddenly transitioned into a range of acute adult services. Redeployment environments included a variety of acute hospital wards and intensive care units. Some participants were redeployed directly to support COVID-19 specific environments such as Nightingale Hospitals. Other participants reported being redeployed to support the workforce in other acute adult specialities. Examples of redeployment responsibilities were vast ranging from

working within Discharge to Assess Teams to supporting adult critical care and rehabilitation services. Paediatric physiotherapists also reported being positioned in healthcare assistant roles within various acute settings. Some shared their thoughts and feelings associated with such dramatic and rapid changes to their roles.

“half of my team were deployed as HCAs to the CV-19 hot site” R035

“Redeployed so no longer part of changes within paedics team. Loss of identity” R298

“I was redeployed to a care of the elderly ward at the very start of the pandemic and spent several weeks being inducted and working there to replace physios who were sent to the “frontline”” R090

“My role disappeared! The realisation that my role will change in the medium & probably long term makes me sad” R309

The majority of paediatric physiotherapists who were not redeployed from community or outpatient settings reported a transition to virtual consultations and home working. Those who were shielding for personal or family circumstance also reported a transition into home working.

“...Currently the only children we are seeing face-to-face are those with urgent equipment needs. My work is mainly performing telephone reviews..... developing alternate ways to communicate with them, including making videos for YouTube.” R090

“Health issues mean I have been working from home. Most of wheelchair service staff were redeployed so I have, with few colleagues, been holding the fort.” R046

Working conditions

Most reported change in working conditions associated with the need for social distancing measures and personal and protective equipment (PPE) use. In addition, shift patterns were altered to accommodate on-call rotas, increased access to acute physiotherapy and to facilitate social distancing. Participants added that the change in working conditions led to new roles being both physically and mentally exhausting.

“doing on call cover on the children's ward for the first time in 15 years!” R315

“It was challenging emotionally working with adults on the stroke ward supporting them with all aspects of their stroke in the absence of their family visiting them. It was challenging speaking to relatives as they were trying to comprehend what had happened to their loved one but not able to visit them. It was challenging physically working with bigger and heavier people than I am used to. It was unsettling in the uncertainty of Covid....seeing patients (in PPE) who then went on to develop Covid. I am used to seeing people in scheduled clinics and so working on a ward with new patients each day was quite unsettling initially.” R008

For those who had to transition to virtual consultations, changes in working conditions also posed multiple challenges. Participants expressed concern surrounding the limitations of delivering their role through virtual platforms. Further exploration of the use of [technology](#) and [caseload management](#) can be found in the

respective domains of the survey report. However, it is important to address here that some paediatric physiotherapists working virtually did not feel they were fulfilling their role or felt disconnected to their role. Many expressed despair associated with lack of physical and virtual connection.

“I have not been allowed in to do my job. I am having to work from home” R297

“Our clinics have been 95% virtual/ telephone. The internet connection and facilities for this have been challenging. The efficiencies of this at times have been soul destroying as you cannot fully assess a patient” R147

“My other significant challenge to my role was not being able to follow-up effectively. Normally I follow up my at risk babies, which I still can do, but only by phone or video which isn't effective, especially for monitoring evolving tone.” R146

Negotiating the demands of new professional roles with personal and family life was also a common report.

“Working from home: some difficulties with work / home-life balance” R005

“Lack of Childcare and working from home” R093

“Working on wards again, weekend working with a young family” R317

Personal and employment circumstance

Some participants returned to work within the NHS from retirement, career breaks or working in other sectors (charity, private or academia). Simultaneously, there were some paediatric physiotherapists who were furloughed. Those placed on furlough were predominantly working in private physiotherapy practices and in hospice settings. A common report from those placed on furlough was anxiety surrounding the financial implications and future employment security. There were also some NHS clinicians who had concerns surrounding the future of their employment.

“Not working. No income. Home schooling” R063

“As a charity we rely on fundraising to keep us afloat. Lockdown has been financially disastrous for us. My physio role has been significantly changed in the proposed new structure to such an extent that I think I will not be able to fulfil the requirements. My OT colleagues post has been removed: we are currently in the consultation process” R344

“We have lost our paediatric ward in the hospital which is a district general...this means huge implications for my post” R382

Theme Two: Fulfilling New Roles

Supporting children, young people and their families

Most experienced restrictions to their roles which resulted in only being able to act when it was deemed to be essential. Participants reported concern, upset and guilt associated with how changes to professional roles impacted upon children, young people and their families.

“Feeling of abandonment of caseload of children with on-going needs” R060

“Reduced face to face as only seeing urgent / critical” R462

“Unable to see patients face to face. Difficulties with adjusting equipment, monitoring tone, providing orthotics, sometimes unable to complete full assessments”. R250

“Redeployed to adult acute ward...very hard not being able to support long term patients on my caseload” R309

“concerns patients/families not seeking help or guidance.” R099

“concern for safeguarding” R223

New caseloads

A dominant response was adjusting roles to meet the needs of new caseloads. The majority of paediatric physiotherapists remaining within paediatrics experienced an increase in caseload due to the reduced number of paediatric staff (see [caseload](#) subtheme).

“Only Paeds physio for my area to continue treating and assessing all done virtually. Team were redeployed to adult wards.” R061

Paediatric physiotherapists who were redeployed into other services adjusted their role to the needs of numerous caseloads. In addition, some professionals balanced multiple roles between adults and paediatric services. The following quotes reflect some of the many extraordinary role adjustments.

“Treating adults with MSK injuries. The last time I did this sort of work was 1992. Working alone from home, away from my usual team.” R084

“I had to help on the adult wards however after my NNU and paedics ward cover was completed. This was ad hoc, as needed. It was stressful helping out on these wards as I felt deskilled, after 20 years in paediatrics!” R146

“Juggling two areas of work. Redeployed into adult respiratory...Attempting to upskill and get up to date with COVID and adjustment to a new team, whilst also trying to stay part of the paedics team and monitor my caseload” R059

Some participants who were identified to be redeployed reported their frustrations relating to the consequences for their paediatric caseload.

“I was redeployed to acute adults - orthopaedics - the biggest challenge was the lack of patients as it was not busy and I felt I had left my own patients and services to go somewhere where I was not actually needed, although I understood the need to be prepared” R326

“frustrating that I was obviously not needed in the wards but was not allowed to do any of my paediatric work.” R090

Adapting and transferring skills

To fulfil new roles most participants described a process of “*upskilling*” (R276) and being on a “*steep learning curve*” (R309). Skills required were vast and ranged from engagement with technology to requirements of PPE. Those continuing to work in acute environments reported adapting their skillset to ensure a safe service could continue to be offered across specialities. Acute clinical skills, including respiratory skills, were most commonly reported from those who held inpatient roles.

“There was almost daily training to support the work on ITU around ventilators and respiratory management.” R116

“I had to do work on the adult wards at weekends so had to relearn a lot of things. All paed appointments were virtual so I had to learn new ways of working with technology.” R204

Some reported at times they felt “*overwhelmed*” (R125) and experienced “*information overload*” (R070). However, a frequent report was the positive opportunities which the new experience offered for future practice. Positive responses associated with learning new skills were often attached to access to training and being supported by colleagues.

“I have found this a positive experience that has helped develop my respiratory skills for when I am working on the paed ward” R034

“Enjoyed being part of the support system in the hospital for COVID and gaining teaching to further my knowledge. Also the wider physio team coming and working together and getting to know each other better” R059

“we had HCA training and there was always someone to ask for support” R008

In addition to learning new skills, many participants placed emphasis on the transferable skills which they held. It was evident that participants had transferable skills which positively contributed to different specialities throughout the COVID-19 pandemic.

“It was interesting to work with different professionals and physiotherapists in a different working role and environments e.g. nursing homes. It re-affirmed that there were useful transferable skills and that experience from over 30 years ago was still relevant.” R125

“Transferable skills and knowledge of movement assessment and analysis has helped my new team”

R200

Theme Three: Common Barriers and Facilitators to Fulfilling Roles

Uncertainty

The versatility of paediatric physiotherapists resulted in some participants being positioned into considerably unfamiliar environments. Uncertainty was a common report relating to the challenge of adapting to new roles.

“Working with adults again after a 15-year gap and uncertainty where I would be based each week”

R034

“Getting used to the ward environment again and constantly changing instructions” R020

Furthermore, the uncertainty of being redeployed was a concern for many who were trying to continue to fulfil their roles within paediatrics.

“Although I have continued to work in outpatients, adrenalin was high with the constant “threat” of being redeployed.” R147

“I found it difficult to settle back efficiently and took a while to pick up and start again... on standby to go back at the drop of a hat if required”. R125

Communication and leadership

Feedback regarding communication of information associated with role changes varied greatly. Some paediatric physiotherapists received regular team updates which positively contributed to their feeling of support. Many added that regular updates from the Chartered Society of Physiotherapy and other professional forums was a supportive factor.

“Yes we have had support from managers and signposts to support for wellbeing. Managers have had a difficult time negotiating advice.....but have always kept us informed of changes”

R097

Lack of information was often reported with feeling unsupported, especially but not exclusively, amongst clinicians in the private sector.

“information is very rarely specific to paediatrics and is a minefield with a huge amount of info coming through. It is a case of as an individual having to make it specific to your individual practice and circumstances however the stress of this is immense” R263

“I have felt supported by the team around me, but not by senior management. There was a huge lack of communication regarding things like PPE, and getting mask fitted. Our manager was also redeployed so wasn't there to be the join between what was being discussed at higher levels.” R019

Reports surrounding communication were usually linked with descriptions of leadership. Many participants expressed positive feedback regarding support which was made available to them. Furthermore, feeling supported was also often associated with feeling prepared for new roles through training and supervision.

“Yes, my physio team and NHS employer have been absolutely brilliant in their support and understanding of the uncertainty and new demands put upon us.” R018

“I felt very supported in my new team, it was initially very nerve wracking and the first week I spoke up about needing more support and this was organised and arranged by my team leader which was amazing.” R130

“Access to 'upskilling' training to ensure appropriate training for the work environment was provided prior to being exposed to working in this environment.” R027

“Having a high level of support and training during this time. Being able to have 1:1 with my supervisor in the paediatric team.” R116

It is also worth noting here that participants with managerial roles reported the need to make adjustments to typical ways of supporting staff.

“Restricted opportunities for induction of new staff...other than virtual, shadowing etc.” R339

“I had to work differently to maintain team morale, sense of purpose and to look after staff during this difficult time.” R066

Team support

Supporting others, and being supported by others, was frequently reported as a positive of role change. A strong sense of “Team morale and support for one another” (R 137) was evident throughout responses.

“Enjoyed being part of the support system in the hospital for COVID and gaining teaching to further my knowledge. Also the wider physio team coming and working together and getting to know each other better. I have loved teaching some of the junior staff my rehab knowledge.” R059

“Working alongside colleagues from a range of different backgrounds all redeployed but willing to pitch in and use our practical skills as Physiotherapists to keep services running well under new demands” R097

“Received lots of moral support from various ward staff members I have worked with in the past, senior ward staff checking I am okay with my new type of work.” R075

However, there were some rare but powerful reports of feeling unsupported. Some participants who had reduced or lost face-to-face contact reported they missed the connection with their colleagues. Loss of typical social support from colleagues was often highlighted by those working in different locations. Some added that social distancing measures within the same environment impacted upon their connection to their team.

“I really felt like I was on my own” R113

"I am isolating therefore, no direct contact with colleagues" R061

"I have been designated as vulnerable so have been redeployed to a "clean" site. I am very grateful for this and feel safe. I do feel slightly out of the loop with my team, but communication has been really good. I miss out on the "chat" discussions where you actually learn quite a lot." R429

"Miss the social part of clinic, working entirely alone in a mostly closed department" R358

"I have been having to self-isolate so am working from home. The lack of support from management has been horrendous. They have not supported me in being able to do any of my clinical work remotely despite options being available." R297

Theme Four: Impact of Role Change

Professional role restrictions and loss

A dominant focus was surrounding role restrictions that were associated with reduced face to face contact.

"No longer able to complete face to face treatment, unable to fully complete my job due to this and I feel like I cannot truly assess and treat my patient correctly." R075

"I am not sure when I will be able to see most of my patients again and what it will look like (in terms of PPE and procedures) when I do." R090

"It has curtailed my teaching role, and currently I am supporting a small percentage of those patients I would usually treat virtually." R153

There were some powerful reports of paediatric physiotherapists explicitly stating their role had disappeared.

"My role disappeared! The realisation that my role will change in the medium & probably long term makes me sad. I feel a large part of what I offer depends on touch, so the thought of trying to do my job effectively remotely is daunting. It is making me seriously consider retirement." R309

"My usual role disappeared as I was visiting children in their homes and hydrotherapy." R042

"Hydrotherapy and Hippotherapy are very close contact. Not able to do remotely" R458

Many expressed concerns surrounding the consequences of role restrictions or losses upon children, young people and their families.

"Many of my children require splints and orthopaedic intervention which is not available to them at the moment. Some are unable to wear splints that have got too small but cannot be replaced. Some are awaiting botox/surgery and this has been delayed indefinitely. There will be long-term effects from this!" R090

“My normal role is working with children on research trials, these were mostly stopped or changed to remote visits via secure web call which was a huge change. Remote visits are challenging for parents, children and therapists and not being able to get the children in could have huge implications on the clinical trials.” R130

Recovering and restarting

Many added they were in the process of trying to recover and restart their typical roles. Emphasis was often placed on trying to develop their roles and services using learning from changes during COVID-19 (see [moving forwards](#) section).

“plans in place for getting back to normal role again.” R407.

“managing patients remotely and keeping tabs on their progress and ongoing needs as we restart the service in a different way” R379

“Usual role was suspended for the duration but has now restarted. Much more work is now being done online including virtual clinics some of which will remain beyond COVID as we now have the equipment to enable them. As a tertiary centre it will allow easier access for those families at a distance and was something we were trying to set up but COVID has facilitated that process.” R346

“Increasing number of urgent CF home visits required to reduce footfall in the hospital” R027

Collaboration

Many participants reported that working throughout the COVID-19 pandemic had improved collaborative working. The majority of participants reported working more collaboratively within their direct and wider teams.

“Parents and colleagues have all been brilliant at adjusting and understanding the situation and everyone has been willing to make it work.” R018

“Team working has greatly improved. Increased communication with school aged parents and families.” R444

“Brought acute and community AHP staff together and fostered new relationships.” R326

“working as a bigger team unit” R023

Those who were redeployed into entirely different roles frequently reported the numerous benefits of working with different professionals within new teams. Benefits to working within these new teams included improved patient outcomes, skill development, improved understanding of other roles and strengthening relationships with colleagues.

“greater understanding of nursing role and forming new relationships with the MDT” R284

*“Building bridges with other colleagues within the Trust who we wouldn’t normally work with”*R280

A greater understanding of other members of the multidisciplinary team was not exclusive to paediatric physiotherapists with redeployment or acute care roles. Participants supporting community paediatric caseloads also reported *“closer liaison with other agencies to discuss and plan how to meet needs”* (R50). One participant highlighted that collaborative working was facilitating the reform, recovery and restarting of services.

“Collaborative working across trust with decisions made quickly...ability to think about how to restart services with some improvements rather than to go back to old ways”. R293

Discussion

The wealth of survey responses provided by participants allowed for a rich interpretation of paediatric physiotherapists’ roles in response to the COVID-19 pandemic. Paediatric physiotherapists’ have endured substantial challenges and changes to their roles to support the collective effort against COVID-19. The chaos created during this pandemic has enforced sudden, extraordinary and unwanted change. Yet, this chaos has also presented an opportunity to reconsider everyday assumptions and processes in order to make positive changes. This analysis has provided a starting point to exploring key questions surrounding the future of paediatric physiotherapy and paediatric physiotherapy roles.

Limitations

The definition of what ‘role’ encompassed and what constituted a ‘role change’ could have been explored further. Through qualitative analysis most participants appeared to have an element of role change, however only 34% reported their role had changed as result of COVID-19. It is anticipated that those who reported their role had changed were those who were redeployed. At the time of writing this report most roles still face major restrictions. It is acknowledged that the impact of this pandemic upon paediatric physiotherapy roles is still unravelling. This analysis is provided as a starting point to exploring paediatric physiotherapy role changes in response to COVID-19.

Considerations for future

We are not yet in a position to wholly reflect on the impact of COVID-19 upon paediatric physiotherapy. However, we need to critically consider how COVID-19 is shaping our roles. Figure 1 provides a summary of five key areas which influence paediatric physiotherapists roles i) children, young people and their families ii) connection iii) competence iv) collaboration and v) compassion. These five key areas have been provided to fulfil two reflective purposes. First, to reflect key areas for further consideration highlighted from this analysis. Second, to offer as a simple framework to support paediatric physiotherapists when reflecting upon how COVID-19 has impacted their roles. Both purposes are with the ultimate aim to stimulate discussion surrounding how the impact of COVID-19 can be used to develop paediatric physiotherapy roles. The

following section will expand upon these five key areas and Figure 2 provides ideas of reflective questions for consideration.

Children, young people and their families

Despite rapid innovation (see [caseload](#) section), many paediatric physiotherapists still experienced concern and guilt associated with not being able to deliver their typical role. To deliver and improve paediatric physiotherapy roles, the impact of COVID-19 upon specific populations needs to be considered. Recent reports such as that by the Disabled Children's Partnership (2020) provide essential considerations for paediatric physiotherapy roles.

Figure 1: Critically Considering Physiotherapists Roles' in Response to the COVID-19 Pandemic



Connection

Many reported their role was lost or compromised due to social distancing restrictions. Consideration should be given to how roles are fulfilled as many physiotherapy interventions involve physical presence and physical connection. The [technology](#) and [caseload](#) reports of the survey discuss the rapid shift to virtual delivery of roles in more detail.

Competence

Emphasis was placed on “upskilling” during the initial stages of the pandemic. Training to support clinical skills was frequently reported, however very few reported training to support the switch to virtual and home working. Furthermore, there was no mention of training to support the leadership and compassionate skills required to fulfil new emotionally intensive roles. Such rapid change in roles warrants reconsideration of what skills are required to fulfil specific paediatric physiotherapy roles.

Collaboration

Paediatric physiotherapists experienced significant role transformations to support other services during the COVID-19 pandemic. Our professional roles are strongly influenced by the needs and roles of others. To develop paediatric physiotherapy roles, consideration needs to be given to promote effective collaborative working with relevant stakeholders.

Compassion

Many paediatric physiotherapists highlighted that fulfilling their role during COVID-19 presented many challenges. The wellbeing report discusses some of these personal challenges in more detail. Whilst most felt supported in their roles, some disclosed they felt unsupported, disconnected and isolated. Consideration should be given to explore how we can promote compassionate and inclusive environments to allow individuals to flourish in their roles.

Conclusion

The impact of COVID-19 is still unravelling, shaping our personal and professional roles. Participants responses have provided invaluable insights into the role of UK paediatric physiotherapists’ in response to the COVID-19 pandemic. The analysis of this domain, and the writing of this article, has helped to identify key changes to paediatric physiotherapy roles imposed by the COVID-19 pandemic. From this analysis, five key areas of focus have been offered to guide critical considerations surrounding the direction of paediatric physiotherapy.

Figure 2: Examples of Reflective Questions using the 5C's guide*

Children, young people and their families: *What is the role of paediatric physiotherapy in supporting the health and wellbeing of babies, children, young people and their families? What paediatric physiotherapy roles should be protected, recovered and restarted? How could paediatric physiotherapy roles evolve to improve the support for children, young people and their families?*

Connection: *How important is physical presence and physical contact to paediatric physiotherapy roles?*

Competence: *Other than speciality specific clinical skills, what skills and training do paediatric physiotherapists require to fulfil their roles?*

Collaboration: *Who could paediatric physiotherapists collaborate with to improve care quality, and how can this be done?*

Compassion: *How do we best promote compassionate and inclusive environments within paediatric physiotherapy, which allow individuals to flourish in their roles?*

These questions have been targeted at a professional network level but could also be considered at an individual level, for example "how important is physical presence and physical contact to **my role?"*

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Association of Paediatric Chartered Physiotherapists COVID-19 Survey Analysis: Caseload Management

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Introduction

Recent UK wide national health service (NHS) initiatives have prompted cost effectiveness strategies across allied healthcare services, resulting in reduced staffing and higher caseload pressures, particularly in the community. Literature has revealed these caseloads to be unmanageable at times, with one APCP survey reporting that fewer than half of paediatric physiotherapy respondents considered their workload manageable (Hodgson and Shannon, 2019). This has resulted in development of unpublished workload tools to support community caseload management, including the Nottingham demand tool and the Birmingham workload management tool.

In March 2020, Public Health England (PHE) introduced safety measures in response to COVID-19 that forced radical changes in face-to-face paediatric physiotherapy practice at a rapid pace. Those who were 'clinically extremely vulnerable' were advised to 'shield', educational institutions were partially or fully closed, and many children's healthcare services were put on hold. Furthermore, COVID-19 related clinical service need resulted in redeployment of clinicians, altering staffing capacity.

The APCP working group identified "caseload management" as an a priori theme to investigate the impact of these COVID-19 measures on existing overstretched paediatric physiotherapy caseloads and to consider the implications for practitioners.

Aim / Objectives

To explore respondent's experiences of managing paediatric physiotherapy caseloads, during the COVID-19 pandemic.

- To identify any changes in practice
- To identify the challenges imposed on practice
- To identify the opportunities within caseload management

Method Summary

An electronic survey was sent to all APCP members between June 4th and June 17th 2020. A qualitative approach utilising Framework Analysis (Ritchie 2014) has been applied. A detailed methodology of the design, development delivery and analysis of this electronic survey is reported in the introduction and methodology section of this series. Further consideration of methodological limitations within this project have been detailed in the [Introduction and methodology](#) section. Domain questions are presented in Table 1.

Table 1: Survey Questions	Type of question
1. What has been your experience of managing your caseload during this period?	Open ended
2. Were you/are you able to continue seeing patients face to face?	Closed (Y/N)
3. What changes have you had to make in managing your caseload during this period?	Open ended

Results

All 472 respondents completed the 'caseload management' domain of the survey, although six respondents answered 'not applicable' to the series questions. Of these, two respondents reported being on maternity leave and one respondent stated they were redeployed. The remaining three failed to provide further detail, but represented different UK regions, banding and settings. Of the remaining 466 respondents, 92% reported a change in their caseload during this period, representing physiotherapists from all UK regions, bands and specialities. Respondents also included those re-deployed but continued to dedicate some time to contact their caseload.

The minority of respondents who did not experience a change in their caseload management represented those in non-clinical roles who did not hold an existing clinical caseload (3%) or reported no caseload contact due to being furloughed, redeployed or shielding at home (4%). Only 1% reported no change to their caseload, with the exception of using personal protective equipment (PPE). These respondents represented a range of specialities including inpatient neonates, research and education, specialist rehabilitation centre and an independent/private practitioner. Across survey responses, there was no direct link evident between children and young people (CYP) with COVID-19 symptoms and caseload management.

Respondents reported a wide range of emotions related to changes in caseload management during this COVID-19 period of interest. Some respondents described the process of trying to manage their caseload as 'challenging' or 'difficult'. One respondent stated: '*it was a very emotional time for everyone*' (R414), while another respondent reported managing their caseload during this time as '*nightmarish*' (R257). Others acknowledged new ways of caseload management to be '*interesting and varied*' (R17), '*positive*' (R265) and '*good*' (R390). These contradicting emotions were not defined by demographical variables; however, time restrictions and staffing uncertainty were linked to negative emotions.

Themes

Results from the survey analysis revealed 5 overarching themes, representing the changes in paediatric physiotherapy caseload management during the COVID-19 period of interest. These are presented in table 2 and will be explored in further detail below.

Table 2: Presentations of themes and subthemes for Caseload Management

Overarching Theme	Subthemes
Caseload responsibilities	Role in caseload management
	Size of caseload
Methods of Assessment and Intervention	Face to face
	Telephone
	Virtual
	Written/emailed
Caseload Prioritisation	Methods
	Referrals
	Waiting lists
Supporting CYP and their families	Communication
	Guidance and support
	Parent led/parent autonomy
Risk Assessment and Safety	Infection Control
	Safeguarding

1: Caseload Responsibilities

This theme explores key changes in caseload responsibility during COVID-19, attributing to a change in physiotherapy role and/or size of caseload.

Roles

Analysis showed that some respondent's roles changed during this period. The most significant and common being re-deployment from community settings to acute adult services. For some respondents working in community settings, they had shared roles between redeployment and managing their caseload:

'Stressful when re-deployed as although most families self-managed, there were still some things to follow up - I was given time from ward duty for this however it felt disconnected' (R8).

Role changes for inpatient teams included covering other specialities within physio.

Across all demographics apart from specialist inpatient services, participants were expected to work from home for some or all of the time. Respondents had different experiences of working from home with some finding it a positive experience and others finding it more of a challenge:

'We have been doing a mix of home and office working - harder working from home trying to do video consults with the distractions from home present' (R405).

For further results on [role changes](#) please see the domain

Size of caseload

A change in caseload size was noted by the majority of respondents, although the setting in which the respondent worked determined how caseload size changed.

Most inpatient-based respondents reported a reduction in caseload size, attributing this to early discharges, reduced admissions and cancellation of non-essential surgeries. One respondent stated:

'Personally, this has led to reduced job satisfaction as normally so busy seeing patients and now mostly at a computer working on service development etc' (R348).

Another respondent from a tertiary centre felt that the move towards early discharge meant:

'I am unable to provide the level of rehabilitation to my patients that is required for them to meet their goals and optimise their potential recovery' (R10).

However, a reduction in caseload also led to opportunities, such as resource development and increased capacity to take on more families.

Conversely, primary/community-based respondents across all UK regions reported an increase in caseload size. This was predominantly attributed to re-deployment and subsequently, a reduced staffing capacity. As a result, some respondents reported caseloads to be managed centrally by team leaders, prioritised and delegated to remaining staff. One respondent reported:

'Losing autonomy in who we could decide to see as leads having to flag up through bronze/silver control' (R126).

2: Methods of Assessment and Intervention

This theme reflects the changes to methods of physiotherapy assessment and intervention during this period. The following subthemes reflect the 4 main methods of delivery, including face-to-face, telephone, virtual provision and written/mailed.

Face-to-face Provision

Within this survey domain, 31% of respondents answered 'No' to providing face-to-face services. For most, this was due to a transition to virtual therapy, although a few attributed this to personal shielding status or re-deployment. Those working in independent/private or neurodisability specialities, located in charity or hospice settings, or based in South East of England and London regions were least likely to provide face to face services.

Of the 69% of respondents providing face-to-face, 7% reported to be in the early process of restarting face to face services, and limited this provision to essential, urgent, emergency or highest priority contacts. More specific examples included those who would deteriorate if not seen, acute respiratory patients, early discharges from hospital, and those with equipment issues. These respondents were most likely to work in primary or secondary settings, in independent/private or neuromuscular specialities and located in regions of

the Midlands and South West of England. The remaining 62% of respondents reported to continue face-to-face provision throughout this COVID-19 period, but all reported that this was only available for essential contacts as described above. These respondents were largely representing Scotland and Northern Ireland regions, worked in tertiary or secondary settings and specialised in respiratory and neonatal provision.

Telephone Provision

A minority of respondents from Northern Ireland, Wales, North East and Yorkshire and Scotland managed their outpatient/community caseloads primarily through telephone communication. One respondent described this method positively, stating:

'Better for those families who cannot/ do not attend to contact by phone - our DNA/WNB rates have decreased' (R70).

However, the majority of respondents used telephone communication in combination with other methods, noting its limitations when used in isolation:

'Very difficult as there is a lot less we can offer our patients over the phone' (R109).

Furthermore, the use of telephone methods was considered suitable for providing advice and signposting, but respondents raised concerns about using this method for:

'One case of serious pathology was not picked up by the telephone consultations, are they safe?' (R151)

Virtual Provision

Many respondents were restricted by lack of access to suitable technology resources in the early stages of the COVID-19 period. Furthermore, respondents noted a significant learning curve in virtual therapy provision:

'Difficult reinventing myself as a tech savvy therapist (which I'm not)' (R340).

Virtual assessments were completed through use of pictures and videos sent by parents, as well as live video platforms. However, assessment limitations were reported in some specialities, such as establishing lung function measures in respiratory, or CYP with complex neurology:

'less likely to discharge as unable to complete a reliable physical assessment (tone, reflexes etc)' (R74).

Furthermore, virtual assessment was considered inadequate by some and raised concerns about the risk of missing 'red flags'.

Virtual interventions were delivered via video platforms and complemented by visual aids like dolls. Signposting to generic intervention resources online was also used e.g. You Tube. Respondents reported contradicting views regarding virtual interventions; whilst some reported this provision to be tiring or

questioned intervention compliance from CYP and their families, others felt this was more time efficient for all involved:

'Difficult to ensure whether families are fully completing home therapy as provided' (R85).

'Parents have been very positive about the videocall, saving them 1 or 2 hours drive to our centre' (R51).

These contradicting views were largely determined by CYP and family engagement, which was challenged by language barriers, families with restricted access to technology or those who lacked confidence using this style of communication.

Virtual provision and its role in future practice was reflected in a number of responses; some raised concerns about the long-term effects of virtual intervention, particularly in complex patients with postural management needs; others reported a personal emotional loss moving away from face-to-face provision:

'I miss hands on physio, assessing and putting treatment into practice myself' (R38).

Conversely, one respondent working in neurodisability in a primary setting said:

'I feel that this will set us up for the future in being able to provide a more supportive, flexible and individual service to our families.' (R38)

For further results on the use of virtual platforms please see [technology](#) domain

Written/Emailed

Many respondents reported that one of the first things they did during this period was to make sure that all CYP's on their caseload had an up to date treatment plan at home for families to complete with them. Other materials that were sent included APCP information leaflets.

3: Caseload Prioritisation

This theme explores the use of rigorous prioritisation systems implemented to manage caseloads during the COVID-19 period of interest. Subthemes describe methods of prioritisation, referral systems and waiting list management, with a focus on those primarily affected by low or uncertain staffing capacity and increasing caseloads in the primary/community setting.

Methods of prioritisation

The most common methods of prioritisation were the use of 'traffic light' or 'red, amber, green' (RAG) systems. These were implemented by respondents in primary/community settings across all UK regions and were monitored by team leaders or peers. The highest priority patients included CYP at risk of being admitted to hospital, including respiratory exacerbations, or those facilitating early discharge from hospital, including post-operative needs. CYP with educational healthcare plans, equipment or orthotic issues were also considered high priority, as one respondent observed that:

'Priority caseload increasing as CYP grow out of equipment/orthotics' (R309).

Staffing capacity determined the priority level seen, with respondents reporting they were able to see medium priority patients when more team members returned from re-deployment or self-isolation.

Low priority CYP were commonly put 'on hold' with various follow up systems, whilst others described discharging low priority CYP and routine referrals, with the option to re-refer. However, long-term effects of these prioritisation methods raised concerns, as one respondent stated:

'Things which could be put on hold for a short time are now of concern and some measure of clinical risk' (R91).

Another stated:

'I am concerned that many will have long term postural changes that we cannot reverse'(R165).

Referral systems

Largely, a reduction in referrals was observed, particularly in inpatients and outpatient teams linked to surgery. One respondent also noted a: *'decline in unnecessary referrals'* (R62) but failed to define unnecessary referrals further. Several respondents from primary/community settings utilised a triage system, accepting only high priority referrals, whilst others accepted all referrals but discharged *'routine referrals with generic advice'* (R324).

Waiting Lists

Despite a reduction in referrals, the majority of respondents reported an increase in waiting lists, with one respondent working in MSK stating *'waiting lists have doubled'* (R278). This was a source of anxiety for some respondents. One respondent from the primary/community setting detailed how they managed their waiting list:

'All on waiting list have been triaged and sent appropriate exercise and advice with a covering letter explaining they will be kept on the waiting list and will be contacted when able' (R413).

4: Supporting CYP and their families

The theme reflected reports of the changes in communication, guidance and support, and parental responsibilities affecting CYP and their families.

Communication

During the COVID-19 period of interest, the rapid transformation of paediatric physiotherapy services and reduced face-to-face contact prompted urgent communication with CYP and their families. This was largely achieved through initial written information:

'Letters sent to all on caseload informing them of level of physio service available and contact details' (R321).

Communication and information sharing with families continued throughout this period, implementing a wide variety of virtual platform initiatives not traditionally used:

'We are developing a series of communication changes to increase how families access our service: Facebook, what's app broadcasting list, generic email address'. (R301)

'We have put a lot of work into our facebook page with videos of positioning, exercises/ activities for all ranges of abilities and lots of links to useful resources. We are having lots of hits' (R360).

'We are developing webinars for routine advice/information' (R301).

However, certain technology would be needed to access this information, raising concerns about the impact on families without technology or confidence utilising such platforms.

Guidance and support

There were conflicting views on how respondents perceived families to be coping; some families reportedly coped well whilst others have needed holistic support extending beyond physiotherapy assessment and intervention, reporting concerns of social isolation, mental wellbeing and balancing responsibilities in the home. One neuromuscular respondent described the effects of lockdown on her caseload:

'Families are struggling to juggle home working, home schooling and managing therapy needs for a disabled child - difficult to support remotely and offer appropriate input for these children' (R85).

Another respondent from London reported:

'Lots of phone calls to check families were coping and managing to get food – many referrals for food parcels' (R295).

Respondents on the whole reported families were grateful for this support, although one respondent observed:

'Parents were initially very understanding but as time has gone on they are becoming quite impatient and frustrated at their child's lack of progress' (R25).

Parent responsibility and autonomy

There was an overall focus on empowering families to self-manage their physiotherapy plan at home and contact the team when problems arise during this period. Parent-led approaches were reported across all demographics. However, respondents shared different feelings towards this transfer of responsibility, largely determined by respondent perceptions of how families of CYP would engage and cope without regular face-to-face follow-up. One respondent reported:

'this has been a very positive experience for some families, enabling them to realise just how able they are supporting their child's physiotherapy needs.' (R190).

Others reported concerns that families had too many other pressures in their life during this time to engage and undertake intervention.

5: Risk assessment / safety of caseload

This theme explores how respondents managed the risks of providing a service to CYP's during COVID-19. The anticipated risks of reduced face-to-face physiotherapy provision is explored. Key subthemes include changes in infection control procedures and safeguarding.

Infection control

All respondents reporting face-to-face provision confirmed the implementation of national and local infection control measures. This included self-isolating when they had symptoms, reducing non-essential face to face contacts and social distancing in the workplace. As a result, many respondents working in primary/community settings reported working from home. Inpatient physiotherapists reported having 'clean' and 'dirty' teams rather than being speciality based. All respondents who had face to face contacts with CYP used PPE.

Results highlighted challenges including a national shortage of PPE and a lack of clarity implementing risk assessment and infection control measures, attributed to rapidly changing, vague and often contradictory, guidance:

'Hard seeing patients with PPE when PHE, the trust and the CSP give different guidance' (R234).

Another respondent reported:

'It has been a challenge in the private sector to get clear guidance and risk assessments' (R7).

One respondent felt:

'the generic information from the CSP is vague to interpret and it would have been nice to have a more collective approach from APCP members with maybe case examples' (R46).

The delivery of face-to-face contact raised several safety concerns. Respondents portrayed a lack of clarity and guidance towards risk assessing those who required face-to face contact and found themselves balancing the risk of CYP contact against the risk of no CYP contact:

'Without communication across the country from paediatric physios it has been concerning not knowing if what you are judging as "essential" (is correct) and when to complete face to face' (R46).

The 'shielding' of vulnerable CYP also created challenges to delivering essential face-to-face contact. Respondents found inventive ways to provide essential services including:

'I have set up ventilators in my car and on driveways so not to come into contact with families' (R4).

Others reduced number of visits by working closely with MDT e.g. working with nursing teams who are visiting to feedback observations.

Safeguarding

Many respondents used safeguarding concerns to inform their prioritisation system, with those CYP at highest risk receiving high priority physiotherapy provision. Respondents raised concerns about the:

'Complexity of safeguarding remotely' (R405). Closer MDT working was cited as a way of managing this risk, however one respondent highlighted limitations with this:

'At times I have had increased safeguarding concerns and found that other services are not functioning or collaborating and responding like they normally would, and this has been a struggle in ensuring children are safeguarded in some circumstances' (R38).

Most concerningly respondents from two separate tertiary centres reported a substantial rise in non-accidental injuries being admitted (R10, R65).

Discussion

This domain of the APCP COVID-19 survey demonstrated a significant shift in caseload interactions, management and delivery of care to CYP and their families. Respondent practice shifted from face-to-face contact and traditional 'hands on' care to remote virtual platforms. This was predominantly driven by restrictions in non-essential face-to-face contact, advised by key regulatory and governing bodies, and enforced by closure of specialist centres, respite and hospices to all CYP except those with 'urgent' needs. However, as lockdown measures ease and non-essential services gradually restart, physiotherapists are faced with significant conflict between resuming traditional face-to-face caseload interactions whilst aligning with governing body guidance, such as social distancing. This conflict demands further attention to ensure a sustainable and safe transformation in the delivery of physiotherapy care.

Literature examining the working conditions and wellbeing of NHS healthcare professionals revealed physiotherapists experience high workloads and a lack of control of their role, leading to work-related stress (Ravalier et al, 2020). These factors have been significantly impacted upon by COVID-19, particularly for those working in community settings that are already prone to lack of support and isolation, further increasing risk of developing work-related stress (Preece, 2020). Strategies to improve cross-organisational working, particularly across acute and community services, could support better understanding of COVID-19 related caseload changes, informing appropriate re-deployment and staffing capacity to meet the needs of CYP and reduce inequalities evident in this survey. Furthermore, strategies to support staff well-being has been shown to enhance performance, improve patient care and retain staff, and should remain a priority for organisations and regulatory bodies following this period of caseload change. These findings corroborate with the [Wellbeing](#) domain of this survey.

In community/primary settings, 'prioritisation' was the most widely reported strategy to manage increasing caseloads. The strategy aimed to identify CYP with 'essential' needs. However, this strategy was considered short-term in its effectiveness, reflected in respondent concerns regarding the impact of physiotherapy withdrawal across lower priority caseloads. As non-essential services restart, efforts should be directed towards understanding the longer-term impact of COVID-19 prioritisation systems, particularly on medium and low priority caseloads, in an aim to develop safe and sustainable prioritisation across UK paediatric care.

Virtual therapy was the most common reported method to delivering physiotherapy care, balancing both safety of all involved whilst offering observational assessment. However, the comprehensiveness and accuracy of observational assessment raised concerns of safety and quality of therapy care. This calls for further research into the validity and reliability of observational assessment measures used in virtual physiotherapy care. Virtual assessment limitations were largely reported in neurology or respiratory specialities and those with safeguarding concerns. These limitations should be recognised and contribute to the prioritisation assessment when considering suitable method of contact. Furthermore, factors of technology infrastructure, individual's understanding of it, and engagement of CYP and families determined its success, highlighting the need for training to ensure virtual physiotherapy is more accessible and successful, including digital training for both professionals and families.

Respondents portrayed positive partnerships with families during COVID-19. This was depicted through increased efforts to communicate and share information through a variety of accessible platforms, as well as offering holistic support, in which one respondent made referrals for food packages. Positive working partnerships were central to the success of virtual therapy, as therapy responsibility shifted to the CYP and their families in their homes. However, the impact of parent-led therapy programmes during this period has yet to be established. Furthermore, this survey is limited to professional viewpoints, lacking insight into CYP and family reported experiences, restricting further analysis of working partnerships during the COVID-19.

Finally, personal safety and caseload safety was widely reported as a concern throughout this survey domain. This was challenged by vague, changeable and at times, contradictory guidance. As a result, respondents withdrew contact with their caseload, concerned they were placing CYP or themselves at risk. Respondents reported using iCSP and social media to create networks for sharing advice, yet a lack of leadership to guide safe working conditions in paediatric care was evident. The results call for leadership and consistency to guide safe working conditions in UK paediatric physiotherapy care.

Findings support the need for the following recommended priorities:

Table 3.	Priorities for Supporting Future Paediatric Physiotherapy Practice
1.	Overcome inequalities around access to paediatric physiotherapy when face to face sessions are minimal.
2.	Develop clear MDT strategies for safeguarding during a pandemic.
3.	Develop strategies for cross organisational working during a pandemic, looking at caseload management as a whole and upskilling across acute and community teams.

4.	All practitioners to be supported by their employers to receive adequate resources and training to be able to undertake virtual sessions with their caseload.
5.	Development of clear and consistent national infection control guidance for client facing practitioners.
6.	Employee stress and wellbeing monitoring and support across all settings, with a priority for those working in community/primary care settings.
7.	Investigate the impact of COVID-19 prioritisation systems.
8.	Investigate CYP and family experiences of paediatric physiotherapy input during the COVID-19 lockdown period.
9.	Research into the validity and reliability of observational assessment measures used in virtual physiotherapy care.

Conclusion

Analysis of the responses to this domain of the APCP COVID 19 survey has provided insight into the initial effects on caseload management during the lockdown. Importantly it has highlighted clear priorities which will help focus future work to support paediatric physiotherapists in managing caseloads and will help to ensure equitable service for patients.

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Association of Paediatric Chartered Physiotherapists COVID-19 Survey Analysis: Technology

Authors: Kerry McGarrity, Anna Hebda-Boon, Jemma Bell, Rachel Evans, Rachel Knight Lozano, Lucy James, Linda Walsh

Introduction

The outbreak of COVID-19 continues to have a significant impact on working practices for all paediatric physiotherapists. Technology was recognised by the working party as a key a priori domain of the APCP membership survey. The unprecedented speed of application of many new technologies and the sudden reliance, in many cases, on telehealth has been widely recognised during the pandemic.

This domain explores members experience with technology during the COVID-19 pandemic.

Aims

To identify, appraise and synthesise respondent data exploring paediatric physiotherapy experiences in the use of technology during the COVID-19 pandemic.

- To identify the changes in technology use
- To identify the challenges of technology use
- To identify the opportunities of technology use
- To consider changes in technology usage which will continue in practice

Methodology

An electronic survey was sent to all APCP members between June 4th and June 17th 2020. A qualitative approach utilising Framework Analysis (Ritchie 2014) has been applied. A detailed methodology of the design, development delivery and analysis of this electronic survey is reported in the introduction and methodology section of this series. Further consideration of methodological limitations within this project have been detailed in the [Introduction and methodology](#) section. The domain of this survey was explored through four key questions. These are presented in Table 1.

Table 1: Survey Questions	Type of question
1) Has the use of technology changed within your role over the past three months?	Closed (yes/no)
2) Please specify what technology you use and for what purpose	Open ended
3) What have been the challenges and opportunities you have experienced?	Open ended
4) Will your use of technology influence your practice in the future?	Open ended

Table 1: Survey questions within Technology Domain

Respondent data was synthesised across all survey questions using a structured framework analysis (Ritchie 2014). A detailed methodology of data analysis is reported in the 'Methodology' section of this series. Within

this survey domain, raw data was extracted line-by-line to develop themes and sub-themes. Microsoft Excel was used to present a matrix of findings and facilitate comparison of demographical and raw data within and across themes. Descriptive statistics were used to support qualitative findings.

Results

472 respondents (APCP members) completed the survey, representing paediatric physiotherapists from all UK regions, banding, specialties and employment settings (refer to '[Background](#)' section).

94.7% of respondents stated that their use of technology had changed during COVID-19. Only 4.2% (n=19) of respondents did not feel their use of technology had changed and 1.1% of respondents did not answer this question.

Of those who stated their use of technology had not changed, 16 out of the 19 were NHS employed and 13 worked within the primary care setting. 10 of these respondents worked in neurodisability. Respondents represented levels of banding AFC 5-7 and 9 out of APCP's 11 regions were represented with the majority of 5 being from London. The reason for not changing in use of technology was not captured by the survey.

When asked about which technology platforms were used, many platforms/technologies have been signposted for a variety of purposes. The most common was either Zoom (321) or Microsoft Teams (235) for meetings and AttendAnywhere (160) or AccuRx (54) for treatment/virtual clinics (See *Figure 1*). WhatsApp (88), Facetime (20) and Skype (49) were all popular, suggested by respondents to be a preferred method for patients and families. Many respondents reported having to change platforms as the service evolved rapidly. It was noted that AttendAnywhere has recently gained in popularity having been slow to be introduced initially. Respondents in Northern Ireland, Wales and some parts of Scotland were more likely to be using telephone only consultations i.e. slower to start using other technologies as many stated they were just starting virtual platforms or waiting to start.

Analysis shows that in many cases the respondent's choice of platform was led by the patient and family preferences where members had to adapt to the system families felt comfortable with.

'Dependant on what the family feel comfortable accessing as long as within the guidance' (R45)

'Did offer other technology software but the ease of WhatsApp was a preferred method for all parents' (R52).

In total there were 27 different platforms used by respondents (See *Figure 1*).

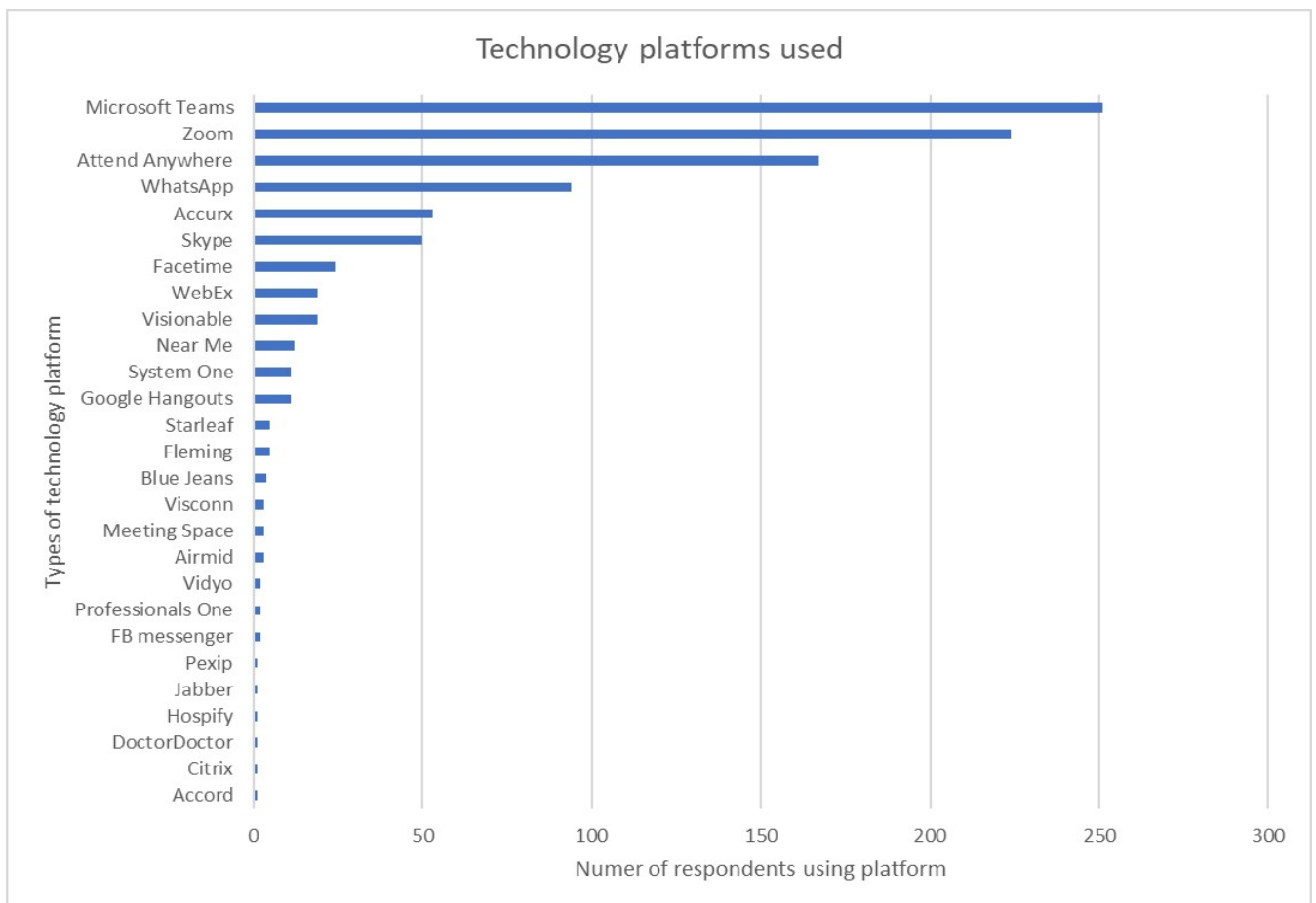


Figure 1 - A graphical representation of the most used platforms determined by participant responses.

Themes

Data analysis within the technology domain revealed four subthemes:

1. Capability using technology
2. Technology and service delivery
3. Technology to support professional communication and clinical education
4. Technology use in future practice

1: Capability using technology

In this theme respondents described the ability to use technologies both from a clinician and perceived client perspective which could be otherwise considered as digital literacy. There was a strong subtheme of technology resources and the environmental requirements, including connectivity.

The unprecedented shift to digital service and rapid reliance on these technologies happened within days and caused many challenges for both clinicians and patients. Learning how to use multiple platforms quickly alongside a lack of training in the systems were amongst the most reported frustrations.

‘Speed with which the technology was rolled out made it a very steep learning curve’ (R67)

'Frequent crashing of database and lack of experience of being able to problem solve some of the more easier IT technical problems'(R62)

Fear of not looking professional and lacking competence in the technology was another common theme.

'Lack of clinician confidence in technology when using technology in front of a patient', 'ineffective with video consultations. due to my lack of knowledge' (R61)

'Delivery of a professional service from my home environment - with kids/ dogs /noise often interrupting despite best efforts to stop this' (R119)

Fear of doing something wrong or issues with data security were reported, it was common for respondents to report that they needed more support than what was available:

'Cyber-attacks = remote access suspended, emails on the go (on a phone) suspended and not reinstated' (R64)

'No previous teaching/ experience on these platforms so were unsure of confidentiality/ safeguarding issues - poor and minimal guidance available'(R118)

There were many environmental concerns, from the patient perspective with siblings or pets interfering with the appointment. Or from a clinician perspective working from home with their own family present and the privacy of calls. The access gap was highlighted especially for those more vulnerable families, similar responses were found regardless of post or banding.

'Poor connectivity. Parents not being able to access new technology.' (R182)

'Language barriers for non-English speaking families.' (R217).

Although there were many technical challenges and difficulties, there were also many positive responses to the opportunities provided such as;

'I find I am more efficient when working at home when comes to reports/programmes' (R201)

'This hasn't just been a review and manage period, it has been progression.'(R261).

Having the correct, often basic resources was one of the biggest challenges our respondents have found;

'Had to buy own webcam to use at home' (R309)

'Lack of laptops for home working. Lack of webcams for office desktops for those in the office' (R406)

2: Technology and service delivery

In this theme, the use of technology for service delivery and the perceived quality of such delivery were highlighted.

A sudden transition from face-to-face delivery to a virtual service model required rapid response to change for both clinician and patient. Some respondents felt virtual working was an asset.

'Seeing people in their own home environment gives a better understanding of their circumstances.'(R5)

'Have also seen a dramatic improvement on confidence of parents/caregivers in providing hands on support to their child with support via video' (R64)

Other responses captured the difficulty of virtual working.

'Lack of eye contact and harder to read body language' (R58)

'Holding iPad/phone while teaching taping application-very difficult and had to get a colleague to sit 2m away to hold iPad' (R236)

Patient safety, service inequality and information governance were frequently reported as a concern, attributed to the rapid adoption of new systems;

'Lack of guidance for community services on information governance' (R250)

'Cyber-attacks affect access into remote working' (R187)

3: Technology to support professional communication and clinical education

This theme identified inter-professional communication such as meetings, team support and education, corroborating with findings from the wellbeing and CPD domains within this survey.

Overall, there was a very favourable response to the use of technology for meetings, attributed to reduced travel time, wider attendance and improved interdisciplinary team working. However, respondents reported initial difficulties getting used to virtual meetings;

'People getting used to the technology and feedback during meetings/calls, other people in the office on different calls' (R140)

'Time saving due to less travel' (R105)

'Ability to meet with colleagues and other service providers remotely through Teams' (R15)

'More attendance for MDT meetings by consultants' (R101)

Some respondents found virtual meetings difficult;

'Can be difficult to speak up in a team meeting on zoom, I found this much more difficult than speaking up in person' (R130)

Although team support was found to be useful;

'Virtual coffee is excellent' (R131)

'Being able to carry out peer support virtually more regularly than I would have been able to' (R323)

Generally, it was felt that virtual working lent different, but valuable opportunities for shared working, professional communication and peer support.

4: Technology in future practice

This theme collated respondents' perspective on which, if any, of their current technologies they would like to retain for future practice and delivery of treatment. A majority of 363/472 (76.9%) respondents did feel that technology would influence their practice in the future.

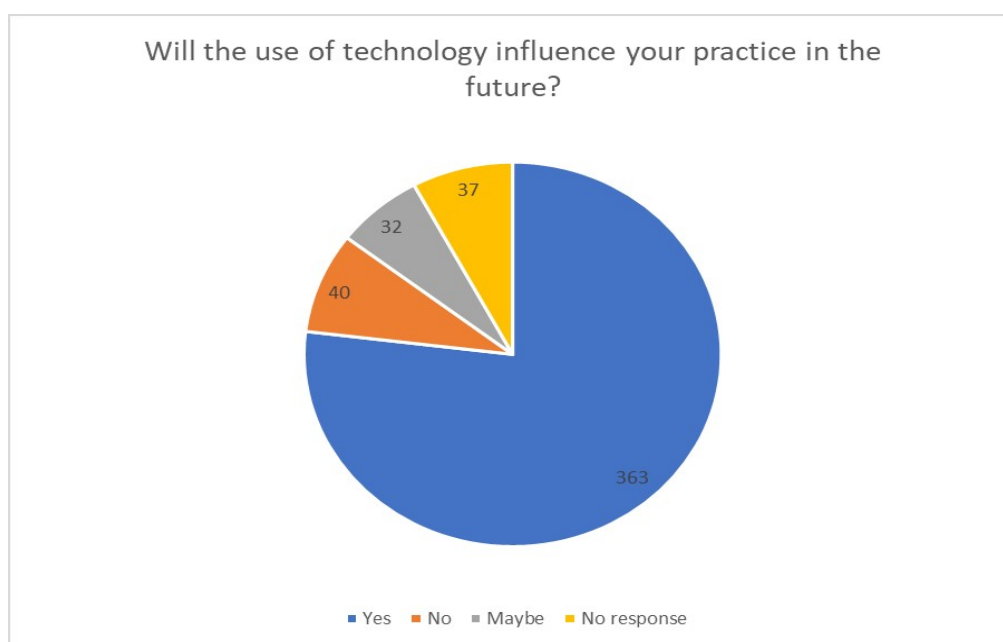


Figure 2 -A graphical representation of responses to whether respondents would continue to adopt the use of technology in the future.

10% of respondents specifically recorded that new patients would require a face-to-face appointment but a larger number recorded that follow-up appointments could perhaps be a combination of face-to-face and virtual delivery.

'Yes, we will offer it as an alternative to families and may offer a mixture, e.g. initial phone/video to take history followed by an initial face to face for assessment, then a few video appointments intermingled with face to face when necessary' (R11)

'Should be given as an option for all appointments'(R36)

Some respondents reported to be very keen on embracing the digital changes forced upon them during COVID-19, although a small number of members contradicted this;

'Should be given as an option for assessment. Convenient so only those needing to attend outpatient departments come.' (R10)

'No really. I prefer to see patients F2F' (R98)

A minority of respondents (41) reported they did not think technology would influence their practice in the future, some expressing strong beliefs and linked to their professional identity.

'Has a role though a poor substitute in Physiotherapy for hands on assessment' (R251)

'Feel physio is hands on especially with children and no amount of technology can replace it' (R287)

'I'm not sure I want to use Zoom again after this!'(R376)

'I will not move on into technology-based assessment or treatment. I think this could be detrimental for our profession' (R150)

Technology was highlighted by respondents as the most significant change in their practice, leading to considerable connections across key domains within this survey. Digital technologies were reflected within the ['Moving Forwards'](#) domain, in which respondents considered how to integrate technology into their future role.

Discussion

'Organizational crises "forward the awkward dimension of 'un-ness': unexpected, unscheduled, unplanned, unprecedented and definitely unpleasant" (Rosenthal and Pijnenburg 1991, p1). In both their onset and their impact, crises are inherently unpredictable. Despite the unexpected, unscheduled, and unplanned nature of crises, people in positions of power are expected to respond in a manner that is both scheduled and planned. The general public expects that leaders will have a written response plan to consult, and the ability to offer regular scheduled updates, in the midst of a crisis response. Herein lies a conflict.' (Shaw, 2018)

The APCP survey followed the COVID-19 outbreak that led to a national lockdown, and the biggest health crisis any current paediatric physiotherapist has had to experience in their working career. Telehealth in itself is not new, some more remote parts of the country had been already engaging successfully with it prior to COVID-19. However widespread adoption amongst healthcare practitioners and patients, beyond simple telephone correspondence, has been relatively slow. (Centers for Disease Control and Prevention, 2020). There were a number of barriers and facilitators to technology described, however, the concept that our profession is psychomotor and hands on is inherent, being a physiotherapist via a screen is difficult and not natural to our professional identity.

Members recorded significant challenges in practical terms (acquisition of hardware/software), professional terms (role changes) and the more subtle indicators of managing sudden and unprecedented organisational change affecting their role, their workplaces and their professional and personal lives.

'Change Management' is the term that is used to refer to the change or transitioning people, groups, companies and projects from one state to another (Belyh, 2019). Many theories of change management have been developed which indicate that change in the workplace should occur in a structured and time specific way (Hussain & al, 2018). The COVID-19 pandemic has not allowed for any gradual processes and members have instead been presented with sudden changes to all areas of their lives, work as well as home. As referenced in the above quote, during times of crisis there is a need for strong leadership, some respondents reported feeling unsupported in their work whilst perhaps being unaware that leadership teams were trying to write the plan for a rapid, unscheduled and complete change in healthcare delivery. Effective strategies need to be developed to manage new working practices and digital professional support and development.

Analysis revealed strong overlap between the Technology and [Well-being](#) domain of this survey, with increased reliance on technology often increasing stress, highlighting the emotional impact of change. The change curve (Figure 3) was derived from work by Kubler-Ross (Kubler-Ross, n.d) and is beneficial to understanding the emotions commonly experienced when processing sudden changes. It describes the internal emotional journey of individuals, exploring shock and denial, anger, bargaining, depression and acceptance when processing change and transition. These complex emotions are overlaid on the

practicalities of trying to perform a professional role in a rapidly evolving environment and further complicated by the inherent difficulties in the advent of new technologies.

The overlap of findings across Technology and [Moving Forward](#) domain reveal strong links between the use of new technologies and professional identity. This is reflected in their perceptions of physiotherapy as a profession and concerns that these changes will be temporary or permanent precipitating a very unsettling period.

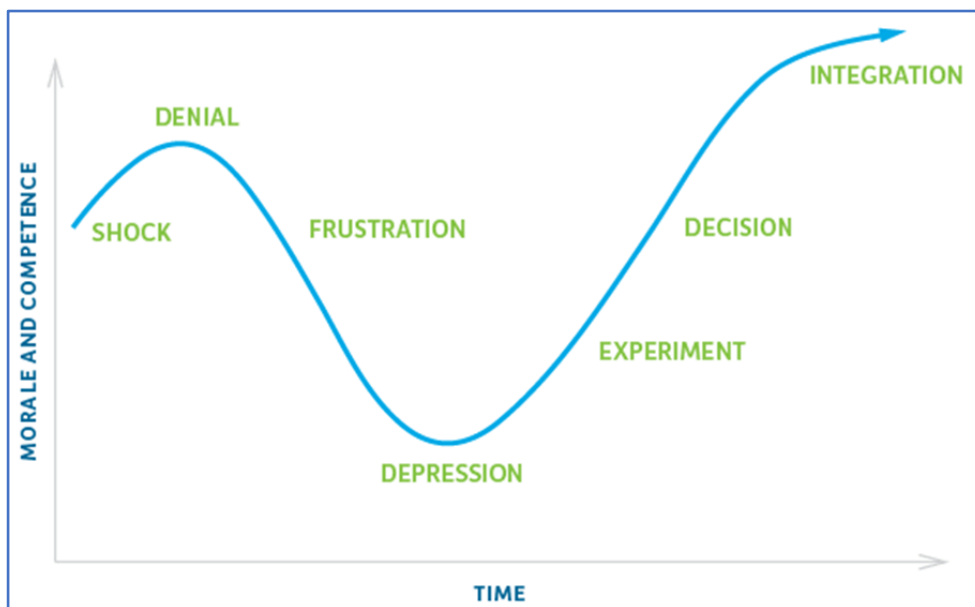


Figure 3 -A graphical representation of 'the change curve'.

Widespread engagement with technology, was initially stalled due to difficulties with procurement of hardware, training and acceptance of new technologies and the move to computer-based record keeping, these concerns need to be addressed in future training.

'Healthcare professionals, managers and IT practitioners are wondering what changes to work practices and new models of healthcare provision that have resulted from the rapid deployment of digital technologies should be sustained beyond the current crisis'. (Klecun, 2020)

The majority of our members can foresee a place for digital health technology continuing as part of their practice, however our profession relies on connecting with children and families which may lead to adjustments in how we engage with technology. It has been recognised that some families are particularly vulnerable in this environment, whether that be because of income, language or learning ability and particular care must be taken to ensure these families are not marginalised. This will require long term planning on aspects of service delivery to ensure services can be accessed by all.

However, most respondents felt that the use of certain technologies should continue, with the possibility of running hybrid systems integrating virtual with face-to-face appointments. This would require a further period of redefining systems and embedding those technologies into everyday use whilst enabling appropriate training for clinicians in their use. Engagement with service users would also be necessary to gauge their

opinions. This might include the development of appropriate online resources and may take respondents to 'integration of change' on the change curve, and improvement in morale.

Conclusion

Analysis of responses in the technology domain of the APCP survey concluded an inescapably swift and challenging change in practice for clinicians, patients and their families. However, for many respondents, they embraced the change and would like to continue some form of digital service delivery as part of a hybrid model into the future. Public Health departments across the four countries of the UK continue to encourage social distancing and a 'virtual first' approach which will require an ongoing commitment to sustainable and flexible delivery of services.

Priorities for Supporting Future Digital Paediatric Physiotherapy are presented in Table 2.

1	Prioritisation of clinical access to appropriate software and hardware with essential training in new platforms is required to develop future treatment delivery that safeguards the wellbeing of staff whilst promoting hands-on clinical skills central to their professional identity.
2	Prioritisation of online/ web resources to enable members to manage effective and efficient telehealth working practices as well as access to appropriate continuing professional development.
3	Prioritisation of development of effective strategies for professional/ clinical support of members working remotely and protocols for supervision, team meetings and appraisals.
4	Prioritisation of development of well-being tools to address concerns linked to digital and remote service provision changes.

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Association of Paediatric Chartered Physiotherapists COVID-19 Survey

Analysis: Continuing Professional Development

Authors: Anna Hebda-Boon, Lucy James, Rachel Knight Lozano, Linda Walsh, Jemma Bell, Rachel Evans, Kerry McGarrity

Introduction

Continuing professional development (CPD) is a legal requirement of healthcare professionals including physiotherapists (Lawton 2003, HCPC, CSP). It includes areas of personal and professional development that should be carried out regularly to ensure safe and effective practice, striving for improvement of patient care and health outcomes (Sargeant, 2018, French 2008). Professional learning can occur in many forms and physiotherapists can meet requirements through a wide array of activities relating to their role and specific to their individual practice (French 2008).

During the unprecedented outbreak of COVID-19 pandemic the healthcare communities, have faced a multitude of restrictions that have challenged and transformed the delivery of patient care. This also affected physiotherapists working with children and young adults, who whilst ensuring safety of self and others, had to adjust to rapid change in workloads and working arrangements - ranging from redeployment, furlough or redundancy to the introduction of home working, with reliance on on-line service delivery. The outbreak of highly contagious virus posed of unique challenges to accessing professional learning in healthcare and gave rise to an array of new learning needs (Anderson 2020, Price 2020, Rose 2020). In these difficult circumstances the healthcare professionals must be supported to ensure their learning needs are met, their professional development continued, and their lifelong learning potential fulfilled, regardless of challenges.

Aim

This paper aims to explore the continuing professional development of paediatric physiotherapists during the COVID-19 pandemic in the UK. Understanding the experiences of paediatric physiotherapists will enable the Association of Paediatric Chartered Physiotherapists (APCP), and other CPD providers to develop professional learning activities that can withstand social and workplace restrictions that may occur in the future.

Methods

An electronic survey was sent to all APCP members between June 4th and June 17th 2020. A qualitative approach utilising Framework Analysis (Ritchie 2014) has been applied. A detailed methodology of the design, development delivery and analysis of this electronic survey is reported in the introduction and methodology section of this series. Further consideration of methodological limitations within this project have been detailed in the [Introduction and methodology](#) section.

This domain of the survey was explored through key questions presented in Table 1.

Table 1: Survey Questions	Type of question
1. Has your CPD changed over the past 3 months	Closed (Yes/No)
2. How has your CPD changed during this period?	Open ended
3. Please share any CPD challenges you have experienced during this period.	Open ended
4. Please share any CPD opportunities you have experienced during this period.	Open ended

Table 1: Survey questions within Continuing Professional Development (CPD) Domain.

Results

The analysis of the CPD domain revealed that the professional learning activities of paediatric physiotherapists were significantly affected during the pandemic. A total number of 14 sub-themes were grouped into three main themes within the CPD domain: forms of CPD, virtual learning, professional practice transformation. See table 2.

Theme I: Forms of CPD	
Subthemes	<ol style="list-style-type: none"> 1. Mandatory training 2. Departmental/Team based training 3. Self-directed learning
Theme II: Virtual Learning	
Subthemes	<ol style="list-style-type: none"> 1. Digital Literacy 2. Technology and Infrastructure 3. Quality 4. Connectivity 5. Learning autonomy 6. Active learning
Theme III: Practice Pattern Change	
Subthemes	<ol style="list-style-type: none"> 1. Time management 2. Service development initiatives 3. Priorities 4. New skills 5. Teams

Table 2: Main themes and sub-themes within Continuing Professional Development (CPD) Domain.

Forms of CPD during the COVID-19 pandemic

Respondents described a wide variety of learning activities undertaken as part of their CPD during the COVID-19 pandemic. Reported activities were grouped into subthemes: Mandatory training, Departmental/team based learning and Self-directed learning.

Mandatory training was often the only learning activity that was available or prioritised during the pandemic, and considered by many respondents as CPD. The majority of these respondents reported that training was completed on-line, which was regarded as timesaving.

There was however a large group of respondents who were not able to access their mandatory training at all during COVID-19 pandemic, mostly due to cancellation of courses or lack of time. This meant for some professionals that their statutory and mandatory training became outdated.

'I have not been able to access anything other than mandatory training.' (R299)

'Some mandatory training is currently cancelled due to social distancing measures.' (P125)

'Booked courses prior to COVID-19 have all been cancelled including some mandatory training which is now out of date.' (R272)

'Easier to complete mandatory training online than attend face to face from a time management point of view.' (R72)

Respondents viewed technology, personal protective equipment (PPE) and redeployment training as mandatory activities, due to the changing nature and requirements of their professional roles, with recognition that this learning would take the place of other more usual CPD activities.

'There was so much info around Covid-19 that some of the more everyday CPD got lost in the background.' (R176)

'There has been a lot of training for redeployment which I will be able to continue into everyday work.' (R18)

Team-based learning within the departments was reported to be significantly affected by the COVID-19 pandemic. This was attributed to enforced safety measures, such as social distancing, changes in staffing capacity due to redeployment and shielding, and altered working patterns to meet the clinical pressures of COVID-19. Many reconnected with teams through the use of on-line platforms (Zoom or Microsoft teams being amongst most frequently used programmes). Here, respondents gave examples of prompt reactivity, where the shift to alternative team-based learning, including in-service training, occurred quickly and without much disruption to learning.

'Currently not providing the normal team Inservice through Zoom or Teams etc due to clinical priorities and service requirements.' (R419)

'Our monthly Inservice training stopped initially but is now re-started.' (R363)

'Not changed - been able to continue supervision via Microsoft Teams and telephone.' (R180)

'It's saved a lot of travel time and Microsoft teams works really well for presentations. I had a whole day of training via teams!' (R450)

Clinicians also missed the opportunity for face-to-face peer learning and supervision within joint treatment sessions, and more informal learning opportunities that would otherwise occur without planning.

'Missing regular joint working single professional and multi-professional for assessing tricky children. Not the same virtually.'(R387)

'Not enough time. Harder to get informal supervision as not seeing colleagues face to face.'(R204)

'Harder to get opportunities to do clinical mentoring, previously done 90% by joint working at bedside.'
(R10)

Respondents who experienced redeployment reported an appreciation for new learning relationships and positive learning support from their teams. Although some described both: the importance and difficulty of maintaining contact with their paediatric-specific teams.

'New opportunities to work with colleagues in adult team, but not relevant to Paediatrics.'(R347)

'CPD during redeployment. Difficult to break away from my new team to access CPD relevant to my usual role. It's difficult to get protected time to do work for my usual Paediatric role.'(R21)

Whilst some respondents passively faced the absence of CPD opportunities, others described a more proactive and autonomous approach to sourcing professional development, describing a range of self-directed learning activities

'Team teaching and journal club were also put on hold during this time so CPD had to be much more self-led.' (R132)

'Any challenge overcome is an opportunity - was able to do it from my home and sometimes even at the best time for myself.' (R458)

Respondents felt disappointed by cancellations of events and conferences. For a large number of respondents attending national and international paediatric-specific conferences is main source of CPD, usually providing opportunities to gain new knowledge and network amongst professionals, was reported to be very limited during the pandemic. Others appreciated comfort and flexibility, safety (related to shielding), others because of increased time-pressures at work.

'There are limited opportunities to attend larger group activities which are also intended to develop networks where personal interaction and small break out groups is lost.' (R375)

'Online stuff is brilliant. Don't have to travel - saves hours of time (and diesel). Available to all (including staff working from home and shielding staff group).' (R87)

'I attended an international conference from my own home.' (R185)

Reading journal articles was a commonly reported activity, both independently and as part of journal clubs. Accessing discussions on clinical scenarios and problem-solving sessions were amongst other frequently reported activities. The importance of reflective practice and learning was frequently mentioned by respondents.

'We have continued to try and attend CPD sessions via Microsoft meetings and continued with Journal club and analysis of research papers online.' (R350)

'I have done many more reflections particularly when I was re-deployed.' (R7)

There were several respondents who despite being re-deployed, reshaping services or shifting practice to virtual spaces, did not regard these experiences as part of their CPD. On the contrary, one respondent wrote: *'We got limited access before anyway. I am viewing the whole experience as CPD.'* (R21)

Virtual learning

A rapid and forced shift to virtual environments impacted respondents' access to learning and engagement with CPD activities. Within this theme 6 subthemes were identified: Digital Learning, Technology and Infrastructure, Quality, Connectivity, Learning Autonomy, Active Learning.

Digital literacy was an important subtheme highlighting the importance of skills as enablers of access to virtual learning. Some respondents were finding this challenging; others were motivated to develop new IT competencies.

'First I need to learn how to access webinars etc..... being of the 'older' generation all really is totally new to me and a challenge.' (R192)

'Before lockdown I'd thought about accessing webinars but never got round to it, now I feel more confident to do it.' (R194)

Many respondents offered criticisms of the quality of online resources, content of educational events and their delivery. Many admitted missing the active component of a learning experience, including the practical activity and/or participation in group discussions, during conferences, webinars and team meetings.

'Reading online gets old after a while, hard to listen and watch too many in a row.' (R133)

'A lot of free stuff out there, difficult to know the quality of it if not accessing it through a known resource (such as APCP).' (R419)

'I find it very difficult to focus on webinars as I'm a very hands on/practical learner and also like to discuss things which you can't do over a PC. Although there are chances to ask questions which is a positive.' (R61)

'I have missed the practical and hands on CPD that I normally enjoy.' (R120)

Poor quality of technological infrastructure at work – whether in the office or at home, was also a barrier to accessing virtual CPD.

'Technology access problematic therefore I have done this from home in my own time.'(R379)

'There is a wealth of info suddenly and tricky to know what to prioritise at times. My internet connection at home drops off and this has made streaming some things tricky. (R203)

The majority of respondents described a noticeable increase in the professional learning content available on-line. Some respondents commented on struggling with an increased exposure to digital information. Respondents frequently commented on the practical and economic advantages of virtual learning, how it saves both time and money, particularly on travel between sites. Whilst decreasing travel, virtual learning offered the ability to build broader networks and connect with colleagues within their team and other professionals, both nationally and internationally.

'Many more opportunities for supervision/ support with or by colleagues via Teams, or webinars advertised by various agencies including APCP online.' (R15)

'I've felt overloaded with info and it's been difficult to take on board especially when things were changing on a daily basis.' (R97)

'More opportunity to learn from practitioners abroad and in other trusts due to online webinar.' (R23)

'Access via technology meant it was easier to participate.'(R228)

'Lots more online resources and training has been developed to make it more accessible and use of video recordings to allow access to talk (especially international ones) where you cannot attend live so opportunities is not missed.' (R470)

Respondents' learning autonomy was often facilitated in a digital learning space, offering greater convenience, particularly with recorded webinars, and an ability to take control and responsibility for ones' CPD activity. Yet, some respondents admitted feeling guilty spending time on CPD amid the pandemic and its associated healthcare pressures.

'There is a certain amount of guilt that you have the time to be able to access CPD during this time when others are busier.' (R20)

'Also feeling a bit guilty with using this time for CPD and not getting out into the community to see kiddos.' (R141)

Practice pattern change

Analysis revealed a multitude of changes in professional responsibilities and working patterns which were influential to CPD activity during the pandemic. New Skills, Time management, Service development, Priorities and Teams were amongst subthemes identified within Practice Pattern Change theme.

For the majority of respondents, keeping pace with rapidly changing information related to COVID-19 was at the forefront of their learning needs, including training and updates on use of personal protective equipment (PPE). Redeployment training opportunities were perceived by some to be valuable, both now and for the

future, whilst others felt disappointed not to have been redeployed after completing training. Redeployment of colleagues left services with reduced staffing levels, causing increased time and emotional pressures and for those running the 'skeleton services', whilst reducing their capacity for CPD. Many said that CPD was not their priority during this time, as they were concentrating on responding to the changing needs of services.

'We are working beyond our capacity due to amount of staff redeployed therefore we do not have time for CPD.' (R214)

'between redeployment to the wards and continuing keeping up to date with my normal job I have found it difficult to fit in as much CPD as normal.' (R132)

Time management was a recurrent subtheme. There was a split between those who reported more time and those who lacked time for CPD. Those who reported more time for CPD attributed this to service closures and reduced face-to-face contacts, whilst others noted a loss of time, resulting from cancelled study leave and protected learning time.

'Due to not seeing patients face to face it has allowed more time to look into online resources and complete mandatory training.' (R264)

'Working from home has allowed me more time to do other CPD.' (R75)

'Most of it [CPD] is in my own time as day very busy chasing around support for families in my care.' (R324)

'All study leave was cancelled.' (R236)

'We also usually have protected band 6 teaching time on Thursday which were cancelled and due to start again soon.' (R135)

'We have been extremely busy as a service working at capacity and prioritising patient contact therefore there has been limited time to access CPD opportunities.' (R132)

'intended to access webinars but managing caseload so time consuming not prioritised this.' (R72)

Many respondents described the disintegration of teams as a result of redeployment, and less opportunity for collective learning.

'Redeployed staff working shifts and 7 days and therefore hard to organize time when can meet together for group reflections / supervision.' (R134)

Many respondents considered service redevelopment in response to COVID-19 as part of their CPD and an opportunity to upskill or gain new skills in this area.

'More time to consider innovative changes that might benefit the service.' (R292)

The competing priorities were also apparent at home where work-life balance was destabilised. For many, lockdown and school-closures resulted in home-schooling responsibilities that had to be prioritised alongside finding time for self-care.

'(CPD was) a challenge as I have had the additional role in home schooling my children.' (R46)

'I have felt emotionally drained and needed to do something different out of work time.' (R8)

Discussion

The results of the CPD domain of this survey give an insight into paediatric physiotherapists' professional learning activities and experiences during the COVID-19 pandemic. The findings illustrate that there has been a rapid and forced change in CPD activity, with two key factors underpinning these changes: 1. The shift to digital environments and 2. the change in professional responsibilities and capacities.

Further exploratory analysis of the survey responses aided re-conceptualisation of needs related to professional learning into four categories of factors and conditions: Autonomy, Networks, Capabilities and Resources (ANCR for Learning Framework), which were considered influential to respondents' engagement in CPD during COVID-19 (Figure 1). The factors and conditions are organised from the most basic level of needs at the bottom, to higher-level conditions at the top and focus on learners and their needs that once fulfilled allow learner to focus on CPD activity.

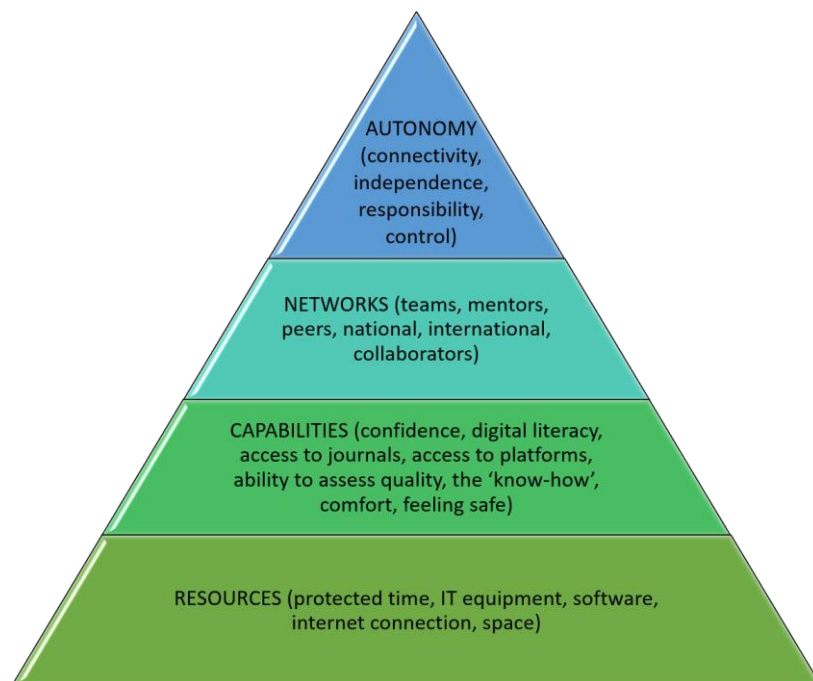


Figure 1. The ANCR for Learning Framework - (Autonomy, Networks, Capabilities, Resources)

Level One: Resources

This level encompasses the group of resources that were deemed necessary for successful engagement in professional learning and interaction. The protected time assigned to the learning process (time to plan, attend, reflect and record) was considered a resource of uppermost importance. Lack of time was one of the most frequently reported barriers to enabling CPD activities. Strong dependence on technology during the outbreak of COVID-19 posed a challenge of inequality to learning access, which varied between different NHS Trusts, departments, and households. Lack of appropriate infrastructure (internet connection, software, computer etc.) to take part in an online learning frequently limited access to CPD.

Level Two: Capabilities

The broadest level of conditions relating to respondents' abilities when resources were in place or were not an issue. An important condition for CPD during the pandemic was capability and confidence when accessing CPD. This includes ability to navigate digital learning environments, acquiring technical knowledge, and making informed choices regarding content and quality of events with confidence. The impact of social distancing and lockdown measures caused stress and anxiety or even guilt related to learning during the pandemic amongst many paediatric physiotherapists around the UK and were detrimental to successful development. Feeling safe and confident was an important condition for accessing CPD effectively. Learning in digital environments has been established in the academic world over the past decade. With blended learning, flipped classrooms and asynchronous learning being used to minimise the lecture content and maximise the active learning experience. This has undergone development in undergraduate healthcare studies. However, this has not been consistently implemented in professional learning courses or events outside of higher education. On-line CPD underwent rapid expansion during the COVID-19 pandemic, however this will require further transformation and careful considerations of: the content, capabilities of the educators to facilitate professional learning online and learner's ability to effectively engage in the process and ensure the knowledge transfer.

Level Three: Networks

The third level of this conceptual model considers the importance of learning communities and networks. Professional teams and learning networks (often interdisciplinary) were important for paediatric physiotherapists. Regardless of the size of the groups or context, the sense of belonging in a learning community was described frequently and was a strong facilitator for CPD engagement. This level echoed the third level of Maslow's hierarchy of needs, which involves feelings of belongingness including close and extended social connections (Maslow 1943, Milheim 2012). Many teams experienced disintegration and breakdown in regular learning activities, contributing to a sense of isolation. Respondents who were involved in knowledge sharing, meaningful collaboration with colleagues and wider networks were amongst those most engaged in CPD. Social learning theory highlights importance of social interaction within communities of practice (Crain 2010, Wenger 1998). It remains that learning is relevant and embedded in the practice context, central to constructing learner's identities (Patton 2013). The shift of learning to digital spaces offered opportunities to collaborate with wider learner networks (cross-specialties during re-deployment, or at the national or international level of educational events) and broaden respondents' professional identity.

Level Four: Autonomy

The fourth level considered learner's autonomy that involved taking control and responsibility for the CPD process. This survey provided numerous examples of pursuing alternative learning opportunities during this extremely challenging time. Here, autonomy of learning was often presented in respondents who exhibited the ability to adjust, facilitated by conditions achieved at lower levels of the hierarchy – appropriate resources including time and the capabilities in accessing learning. The influence and importance of networks when considering autonomy of professional learning could not be ignored. Zone of proximal development (Vygotsky 1978) refers to the difference between what person can achieve through independent learning to what they can achieve through collaboration with others (Ormrod 2018, Crain 2010). It also highlights the role of the educators in providing the scaffolding (tools and support) to enable emergence of new skills. Our analysis

confirmed that the connectivity was an important catalyst of learning within autonomous professional development especially in times of physical isolation.

Conclusions/Summary

Promotion of technology to create opportunities to maximise educational value should be encouraged with careful consideration of equality in accessing resources – not only these related to technology and equipment but also access to protected time for engagement with professional learning. The results of this survey clearly highlight the importance of networks and learning communities, and their role in facilitating access to CPD. Findings show that autonomy of professional development thrives with collaboration. This is one of the critical areas for the APCP and other professional networks to focus on, as they can facilitate and create safe and welcoming environments for knowledge exchange both virtually and face-to-face. The pandemic significantly impacted on the paediatric physiotherapy practice and professionals' access to learning. Extra care should be taken to rebuild the confidence, diagnose barriers and facilitators of professional development, and provide guidance on the new ways of accessing CPD activities. Although courses, lectures and modules are firmly driven by learning outcomes, it is not always the outcome that is the most important part of our learning, but the process of learning itself, including the reflection on what knowledge has been gained.

The ANCR framework, conceptual model of factors and conditions for professional learning during the COVID-19 pandemic, has been informed by analysis of a nation-wide survey of APCP members. This model can facilitate paediatric physiotherapists' engagement with CPD, by supporting the reflection and identification of clinicians' needs and barriers arising at each level. Furthermore, this model can help with planning the resource provision and organisation of events to maintain and enhance physiotherapists' engagement with professional learning in the post-COVID-19 recovery phase of service provision in the UK.

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The Association of Paediatric Chartered Physiotherapists COVID-19 Survey Analysis: Education and Research

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Introduction

The paediatric physiotherapy profession offers a range of academic and clinical career pathways, encompassing roles in research and education across higher education and clinical institutions.¹ Physiotherapists also contribute to the professional development of others, as educators for clinical placements, mentorship and apprenticeship programmes.

Research in paediatric physiotherapy underpins safe, effective practice and can promote the value and impact of the physiotherapy profession. Research engagement has also been linked to improved patient outcomes and forms part of UK Care Quality Commission Inspections.^{2,3} During the last decade, the UK has observed an expansion of postgraduate physiotherapy programmes, enabling clinicians to develop the knowledge and skills to undertake research activity. Organisations such as the National Institute of Health Research (NIHR), in partnership with the CSP, have also established significant research opportunities through mentorship programmes, courses, workshops, support networks and funding fellowships, with specific awards targeting paediatric research. These efforts have embedded career development pathways within the paediatric physiotherapy profession, bridging the gap between academic research and clinical practice, and building research capacity into the workforce.

Education in paediatric physiotherapy aims to support workforce development, building knowledge and skills for students, colleagues and individuals. In recent years, the CSP has observed a significant expansion in physiotherapy education, with a 27% increase in physiotherapy programmes. The UK now offers more diverse entry routes than ever, following the introduction of physiotherapy apprenticeships⁴, reflecting the importance of educator roles across clinical practice and academic institutions.

The outbreak of COVID-19 has had a significant impact on UK research and education practice. The NIHR re-directed resources to COVID-19 related research, pausing active clinical trials and those intending to start. In education, workforce capacity pressures resulted in temporary Health and Care Professions Council registration of final year students and paid support worker roles for second year students. UK wide clinical placements were paused and higher education physiotherapy programmes moved online⁵.

In response to these changes in roles and practice, research and education was highlighted as a key *a-priori* domain by the APCP working group and subsequently formed a core element of the APCP COVID-19 survey.

Aim and Objectives

This project aims to explore the experiences of paediatric physiotherapists in relation to research and education during the COVID-19 pandemic in the UK. This will be achieved through the following objectives:

- To identify the changes in education and research practice
- To identify the challenges faced within education and research practice
- To identify the opportunities encountered within education and research practice

Synthesis of these shared experiences will inform APCP priorities to support paediatric physiotherapy clinicians, researchers and students across the UK.

Method Summary

An electronic survey was sent to all APCP members between June 4th and June 17th 2020. A qualitative approach utilising Framework Analysis (Ritchie 2014) has been applied. A detailed methodology of the design, development delivery and analysis of this electronic survey is reported in the introduction and methodology section of this series. Further consideration of methodological limitations within this project have been detailed in the [Introduction and methodology](#) section. This domain of this survey was explored through four key questions. These are presented in Table 1.

Table 1: Survey Questions	Type of question
1) Does your role involve education i.e. clinical education, lecturing or research?	Closed (yes/no)
2) How has your education / research role changed within this period?	Open ended
3) Please share any education / research challenges you have experienced during this period	Open ended
4) Please share any education / research opportunities you have experienced during this period	Open ended

Respondent data was analysed across all survey questions using a structured framework synthesis. A detailed data analysis process is reported in the Methodology section of this series. Within this survey domain, raw data was extracted line-by-line to develop themes and subthemes, supported by NVIVO 12 software. Microsoft Excel was used to facilitate comparison of demographical and raw data within and across themes. Descriptive statistics were used to support qualitative findings.

Results

N=176/472 (37%) respondents reported that they undertook research and/or education responsibilities as part of their role. This cohort represented members from all regions, settings, employers and specialities. Available demographic data identified those more likely to confirm research and/or education activities as part of their role worked within a tertiary setting, were employed as a Band 7 or 8 and specialised in neuromuscular or neonatal care. Within regions, Scotland had the highest percentage of respondents undertaking research and/or education; the South East region had the lowest. Please refer to Table 2 for detailed characteristics of respondents within this survey domain.

UK Region	N	Setting	N	Speciality	N	Employer	N	Band	N
East of England	13	Hospice	0	Independent	6	Academic	1	5	0
London	35	Other	10	MSK	32	Charity	10	6	28
Midlands	19	Preschool	1	Neonatal	7	Independent	20	7	107
North East & Yorkshire	20	Primary	89	Neurodisability	92	NHS	141	8	29
North West	22	Secondary	27	Neuromuscular	11	Other	3	Missing	12
South East	13	Tertiary	40	Other	18	Social enterprise	0		
South West	14	Private practice	2	Respiratory	9	Missing	1		
Northern Ireland	5	Missing	7	Education/ research	1				
Scotland	21								
Wales	10								
Unknown	4								

Of the remaining 296 respondents that answered 'no' to the initial survey question, those less likely to identify education or research as part of their role worked within a primary care setting, were employed at a band 5-6, or specialised in independent/private practice. Unexpectedly, only 1 out of 4 respondents employed by an academic institute answered 'yes' to undertaking research and /or education as part of their role.

Only 5% of respondents reported no change in their role during this period; the majority of these worked in London-based tertiary specialist centres or independent/private settings. The remaining 95% of respondents portrayed an overarching withdrawal of education and research during COVID-19, depicted in cancellations of lectures, conferences, courses and student placements, closures of academic or research workspaces and a perceived flooding of resources into essential clinical services. These experiences emerged through 3 core themes, presented in Table 3.

Table 3: Overarching Themes	Subthemes
Theme 1: A move towards virtual teaching and assessment	Understanding Technology Interaction and Learner Engagement Development of Educational Resources Accessibility and Sharing of Education Virtual Assessment of Learning
Theme 2: Cancellation of clinical education	Student Clinical Placements Recommencing Student Clinical Placements Clinical Education within the Team
Theme 3: Taking a step back from research activity	Suspension of Research Activity Barriers to Continuing Research Partnerships in Research A Vision of Future Research

Theme 1: A move towards virtual teaching and assessment

The ongoing need for education endured throughout COVID-19, as academic programmes continued online, clinicians were redeployed to unfamiliar areas of clinical need and workforce capacity was supported by new starters⁵. To maintain safety of educators and learners, education was forced onto a virtual platform. This theme was concluded with confidence, portrayed adequately by over a third of respondents and upholding relevant representation, in which all demographical cohorts were included, except those working in hospice settings. Respondent answers focused on what was lost and gained from a transition to virtual delivery of education.

Understanding Technology

The increased use of technology as an education platform was evident in reports of delivering lectures and webinars via Zoom and Microsoft teams, in which '*technology glitches*' (R201) were commonly referenced as a challenge. Respondents widely acknowledged a digital learning curve, highlighting a key challenge for educators transitioning to virtual platform.

'Just learning the skills but even though I am not very technical I have adapted quickly which I've impressed myself (as I'm not a youngster!!)'. (R408)

However, within the clinical setting, reports of accessing digital training were scarce, with one respondent expressing concerns about '*understanding how best to make use of technology to be most effective*' (R186).

Interaction and Learner Engagement

Respondents discussed the loss of interaction delivering education through a virtual platform, such as debating clinical research, difficulty reading the room, cues missed and a concern over learner engagement. One respondent reported:

'Many people are feeling exhausted from this use of technology and do not always fully engage within video learning'. (R162)

Other respondents referred to the creativity of virtual teaching using online forums and group work, videos, you tube and dolls for practical sessions, with one respondent noting *'great feedback'* (R154), suggesting more positive outlooks of learner engagement.

Development of Educational Resources

Respondents referred to the time-consuming preparation of online resources, such as adding voice overlay and including extensive notes, ensuring learners could understand the resources in the absence of an educator. Although one respondent disagreed, stating:

'short teaching videos are quick and easy to make, can be tailored precisely to your colleagues' needs and are readily available repeatedly and whenever suits'. (R343)

Other respondents reported to have more time to develop educational resources for clinicians, families and students. This time was predominantly sourced from a loss of workload dedicated to delivering face-to-face training and education, as one respondent noted:

'During this period though because my role in training staff in safer handling has not happened. I have had more time to streamline training packages, review what these will look like in the new climate'. (R88)

Accessibility and Sharing of Education

Respondents widely recognised the accessibility of a virtual teaching platform. In their role as learners, respondents reported access to online learning resources from the NIHR, APCP, CSP and Royal College of Paediatricians and Child Health. In their role as educators, they highlighted opportunities to reach a wider audience, not just nationally but internationally:

'I was involved in delivering a university course in another country'. (R152)

The theme portrayed a sense of community, in which respondents reporting sharing of education resources both within and beyond clinical and academic institutions:

'We sent the PowerPoint to schools and university to allow them to have access to the information online'. (R60)

Developing a resource section for students to access free courses online webinars, talks that they can go to if we are unable to be with them at the time'. (R371)

Virtual Assessment of Learning

Two respondents shared their experiences of virtual assessment; one noted concerns about ensuring learning after delivering training, whilst another perceived an online viva examination to be a success.

Theme 2: Cancellation of Clinical Education

Of the 176 respondents completing this survey domain, 52% noted a change in their role as a clinical educator. They described their role in reference to student placements, in-service training, carer training and upskilling staff members as part of redeployment. The theme represented over half of respondents from all demographic cohorts except independent/private sector members.

Student Clinical Placements

Within the cohort, 66% described a loss of their role as a clinical educator, resulting from cancellation of student placements. Few attributed this to academic institution decisions. The majority of respondents described cancellation due to clinical organisation constraints, including redeployment of staff or those working from home, limited delivery of face-to-face provision, lack of opportunities to gain competencies, social distancing, insurance and safety:

‘Unable to provide student placements as working in community and stopping face to face work has impacted on our ability to offer hands on for students’. (R85)

‘Students are not insured to attend placement at present therefore placements have been cancelled’. (R416)

Only one respondent, based in a London secondary setting, working within the paediatric MSK speciality, described taking on virtual students, but did not provide any further details.

Recommencing Student Clinical Placement

The majority of respondents anticipated the return of students in the near future, with only one respondent stating they would not be taking students back. Three respondents were expecting students as soon as ‘next week’, all of which worked within acute settings, specialising in paediatric MSK. The delivery of virtual therapy was considered in these placements:

‘we are due to have our first paid student next week. There placement will have to include virtual clinics and telehealth will become a part of our teaching’. (R146)

‘Students are starting with us this week. We are hoping to encourage them to help us develop more resources to help us through this time. Such as online video for lower limb rehab and online DCD exercise programme’. (R90)

Some respondents portrayed more caution, detailing discussion and careful planning of student placement commencement.

‘... We await guidance as to what this may look like going forward into the next academic year’. (R111)

'Lots of discussion at present around the return of students and how we can manage that in the community with social distancing - travelling together, getting hands on, office space. The fact that we are all working from home at present. Student who was supposed to be with me at the moment, but looking at how we can offer some sort of placement before she goes back to university'. (R371)

Other respondents described concerns about the experience and skills students will gain from virtual therapy, whilst others described the need to restore face-to-face provision before recommencing student placements.

'Student education has stalled and when we do have students there is minimal clinical experience that they can really gain with the majority of our appts being via telephone or video'. (R452)

'Student placements have been suspended and unlikely to recommence until more services are restored to ensure variety of placement and competence'. (R271)

Clinical Education within the Team

Respondents referred to a loss of their role in delivering clinical education to team members. This was due to constraints of social distancing, staff absence, workplace closures, reduced time and clinical pressures. Some respondents reported a move to virtual clinical education. Only 7 respondents described teaching face-to-face in a clinical setting, supporting new starters, targeting training for therapy assistants and upskilling carers and staff, both within physiotherapy and across other disciplines. The majority of these respondents worked within respiratory specialities and were employed in NHS primary and secondary settings across Northern Ireland, Midlands, Scotland and London.

'Increased nursing staff and basic grade upskilling in paediatric respiratory modalities including airvo and bipap'. (R472)

'It hasn't really other than having to up skill non respiratory staff for pandemic'. (R305)

'We feel it is currently unsafe to take students but I have been involved in the on call training of our junior staff'. (R310)

'Involved in up-skilling colleagues to work in other areas during Covid19'(R109)

'On hold while re-assigned to rapid response for a few weeks but back to carer training now'. (R193)

Theme 3: Taking a step back from research activity

From the survey results, 20% of respondents referred to research activity as part of their role, representing paediatric physiotherapists from all workplace settings, employers, and UK regions, except Wales. The theme revealed strong coherent findings, although less respondents contributed to this theme, with underrepresentation of respondents working within respiratory specialities.

Suspension of Research Activity

Paediatric physiotherapists reported a significant change in their role, with nearly all of respondents portraying a step back from research activity. Only 2 respondents continued researching with minimal change, although both confirmed to be in the later stages of their study:

'Luckily all data was collected otherwise we would have had to stop the project'. (R233)

'I do not teach, but my research moved on quite well. I developed 2 papers whose research was already completed'. (R149)

Withdrawal of research activity encompassed cancellation of training courses, research team meetings, conferences and associated abstract submissions. Respondents attributed this to prioritisation of clinical services, face-to-face restrictions and subsequent loss of support from research departments, funding and allocated research time, as resources were redirected to COVID-related research only.

'Personally, I'm not involved with any research projects that are currently running but the funding for one proposal has now been pulled due to COVID'. (R200)

'I only started the role in April so unsure, I have been working on research proposal but little time to complete application'. (R383)

Barriers to Continuing Research

Respondents continuing research activity were halted by imposed recruitment suspension. Those few continuing to recruit were limited by 'shielding' participants, restricted travel and difficulty building researcher-participant relationship virtually. One respondent shared their research challenge as:

'Building a rapport with new families over the phone/ videocall in order to be able to ask them to be involved'. (R400)

Respondents who had successfully recruited to their study were restricted by loss of access to face-to-face data collection:

'...I was conducting research around zika virus and had to stop as unable to conduct standardised assessments (Bayley III) via teletherapy'. (R351)

'Unable to see the patients in clinical trials face to face at this time, limited outcome measures taken virtually' (R332)

Furthermore, respondents reported the need to undertake ethics amendments to ensure continuation of research. Ongoing research activity was impacted by loss of clinical space and equipment and academic institution closures.

'Difficult to use our therapy rooms/ equipment for research as our department is closed' (R174)

Partnerships in Research

The disparity between research and clinical priorities across health and academic institutions were apparent, as respondents highlighted challenges accessing their clinical partners during COVID:

'Research- difficulty getting the data needed for MSc dissertation due to pressures on hospital'. (R154)

'Support from Trust research department reduced as prioritising covid 19 research'. (R69)

Respondents acknowledged the wider healthcare pressures, reluctant to reach out to clinical providers in continuing or restarting research activity:

'Feel that it is inappropriate to try to access clinical partners for non-covid research at this time'. (R434)

A Vision of Future Research

Despite the overwhelming challenges described, respondents highlighted opportunities to facilitate new research. Respondents referred to COVID-related research funding, time as a team to reflect on practice and new ways of working, updating databases and undertaking audits or analysis of outcomes during this period:

'COVID provides a unique opportunity to look at the impact of a lack of therapy has on our families - we are looking to use the CPIP database to look at pre and post COVID measures'. (R200)

The novel move to a virtual platform also contributed to new research opportunities in virtual clinic provision, international collaborations and accessible research training, as one respondent described the 'generous access' (R149) to NIHR online courses. Conversely, a minority of respondents who described their study to be 'on hold' or 'cancelled' declared there were no research opportunities in the near future. Furthermore, one respondent described the challenges of future research planning whilst uncertainty of service provision existed.

Discussion

Within this survey domain, 176 respondents identified to have a role in education, including clinical education, lecturing or research. Of these, 95% identified changes within their role, summarised through three key themes; Theme 1 described a transition to virtual teaching only, theme 2 explored the temporary pause of clinical placement education and theme 3 portrayed a withdrawal from research activity. Each theme depicted specific challenges and opportunities encountered within their role and practice.

When asked what had changed during this period of COVID-19, an overwhelming majority of respondents described a withdrawal from their educator and/or research role, as clinical priorities moved to the forefront of healthcare. Education and research are essential to maintaining quality, safety and effectiveness in delivery of paediatric physiotherapy practice, especially during a period where changes in service provision are significantly altered without a known understanding of its impact. As we look towards an uncertain future in which we continue our roles alongside COVID-19, findings from this survey domain raise an overarching question: **How do we safeguard and sustain education and research in paediatric physiotherapy practice?**

The withdrawal of face-to-face education and subsequent transition to virtual platforms was coherently described by respondents, both clinically and academically. Although digital learning platforms are well established in higher education institutions, findings from a recent Johanna Briggs Institute scoping review found physiotherapy programmes delivered a blended approach, in which digital learning is supported by face-to-face learning, with author-reported outcomes from 6 UK-based studies concluding student preferences for face-to-face delivery⁶. Furthermore, its use in clinical practice remains novel, traditionally

focusing on hands-on practice-based learning. This was reflected in reported challenges of understanding technology platforms, with scarce reference to accessing digital training, corroborating with findings from the [Technology](#) domain of this series. Respondents who described positive perceptions of digital learner engagement also reported knowledge of diverse digital platforms, supporting the need for educator-focused digital training to plan, design and deliver virtual education to its full potential and safeguard a sustainable approach to future healthcare education. Future exploration into stakeholder perspectives of virtual learners across academic and clinical environments may provide understanding of interaction and engagement with digital teaching methods alone, compared to established blended learning approaches.

Student clinical placements dominated the education and research domain of the survey, with over half of respondents identifying their role as a clinical educator. In response to the UK-wide pause of clinical placement, respondents revealed conflicting perspectives surrounding the recommencement of work-based learning for students. These conflicts were linked to wide-ranging virtual service provision across different settings and specialities, and its unknown impact on placement expectations, clinical experiences and opportunities. Uncertainty was evident in accounts of future placement planning, with one respondent awaiting guidance for the next academic year. Findings highlight urgent need for collaborative placement planning and leadership from governing bodies to guide a sustainable approach to clinical education for the next generation of physiotherapists. It is noted that academic-based respondents were under-represented and students were not part of the respondent cohort, directing further exploration into stakeholder perspectives to understand the experiences, opportunities and challenges of partially or fully-virtual clinical placements.

Findings reflected a UK-wide pause of non-COVID clinical research, attributed to prioritisation of COVID-related research across clinical research networks and rising clinical partnership pressures. Respondents depicted a loss of critical clinical-academic collaborations and a reluctance to rebuild these partnerships over time, acknowledging the needs of the wider global health crisis and the disparity between academic and clinical organisational priorities during this period. Since entering a new phase of the pandemic, the NIHR has reached out to researchers, providing a 'Framework for restart' to guide the recommencement of clinical research activity, with consideration of the urgency, viability, safety, capacity and site readiness⁷. However, ongoing clinical healthcare pressures may impede the restoration of a fully collaborative clinical-research partnership.

Those respondents endeavouring to continue research activity safely were thwarted by significant challenges transitioning to virtual data collection and intervention delivery. Recent studies have established virtual feasibility and psychometric properties of specific monitoring tools traditionally implemented face-to-face^{9,10}, setting a precedent for future research. Similarly, a recent systematic review explored a decade of studies delivering telerehabilitation in children with disabilities, concluding the need for further research to better understand the characteristics of delivering effective telerehabilitation interventions in paediatric healthcare¹¹. In an uncertain UK healthcare climate, flexibility and adaptability should be embedded into research designs, with consideration of remote monitoring tools and intervention delivery to promote participant and researcher

safety where appropriate. This demands further exploration into the rigour and ethical implications of virtual research, such as technology inequalities. The impact of paused, delayed or discontinued research on CYP and their families affected by non-COVID related conditions has yet to be established and should be considered by researchers as they recommence activity.

Further consideration of methodological limitations within this project have been detailed in the Introduction and methodology section.

Conclusion

The findings of this survey further our understanding of how research and academic/clinical education roles contribute to the diverse and versatile paediatric physiotherapy identity. Yet, the impact of COVID-19 has led to temporary withdrawal of these traditionally face-to-face roles. Although higher education has established presence within virtual environments, clinical research and clinical education, including student placements have yet to establish such a transition in paediatric physiotherapy. This has resulted in significant discontinuation of activity and requires further attention to explore the long-term impact across research and education practice and roles. Efforts to move forward require a collaborative and sustainable working partnership between academic and clinical institutions, with further inquiry into the viability, experiences and impact of virtual placements and virtual research alongside COVID-19 clinical pressures. The findings of this project have raised 3 key priorities to support research and education roles within paediatric physiotherapy. These are presented in Table 4.

Table 4: Priorities for Supporting Research & Education Roles in Paediatric Physiotherapy	
1)	To advance paediatric physiotherapy educator’s skills in design and delivery of educational programmes (including assessment) in the virtual environment to its full potential, in an aim to optimise learner engagement and interaction
2)	To establish / strengthen sustainable academic-clinical partnerships, which could facilitate development of viable clinical placements that would ensure the safety and wellbeing of patients, students and educators, whilst promoting hands-on clinical skills central to their professional identity.
3)	To explore the viability, ethical and rigour of virtual research, to support flexible and adaptable study design, methodology and intervention delivery that can be sustained in climates of uncertain clinical pressures, limited funding and interpersonal contact restrictions.

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Association of Paediatric Chartered Physiotherapists COVID-19 Survey Analysis: Wellbeing

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Introduction

Wellbeing is recognised to be of great importance for healthcare staff, as emphasised by The NHS People Plan (2020) and the wealth of wellbeing resources that have been made available by organisations such as the Health and Care Professions Council Chartered Society of Physiotherapy, and The Kings Fund throughout the COVID-19 pandemic. There is also a growing body of evidence that links healthcare staff wellbeing with quality of care and patient experience, whilst recognising existing pressures upon the National Health Service (Kings Fund, 2018).

The Oxford English Dictionary offers a simple definition of wellbeing: *‘the state of being comfortable, healthy, or happy’*, whilst the New Economics Foundation (2012) proposed a broader definition: *‘Wellbeing can be understood as how people feel and how they function, both on a personal and a social level, and how they evaluate their lives as a whole’*.

The UK Office of National Statistics (ONS) measures of personal wellbeing similarly include happiness, life satisfaction, whether individuals feel things in their life are worthwhile, alongside measures of anxiety.

In the months leading up to the COVID-19 lockdown imposed on 23rd March 2020 in the UK, the ONS (2020) found that ratings of anxiety and happiness deteriorated for the first time since they started capturing these measures in 2011. As of June 2020, ratings of life satisfaction have also continued to remain lower than before the COVID-19 pandemic (ONS, 2020).

These statistics illustrate the potentially wide-ranging impact of the COVID-19 pandemic on personal wellbeing. Physiotherapists, alongside other health professionals, faced many challenges during the COVID-19 pandemic. Some experienced job loss or furlough, some were redeployed to new teams, whilst others rapidly implemented telehealth to deliver care remotely. These changes occurred alongside the challenges of complying with infection control and social distancing measures (Haines and Berney, 2020), whilst individuals simultaneously experienced the personal impact of the pandemic and mitigating measures imposed by the UK Government.

In appreciation of the importance of wellbeing and the potential impact of the COVID-19 pandemic on personal wellbeing, the APCP COVID-19 working group sought to include the wellbeing domain in this survey.

Aim

This domain of the APCP COVID-19 survey aimed to explore the wellbeing of paediatric physiotherapists, to offer insight into individual's experiences, share learning, and prompt reflection. This information may also inform future APCP activities and support for APCP members.

Methodology

An electronic survey was sent to all APCP members between June 4th and June 17th 2020. A qualitative approach utilising Framework Analysis (Ritchie 2014) has been applied. A detailed methodology of the design, development delivery and analysis of this electronic survey is reported in the introduction and methodology section of this series. Further consideration of methodological limitations within this project have been detailed in the [Introduction and methodology](#) section. This domain of the survey was explored with one key question, as presented in Table 1.

Table 1: Survey question	Type of question
'Our working lives can often present challenges especially in times of change. The COVID-19 outbreak has led to massive changes to our professional and personal lives. Can you share the effect this situation has had on your wellbeing?'	Open ended

Sample

192 (41%) survey respondents from a total of 472 completed the wellbeing question.

These respondents represented paediatric physiotherapists across the UK, with all geographical regions represented. The majority of respondents identified they work in NHS roles (83%), with 11% in independent practice, 4% charity, and the remaining 2% identified as academic or other. The NHS Agenda for Change banding scale was represented as follows: 1% band 5, 21% band 6, 66% band 7, 6% band 8. A remaining 6% did not identify any banding, and reported working in independent, charity or academic sectors.

55% of respondents to the wellbeing domain identified as working within the neurodisability speciality, and 16% identified as working within musculoskeletal practice. The remaining respondents represented evenly the neonatal, neuromuscular, and respiratory specialities. The smallest speciality representation, as above, was education and research at 1%.

Results

Three key themes emerged from framework analysis of the wellbeing domain, as illustrated below in Table 2.

Theme 1	Theme 2	Theme 3
The emotional impact of the COVID-19 pandemic	Relationships	Maintaining wellbeing through COVID-19
<ul style="list-style-type: none"> • Stress • Fear • Living with uncertainty • Anxiety • Guilt • Motivation • Fluctuating emotions • Emotional and physical fatigue • Professionalism 	<ul style="list-style-type: none"> • Family and personal relationships • Peer support • Leadership • Team dynamics 	<ul style="list-style-type: none"> • Flexibility • Social connection • Work-life balance • Self-awareness • Sense of purpose • Finding structure and new routines • Keeping active • Learning and personal development • Gratitude

Theme 1: The emotional impact of the COVID-19 pandemic

Stress

The rapid pace of change and volume of information associated with the COVID-19 pandemic were often reported as sources of stress and exhaustion. Stress was also associated with changes in employment, redeployment, and challenging personal circumstances, as explored further in the Roles domain of this survey. Many respondents described the stress of conflicting demands on their time, i.e. juggling home working whilst home schooling children, or caring for elderly relatives. Stress was also cited as a source of strain on families and teams.

'At the start of the situation, I have never known a more stressful, fast paced period of change within the NHS. Initially huge increases in stress, anxiety, lack of sleep, feelings of being unable to cope (hugely exacerbated by my husband having a frontline role within NHS and having same levels of stress, anxiety etc!) For a while we ate, breathed and slept Covid-19!! Never a winner for a happy family life - throw 3 children into the mix and you can imagine the chaos!' (R.284)

'It has had a huge detrimental effect on my mental and physical well-being - not just for me but my family and my daughter as well who has special needs. we have hit crisis point as a family and I have now lost my job. my anxiety, stress levels and now financial worries are massive and I feel this has not been heard by anyone.' (R.32)

'I found the conflict between desperately wanting to help with the pandemic in a more direct way and protecting my home and family very stressful.' (R.37)

'Stressed and tearful at times, inability to cope with things that would usually not cause an issue, lack of tolerance, need for release.' (R.395)

Fear

Respondents described fear of catching or spreading the COVID-19 virus, fear of putting others at risk, fear associated with uncertainty, and fear of redeployment. The latter related both to concerns about working directly with people that have contracted the virus, and perceptions of own competence.

'I was extremely worried about being re-deployed and the risk this would pose to my son who is not classed as vulnerable but has significant respiratory issues' (R.37)

'Frightened about redeployment and will I be up to the challenge.' (R.110)

'Fear of the unknown in the beginning created stress in work environment' (R.383)

Living with uncertainty

Uncertainty was commonly reported as having a negative impact on wellbeing, also illustrating the wide-ranging personal impact of the pandemic.

'I am anxious about the uncertainties of the future. I can't see my fiancé, I lost my job, I am living at home with my parents (at the age of 40)' (R.112)

One respondent described gradually adjusting to live with uncertainty *'I'm a planner, so not having things in the diary hasn't been nice but that's changing now'* (R.34), whilst another described the importance of shifting the focus from uncertainty and to *'take one step at a time'* and *'deal with things as they come'* (R.189).

Anxiety

Anxiety was also associated with factors such as concern for own health and that of loved ones, and uncertainties about the future. Some reported anxiety relating to the changes in their working lives and for the children and families they were supporting, whilst others were anxious about the wellbeing of redeployed colleagues. In relation to redeployment, poor communication, lack of leadership and planning were also reported as sources of anxiety.

'A feeling of anxiety when I am working from home that I am not working hard enough, or that I am letting the children down in some way- not being able to keep an eye on them regularly I am worried that they may deteriorate.' (R.156)

'Anxiety and concern for self and team members with abruptly and significant redeployment with poor planning and limited communication and clarity' (R.271)

Guilt

Various respondents reported feeling guilt. They described dilemmas they have faced, often between professional duties and family responsibilities, or when comparing their own situation to that of others who had been redeployed.

'Feeling of guilt - what if I take the virus home?' (R.86)

'Despite being advised that our trust had comfortable staffing levels on frontline, I was then left with the guilt of not 'playing my part' in the campaign against COVID-19 and perceived judgement when explaining to others that I was working from home' (R.422)

'I feel guilty at ignoring the kids and not being the primary care giver because I am doing so many extra hours of work, I am exhausted' (R.22)

'Guilt of not being able to offer home schooling to my children unlike other parents in my daughters school' (R.300)

Motivation

Mixed comments were made about motivation, with respondents either reporting an improvement in motivation and productivity, loss of motivation, or the need to stay self-motivated due to remote working and social isolation.

'It has been very motivating. I have been in a position where I have been able to do what was needed. it was difficult when things were uncertain and very disappointing when we were not needed for redeployment.' (R.17)

'I felt quite positive at first but as time has gone on and I am doing more and more video calls rather than treating patients face to face, I have found it difficult to remain motivated at work and I felt that my productivity has decreased as a result.' (R.413)

'Isolated and need to be self motivating and very limited interaction and external stimulus' (R.240)

Fluctuating emotions

Many respondents reported that their emotions fluctuated during the pandemic, linking this to a lack of social support and inability to participate in activities that usually maintain their wellbeing.

'my anxiety and mood currently fluctuate much more than previously because coping strategies (meeting friends, going to cafes, having a massage) have been stopped' (R.121)

'I have definitely been on a "Coronacoaster" in regards to wellbeing and emotions. Sometimes I have been in a very unsociable mood for no apparent reason and have struggled with lack of face to face interaction' (R.237)

Emotional and physical fatigue

Some respondents described feeling emotionally and physically drained. Some disclosed how increased stress affected their physical wellbeing, with reports of sleeplessness, feeling drained and exhausted, irritable bowel syndrome, eczema, and migraine. Fatigue was linked with the longevity of the situation, isolation, stress, the complexities of changes and pressures at work and at home, the emotional load of working with others that were also experiencing stress and anxiety, and the emotional load of clinical practice. It was also recognised that use of virtual platforms for appointments and meetings was mentally and physically tiring.

'It has been draining. And the realisation that the situation will not return to normal for some considerable time often leads to lack of motivation' (R.14)

'Working within a tense, highly charged environment due to whole workforce stress, anxiety, burnout is emotionally and physically draining.' (R.86)

'I'm exhausted. I'm a single mum trying to homeschool school a child with special needs and work full time and a lot of that work is emotionally draining.' (R.274)

Professionalism

A small number of respondents commented on their feeling of professionalism during the COVID-19 pandemic, as below:

'Working from home and being professional can be very difficult with small children. My son climbing on my head half naked and pulling faces whilst I'm on a zoom appt with a parent was difficult to swallow. It seems zoom has the same effect on my children as the phone, they suddenly behave like wild banshees disregarding all their usual limits! Each phone call or zoom appt I have this underlying anxiety about the bedroom door opening and what will commence.' (R.37)

'More wobbles at work - felt unprofessional but very supported!' (R.136).

One respondent shared that they found it *'Very difficult to be a therapist behind a computer screen. Struggling with not completing hands on and face to face sessions with children and families'* (R.85).

The impact of redeployment on professional identity, both positively and negatively was also highlighted:

'Initially very stressful working in a different area, requiring different skills and working as part of a new team - felt like I had started a new job! Lost a lot of confidence in abilities moving from a role which I have been doing for 12 years to a new role.' (R.214)

'During the outbreak I have been proud that I have still been able to go to work and make a difference and have retained my identity of being a physiotherapist, when I failed my mask fit it was like that identity had been taken away from me too which was difficult to process. Thankfully I passed the second time I was tested which was a big relief!!' (R.237)

Theme 2: Relationships

Family and personal relationships

Some reported that due to changes in their living arrangements for shielding (R.210), living alone (R.371) or social distancing measures they were no longer able to see loved ones. One respondent described the longing to hug their newly born grandchild (R.110). Some reported that they maintained contact with family and friends virtually, which helped them to cope with stress and to maintain a sense of wellbeing (R.186).

Whilst some appreciated being able to spend more time with their family due to home working, others reported that juggling roles and dealing with pressures and stress had a negative impact on the relationships within their household.

'Family are a strength and my saviours.' (R.84)

'The positive in all of this is I am with my family all of the time, the children are happy and this is definitely good for my well being.' (R.37)

'Working predominantly from home with a 6yo and 1yo at home full time with no access to education. The balance of trying to juggle work, home schooling and general home life has been a challenge. The feeling that I'm doing everything 7 days a week with no break, needing to work on my typical days off to catch up on work/hours not achieved during the week due to child care. General strain on relationships within our household.' (R.68)

Peer Support

Maintained contact with peers was strongly identified as positively influencing wellbeing. Those working in their usual settings valued the ability to share experiences, share concerns, and have meaningful face to

face conversations. Others working from home, lone practitioners, or those shielding, reported feeling isolated. They described the negative impact this had on their wellbeing.

'I am fortunate in that I continue to work from my main office base on my NHS days - this allows general discussions around well-being and has kept a sense of normality during the COVID restrictions. In my other job (University based) everything is now online from home and that is more challenging.' (R.16)

'Thankfully well supported by colleagues and trust otherwise I don't think I'd still be at work!' (R.198)

'Team support and morale has been vital, feel less isolated than those working at home' (R.206)

'I am really struggling mentally. I am having to socially isolate due to health conditions and pregnancy so I have not been in work since mid-March. I am lonely, feel utterly undervalued, I feel isolated from everything going on at work. I'm doing all I can to stay positive but it's getting harder and harder as the weeks go by.' (R.296)

Technology enabled respondents to keep in touch with colleagues remotely, however it was recognised that this did not fully replace the value of face to face contact, and that the need for face to face interaction increased as time progressed.

'I miss being with colleagues and although video is ok its not the same as being able to sit with a colleague and talk.' (R.333)

Team dynamics

Some respondents acknowledged how feelings of anxiety may ripple through a team, affecting team dynamics and the wellbeing of others. Others recognised how the COVID-19 pandemic positively enhanced relationships.

'Difficult managing team members anxieties and keep positive through such uncertainty. Trying to maintain an air of flexibility and positivity despite low mood and anxieties' (R.198)

'I have observed the fall out in many of the staff members I work with as they wrestle with working from home, juggling family commitments and unprecedented change.' (R.65)

'getting to know other team members during the difficult time has been bonding.' (R.17)

'It has made our family closer and our team work better together.' (R.278)

Leadership

Respondents with leadership roles described the challenges they have faced in supporting their teams whilst maintaining their own wellbeing. They also described positive emotions such as pride and appreciation. Others reported how strong leadership supported them through the pandemic.

'As a manager and clinician, the pressures of communication and translating all the ever changing information has taken its toll. Staff often expect clarity where there is none and you become the brunt of their frustrations.' (R.233)

'Personally it has been a time to be grateful for the team and the way they have adapted and taken on board new ways of working, stepping up to redeployment, working with technology, older and younger staff equally picking up the baton. That has been rewarding and I have felt very proud to lead the team.' (R.65)

Theme 3: Maintaining wellbeing through COVID-19

Flexibility

Although many respondents reported increased stress and anxiety due to the COVID-19 pandemic, some respondents reported that their wellbeing has not been negatively affected, or they have now settled following initial anxieties. Some attributed maintenance of their wellbeing to flexibility and an ability to adapt and adjust to change.

'No issues really - it's just about being flexible and adjusting to new working practices' (R.452)

'There have been times at the beginning when it has been quite adrenaline driven, quite exciting times really as we plan and adapt to new ways of working and help staff groups to adapt and work differently.' (R.65)

Social connection

Social connection was reported as essential for wellbeing through the COVID-19 pandemic. A lack of social support had a significant impact for those who were feeling isolated and for those that may have been experiencing mental health difficulties prior to the pandemic. It was recognised that it is important to make time for meaningful interactions and conversations in the workplace, and to maintain contact with those working from home.

'I was struggling with my wellbeing prior to covid and support networks were stopped.' (R.310)

'Create social chat opportunities with colleagues in working environment to reduce intensity and pressure/ worries/ concerns from whole COVID situation' (R.338)

'Need to be more mindful of how this support can be offered and ensuring that people don't get lost or suffer in silence.' (R.215)

Work-life balance

Many respondents described how changes to their working patterns impacted on their work-life balance, with consequences for their wellbeing. Some reported difficulties maintaining work-life balance when home working, due to blurred boundaries and challenges in juggling responsibilities.

'Working different hours to accommodate a young family, starting work at 6am and working until 11pm to get my hours done has been much harder than I could have imagined' (R.3)

'Feeling overwhelmed at times and stressed. Working at home in the evenings when I should log off. Poor sleep (I'm usually a good sleeper).' (R.101)

Others described how their circumstances enabled improved work-life balance:

'No commute means much less stressful mornings – I have been able to do yoga everyday before the children wake up' (R.449)

'My well being does not seemed to have been affected by the situation. I think there are positives of working from home and it has allowed more time to think and head space to focus on what is important.' (R.186)

'Lockdown was great- I live in the country, so a lovely work life balance struck.' (R.258)

Self-awareness

Respondents described ways they have been taking care of their own wellbeing, highlighting that self-awareness helped them to notice their emotions, and to be proactive in taking action to improve their sense of wellbeing.

'Have odd moments of feeling low but spot it and get out for a walk.' (R.34)

'I am aware of feeling overwhelmed at times and when I do I ensure I get out, walk, connect regularly with close friends with technology. Finding something creative to do and a lot of reading' (R.376)

Sense of purpose

A sense of purpose was positively associated with wellbeing, with some describing how the response to the pandemic provided them with a sense of purpose. Others described how a loss of sense of purpose negatively affected their wellbeing.

'Initially I was feeling very driven to ensure all my families and the staff I work with were safe and supported. I was happily working overtime to do what I felt was necessary' (R.37)

'On returning to paediatrics I felt that I didn't have a purpose.' (R.310)

'I have found it difficult to remain motivated and positive with so little to do.' (R.50)

Finding structure and new routines

The changes and restrictions associated with the COVID-19 pandemic altered daily routines dramatically. Some reported that home working improved their daily routine, as they no longer commuted to work. Other respondents explained how finding new routines helped to give a new structure to daily life, which positively influenced their wellbeing.

'I have been in more of a routine compared to my normal working life so it has improved my wellbeing as I can exercise regularly' (R.440)

'I have tried to maintain a structure to my week in terms of exercise and in fact I have been able to increase the amount I do over week, loving being outdoors and have accessed classes via zoom.' (R.376)

'I have joined 2 online training (exercise) programmes that get me out of bed at 7.30 for 30 minutes of yoga pilates or stretching... I work part time so this regular exercise helps shape my week' (R.343)

Keeping active

In addition to contributing to a sense of structure and routine, the importance of activity was recognised in relation to the increase in sedentary working practice and poor ergonomics of home working. A range of associated musculoskeletal problems were reported, including headaches, back and wrist pain.

'I have found a lot of the time I have been sat down which I do not think has had a positive impact on my overall wellbeing and mental health and it has left me feeling tired and sluggish' (R.413)

Exercise was also reported as a form of stress-relief, enabling opportunities to get outdoors and to connect with nature. Other activities reported included crafts, going for walks, running, yoga, and virtual classes or challenges. The virtual classes and challenges also contributed to motivation and connection with others.

'I keep up with outdoor exercise which is keeping me generally fit and mentally ok' (R.124)

'Exercise has been important, so much time now sat at a desk with back to back meetings' (R.65)

'I am lucky enough to live in a beautiful part of Scotland with a garden and lots of nature and walks on my doorstep and this has always been one of my ways of maintaining my wellbeing.' (R.111)

Learning and personal development

Some respondents reported a sense of satisfaction arising from changes in practice, as they had the opportunity to take more time for learning and service development. It was also recognised that although redeployment was challenging, it was an inherent opportunity for personal and professional development.

'I have also valued the time away from clinical duties to develop service and update my knowledge according to the evidence base.' (R.143)

'I very much missed my normal working team and my normal job but I have enjoyed the challenges it has brought and I feel I have learnt lots and overall it has helped my knowledge and development.' (R.129)

Gratitude

Respondents described what they have been grateful for during the pandemic, suggesting that awareness and gratitude may be helpful in maintaining a sense of wellbeing.

'Being more grateful for the little things' (R.390)

'Overall it has been a very stressful time in both job and home and trying to juggle it all. I'm grateful for supportive team and family/friends during it all' (R.291)

'I am grateful to have a good core group of friends/mentors who are in the same situation and we all are sharing and supporting each other.' (R.408)

Discussion

The wellbeing domain of the APCP COVID-19 survey has demonstrated the varied impact of the pandemic on paediatric physiotherapists across the UK. Some clinicians reported no change or an improvement of their wellbeing, with positive emotional experiences including excitement, pride, motivation, strong sense of purpose and a sense of achievement. Positive circumstantial changes included greater flexibility, more time at home and with family, and more time for self-care. Others described feeling overwhelmed, exhausted, stressed, and anxious. Many described difficulties coping with change and uncertainty, and the challenges

of managing the conflicting demands of daily life. Time was a critical factor that influenced wellbeing, as many who reported a deterioration in their wellbeing recognised additional pressures on their time. Conversely, those who reported an improvement in their wellbeing generally reported increased flexibility with their time and more time available for activities such as exercise.

Alongside the other domains of this survey, the findings of the wellbeing domain illustrate that within a single team or family, individuals could be experiencing the pandemic differently depending on their own personal circumstances and the resources, support, and coping strategies available to them. Damian Barr (2020) captured this with the fitting analogy: *'We are not all in the same boat. We are all in the same storm. Some are on super-yachts. Some have just the one oar.'*

This leads to the concept of resilience, which is described as the ability to withstand setbacks and bounce back from adversity (Luthar and Cicchetti, 2001). Respondents to this survey described many coping mechanisms that may have positively influenced their resilience, such as exercise, support from others and staying socially connected. Flexibility and the ability to adapt were also positively associated with wellbeing

The ability to select from a range of coping strategies in response to change has been described in literature as psychological flexibility. Dawson and Golijani-Moghaddam (2020) also concluded that psychological flexibility was positively associated with wellbeing during the COVID-19 pandemic in the UK, as it disposed individuals to adaptive coping responses. Flexibility was also identified as a factor that individuals would like to retain in the Moving Forwards domain of this survey.

The experiences shared within the wellbeing domain of this survey have also emphasised the importance of personal reflection, and of taking time for one's own wellbeing, and that of others. A number of the elements that appeared to contribute positively to respondent's wellbeing have been captured with the anagram 'Feel fabulous' (Figure 1), which although not exhaustive of factors that can promote wellbeing, may offer a light-hearted reflection aid. Firstly, as respondents recognised the importance of self-awareness, it begins with appreciation of the range of emotions that one may feel. It then follows that flexibility, time to adjust, building resilience, accepting uncertainty, continuous learning, embracing opportunities, being understanding towards others, and social and peer support, may all also improve an individual's sense of wellbeing. It is also important to recognise that staying connected is both positive for one's own wellbeing, and that of others, as some respondents stressed the importance of reaching out to colleagues that may be feeling isolated.

Signposting to support is also of vital importance, as also found in the [Roles](#) domain of this survey. Links to a range of wellbeing resources, including a downloadable copy of the infographic below, have therefore been made available on the APCP website. (Figure 1).



Figure 1.

Limitations

It is recognised that only 41% of total survey respondents completed the wellbeing question, which may have been influenced by the wording and position of the question towards the end of the questionnaire. As respondents may have commented on their wellbeing in response to other survey questions, it is therefore important to consider these findings alongside the other domains of this APCP survey.

Conclusion

The wellbeing domain of the APCP COVID-19 survey has revealed the broad and varied impact of the COVID-19 pandemic on paediatric physiotherapists in the UK. It revealed that individuals have faced changing circumstances and fluctuating emotions, and that wellbeing is a complex and dynamic concept.

The experience of the COVID-19 pandemic has emphasised the importance of taking positive steps towards health and wellbeing, as per the NHS People Plan (2020), so that organisations, teams, and individuals, can not only cope, but flourish, when faced with challenges of any scale in the future.

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Association of Paediatric Chartered Physiotherapists COVID-19 Survey Analysis: Moving Forwards

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Introduction

On the 23rd of March 2020, the UK government closed all but essential shops and services and shared the message to “stay at home” (UK Government 2020). The social distance guidance resulted in unprecedented challenges to health and care systems in the UK during this time and since (Kings Fund 2020). The need to keep patients safe became paramount, requiring urgent and radical redesign of services (Rastrick 2020). As key workers, paediatric physiotherapists were at the frontline, experiencing a multitude of changes from remote working, implementation of telehealth to potential redeployment, restructuring of teams alongside changes to usual work processes, work environments and pathways for care. (CSP, Kings Fund). The compelling need for service redesign had significant impacts at a professional level alongside the effects on healthcare workers personal well-being (CSP, Kings Fund). The implications for practice are ongoing with continued uncertainties and changes (NHS England, Rastrick 2020).

The ability to reflect on one’s experiences and actions to engage in a process of continuous learning is an integral aspect of being a physiotherapist (HCPC standards of conduct, performance and ethics). The APCP project group sought to facilitate learning through critical and constructive self-enquiry to help process the radical change that has been enforced upon us both as individuals and as a profession.

By analysing respondents’ comments, a discussion can commence so that knowledge is shared, and collective professional wisdom developed whilst understanding how we can support each other and develop resilience (Tony Ghaye, HCPC 2020). Considering the continued uncertainties and possible future lockdowns, there is a real need to learn and adapt so that we can move forwards personally and with our professional practice in a positive and meaningful way. By including this domain, it was hoped there would be time provided for respondents to carefully consider what has been lost and what could be gained. For this reason, the survey project group identified the “moving on” domain as crucial in offering the APCP members an opportunity for reflection on changes that have influenced their practice following the initial period of the COVID-19 lockdown.

Aim

This paper aims to explore the aspects of change that paediatric physiotherapists would like to retain moving forwards following the initial COVID-19 pandemic in the UK. Open ended questions have been used so that

Respondents experiences of change could be explored. This information will inform the APCP’s endeavours to support its members and to be ready for future challenges.

Method Summary

An electronic survey was sent to all APCP members between June 4th and June 17th 2020. A qualitative approach utilising Framework Analysis (Ritchie 2014) has been applied. A detailed methodology of the design, development, delivery and analysis of this electronic survey is reported in the introduction and methodology section of this series. Further consideration of methodological limitations within this project have been detailed in the [Introduction and methodology](#) section. This domain of the survey was explored through three key questions. These are presented in Table 1

Table 1: Survey Question for Moving Forwards Domain	Type of question
1. “What changes/ways of working would you like to retain for future practice”	Open ended
2. “What have you changed/learned that will continue to influence your practice?”	Open ended
3. “Please share any further comments or reflections”	Open ended

Results

472 paediatric physiotherapists completed the APCP COVID-19 survey. 185 of these respondents commented in this final section exploring the changes and reflecting on ways of working that have affected them during this time. These were considered as influential to respondents in the process of moving forwards. The respondents were representative of a variety of UK regions, banding and specialities and employment settings.

Data analysis revealed four key themes which include:

- *Future of digital practice*
- *Formulation of new working models*
- *Leadership*
- *Factors enabling coping with change*

Theme 1) Future of Digital Practice

The use of technology has been found to underpin all facets of the moving forwards domain. The development of digital pathways during the COVID-19 crisis has facilitated service delivery in a time when traditional face to face methods were unavailable.

'I think it has given us a push to enter the 21st century and realise the opportunities that having technology at our disposal means that some part of our work will not go back to "normal" and we will find a new technology-enriched normal' (R424).

Respondents wanted *'to continue to embrace technology and its' benefits'* (R284) but there was acknowledgement of the need for research into patient and clinician satisfaction and outcomes with remote consultations compared with face to face consultations as well as adaptation of skills with virtual appointments. *'Develop better ability to explain to parents how to handle their children as well as show them'* (R444) Changes for patients and clinicians were considered.

'I have learn to work in little chunks with parents, instead of doing an hour session each time, the virtual sessions are not longer than 20 min however the parents are sharing more regularly improvements/changes they are noticing by doing the activities suggested during the virtual session. Parents are becoming more confident about working/playing with their own children' (R390).

'I think there are many potential benefits to telephone and video consultations in paediatric msk care. Much of the current research into remote physiotherapy is based on adult populations. It would be interesting to understand how remote consultation impacts patient and clinician satisfaction and clinical outcomes compared to face to face consultation' (R422).

Two areas of key advantages were reported in the survey, patient-centred benefits, and clinician-centred benefits. Patient-centred benefits were perceived by respondents as providing more choice and flexibility in arranging appointments including the appointment type. *'Some virtual therapy will be useful but giving families the choice will be key!'* (R54).

Improved availability of resources for patients and overall improved connectivity was described. *'we've created lots of online resources that we'll continue to use'*(R426).

"Retain- Zoom meetings and webinars and develop these for learning and as a resource for parents" (R124).

"Connectivity - with families without the need to visit clinic and with colleagues in different settings" (R147).

The second area of identified benefits was clinician-centred. This included technology/digitalisation aimed at improvement of work efficiencies (i.e remote meeting attendance) and ease of access to learning and teaching.

'Video MDT has been useful at time for more people having the ability to attend. It should be considered in the future to include those that cannot attend or for sharing knowledge and skills of other hospitals to come together' (R162).

'Will continue to use video in some instances, to reduce time and travel for family and myself' (R228).

'Can do more by teleconference etc and use this efficiently to work' (R314).

"Using virtual IT tools to aid teaching" R100.

Respondents specifically highlighted the importance of sharing learning. *"Sharing learning is very important to enhance and improve patient/family /child care" (R109).*

"continue with better use of technology, hopefully people will embrace change more readily" (R130).

"Continue to use/ develop use of technologies to support my practice where appropriate" (R 14).

"Use of attend anywhere for some follow up appointments will save time and reduce DNAs. It will also allow attendance at clinics/meetings you would otherwise be unable to join due to travel distance and time" (R104).

The "future of digital practice" theme identified many areas of benefits to clinical practice including sharing of resources, attendance at clinics, reduction in unnecessary travel and improved flexibility in clinic and meeting attendance. These were reported as positive changes to practice by respondents. Appropriate technology resources and support for learning new technology and training patients and their families was identified as a requirement for its successful use.

Theme 2) Formulation of new working models

Rapid changes have occurred to service delivery and working practices in response to COVID-19. Many respondents highlighted the benefits of remote working and use of telehealthcare. Similarly to the previous theme, analysis has shown two areas of key advantages; patient-centred, and clinician-centred. Respondents reported the need for continued review of working practices and considered what aspects of 'pre-COVID-19' models of practice should be retained and the facets of new working practices that have been advantageous for patients and clinicians alike.

The patient-centred benefits included greater patient inclusion in designing future service delivery to achieve improved engagement and to make meaningful patient-centred change.

'I feel we have a duty to listen to the feedback from the children, young people, their families and carers so we are able to understand what works well for them in our new ways of working. I hope

we will be able seize all the new opportunities for delivering our services, supporting our staff and their development in new ways' (R111).

'I think the service we can provide can be more flexible and tailored to the individual after working through this time' (R37).

'Retain flexibility in practice to offer patients a range of consultation opportunities to best suit their needs at any given time' (R338).

At the personal level, the changes to working patterns have been identified as a source of improvement to work-life balance with respondents commenting on the positives of flexible working with reduced travel and increased/better access to improved work environments. *'We can link up with others more easily so travel is less of a barrier' (R65).*

Nearly all respondents felt that remote working and virtual appointments should be considered in conjunction with face to face appointments. *'there is a place for tel/vid reviews but this should be used in the context of f2f and hands on input' (R385).* The vast majority of respondents commented on a desire to continue with flexible working/working from home with positive affects noted for their productivity.

'I would like the opportunity to work from home more. I can access everything I need and it is a quieter environment. To make more regular phone calls to families, combined with face to face appointments. I feel like I have got to know some parents better that usually don't engage as well' (R156).

"Can be more structured within the day & plan in admin tasks better at present" (R226).

Many respondents identified the potential loss of "hands on skills" as a concern.

'there is a place for the use of technology and have great concerns in the correct application for when to be used & therefore might over ride our assessing & hands on skills as physios' (R61).

'There is a place for technology but we lose so much if we just – switch. The ability to guide, assess and build patient rapport will be lost' (R256)

'Still see the need for hands on with new patients and complex patients' (R371)

Respondents were also concerned that the rapid shift to virtual/telehealth will deepen the risk of areas of access inequality.

'We must ensure that we work to maintain equitable service. Many families who have financial difficulties or socially disadvantaged have suffered disproportionately at this time' (R128).

Theme 3) Leadership

The analysis has shown that the roles of leaders are crucial and strongly shape the perceptions of team support in this domain. Leadership and the perception of support emerged in analysis of the “[Role](#)” domain of this survey series. *‘We were aware of a lot of possible plans being made but these weren’t shared with us which led to rumours and speculation’ (R420).*

Furthermore, the lack of clear communication from leaders has been commented on as a factor contributing to emotional wellbeing. *‘I think some of the anxiety we had at the start could have been mitigated by better communication from those higher ups’ (R420).*

Conversely staff appreciation from team leaders was found to result in *‘better working relationships with parents and colleagues with a common purpose of keeping everyone safe from COVID’ (R17).*

Respondents commented on employer qualities that they hoped to see going forwards

‘Employer flexibility and appreciation of its staff’ (R198). ‘Recognise individuals strengths...and allow them to use them when possible/ share with others. Support one another to allow colleagues to work to the best of their abilities and be most productive’ (R338).

Theme 4) Factors enabling coping with change

Respondents shared the personal effects of working during this crisis with reflections and advice on how to cope with change in the future. This included acknowledgement of the need for time to process what has happened.

‘I feel we will need a time to debrief after all this and process what has happened. The changes have been exhausting and unlike many friends outside of healthcare we often haven’t had time to stop and recoup. We must reflect and learn’ (R340).

The term “team” featured in comments where positive experiences were described. *‘This has been an exceptionally stressful time but I am proud of the team i work with and my own family at home and of myself. I am more resilient than I thought’ (R200).*

‘The importance of having a supportive team around you has been paramount, we have all had times where we have been upset/stressed/worried but we have come together- be that in the form of a virtual coffee and catch up or doing online exercise classes together in the evening outside of work. I am lucky as I have a lovely team, but have worked in difficult teams in the past and know that my COVID-19 experience would have been a lot more stressful if I did not have the support of my team’ (R237).

Respondents commented on flexibility and openness to change. This was similarly reported in the wellbeing domain of this series. *'Things will not be the same moving forwards so will need to be much more adaptable and open to change in developing different ways of working'* (R 14). *'willing to give things a go'* (R17). *'Collaboration and being flexible'* (R235).

Characteristics like kindness and tolerance were considered as helpful in adapting to change. Respondents imparted advice to implement these qualities. *'Be kind, understanding, tolerant...and those around you will respond in a similar way'* (R338).

'Re-evaluation of priorities. previously worked very hard putting pressure on myself to manage a lot in a day' R228

'Continue to challenge and push boundaries....' (R65)

Limitations

39% (n=185) of respondents answered the moving forwards domain questions. The comparatively low number of responses may be related to the length of the questionnaire although it was validated and piloted or to respondents' readiness to comment. It seems that the latter could be possible as the survey was implemented in the first few months of national lockdown. This limitation was identified by some respondents. *'There might be other positives but I'm currently in the middle of a crisis so perhaps not quite ready to analyse everything'* (R260). *'I feel we will need a time to debrief after all this and process what has happened'* (R340).

Discussion

The four key themes identified during analysis represent the ways in which change could be facilitated with resultant positive practice transformation for patients and clinicians. The analysis highlights the concurrent clinician considerations and patient centred variables within the four themes. The identified linkages between managing self, working with others, reflection and learning in the context of rapid organisational and personal change is reflected in the Peoples Plan 2020 (Haines 2020). Leaders ability to influence clinician experiences which in turn allows services to be adapted to meet the needs of their patients effectively has been brought to the fore. Through inclusive and compassionate work environments, teams can be supported to deliver services that clinicians and patients aspire towards (See figure 1). The importance of retaining flexibility in practice has been identified in the analysis of this domain.

The COVID-19 pandemic is ongoing, thus investigating respondents' reflections at this time is complex. The concepts of reflection-in-action as compared with reflection-on-action (Donald Schön's, Van Manen) and also reflection-for-action (Killion and Todnem 1991; Grushka et al. 2005) are useful to consider how and in what ways reflection is used. Reflection can lead to a change in the practitioner's view of self, values, and beliefs (Donaghy 2000). It is this self-concept, values and beliefs alongside experiences that lead to professional identity. The respondent's comments in this domain of the survey have provided insight into their personal

reflective practice and the challenges and opportunities of these unprecedented times. Many changes were borne out of necessity and now that we are in the moving on period from the initial lockdown, we can consider how changes can be facilitated.

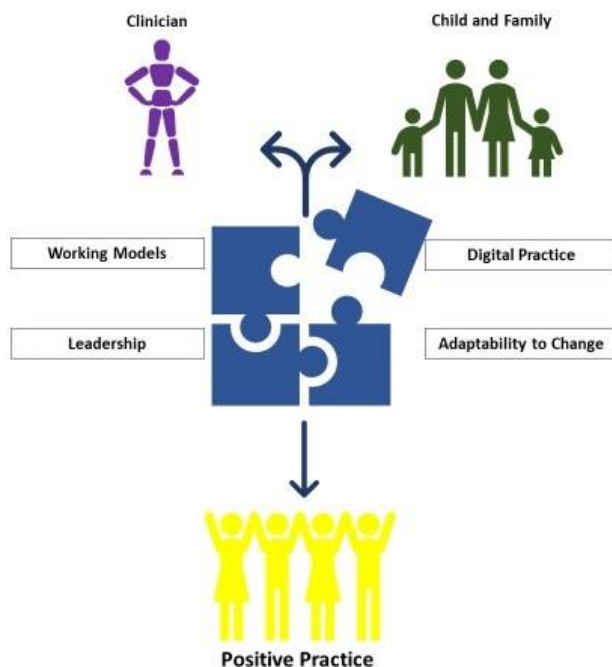


Figure 1. Variables affecting change during COVID-19 lockdown

The importance of the leadership role is clear in this domain. Leaders need simple methods to help people to work together as productively as possible to make progress in a time when rapid change is required (Kings Fund, 2017). ‘Experience-based co-design’ is a concept of bringing healthcare professionals together with service users to improve quality of care through service re-design and reconfiguration of traditional roles with a partnership approach to co-design services and care pathways (Donetto et al 2015). The usual challenges of experience-based co-design have potentially been mitigated by the COVID-19 pandemic as there was already a change between service users and service providers with a new common goal to keep people safe and an acceptance that services could not continue as they usually would. This shared vision and common purpose to reduce the spread of COVID-19 can be utilised at this time.

The method of appreciative inquiry for promoting transformational change by focusing on affirmation, appreciation and positive dialogue is a participatory approach that could be implemented with experience-based co-design (Trajkovskti et al, 2013). Analysis in this domain supports the shift to create positive dialogue. Respondents presented a clear want for supportive, communicative, and positive encouragement from leaders. This has also been identified in the NHS Peoples Care Plan 2020.

The known complexity of healthcare systems needs to be acknowledged by healthcare professionals working within them (Braithwaite 2018, Rastrick 2020). Effective change requires factoring the idiosyncratic nature

of services rather than applying a linear improvement approach (Braithwaite 2018, NHS Peoples Plan 2020). The concept of formulating new working models has been driven to the forefront of all physiotherapists practice and has been recognised at a strategic level by the NHS Peoples care plan 2020. By using existing resources including tools like appreciative inquiry, experience based codesign and developing future strategies we could support paediatric physiotherapists and our patients. The Kings Fund have developed resources with a devoted theme of “working differently” (<https://www.kingsfund.org.uk/publications/covid-19-road-renewal-health-and-care>). Appropriate technology is integral to the successful implementation of this alongside enhanced learning around technology applications and use (NHS England 2019 A Digital Framework for Allied Health Professionals).

Conclusion

Our future practice can be enhanced by reflecting and recognising the knowledge that we have learnt from the initial period of national lockdown. The ability to change our working practices and care pathways will require collaboration with clinicians and patients whilst having the support of our leaders and support within our teams. We can move forwards from the initial effects of this crisis and prepare for future challenges by utilising our experiences to inform our future work. As a respondent succinctly summarised ‘*We need to plan for this again so not to forget what we’ve learned, what worked well, or not so well*’ (R34).

Priorities for further consideration following analysis of this domain are presented below:

1.	To advance paediatric physiotherapists skills in assessing and treating patients in a virtual context so that the varied needs of patients can be facilitated with a range of consultation options.
2.	To explore patient, parent and clinician engagement and satisfaction with virtual appointments compared to face to face appointments and to review outcomes of both virtual and face to face appointment types.
3.	To support retention of continued flexibility in working models for clinicians alongside developing leadership roles where staff appreciation is valued.
4.	To endeavour to have inclusive and compassionate work environments where each team member is valued and supported with particular attention to the importance of each individual’s wellbeing. To work on developing processes where clinicians are involved in service design and delivery with meaningful collaboration with leaders.

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Are we there yet? The journey towards defining our professional identity during time of crisis – the APCP COVID-19 Survey

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‘Not everything that counts can be counted, and not everything that can be counted counts.’

WB Cameron 1963, Attributed to A. Einstein

Introduction

Traditional healthcare roles, interactions and provisions have undergone unprecedented and rapid transformation as a result of COVID-19. Findings from this National APCP survey report highlights a myriad of changes experienced by paediatric physiotherapists, affecting clinical practice, education, research activity and physiotherapists’ personal lives. Survey responses have shown that widespread redeployment destabilised teams, altered service provision capacity, team interactions and professional development, which largely moved to virtual platforms (detailed in sections by [Bell 2020](#), [James 2020](#)). Concerns around compromised patient care, research projects, educational activity and clinical placements were felt across the profession (detailed in sections by [Evans 2020](#), [Hebda-Boon 2020](#), [Knight-Lozano 2020](#)). There were many health service inequalities relating to the impact and response to COVID-19, exacerbated by feelings of isolation, disparities in access to digital solutions and capability gaps. On the other hand, some aspects of virtual communications and digital innovations were welcomed changes for healthcare delivery and development (detailed in sections by [McGarrity 2020](#), [Walsh 2020](#)).

Despite the challenges of these unprecedented times, paediatric physiotherapists shared positive accounts of opportunities for self-development and supporting others, whilst striving to maintain integrity in practice. Against the odds, many shared examples of advancement of their professional practice and the profession itself, described across all sections of this report.

This final section of the APCP COVID-19 survey series is intended to bring together findings across all domains of the survey, consolidating learning and reflecting on key elements of our professional identity that faced change during the initial period of UK COVID-19 pandemic.

Professional identity at glance

Professional identity is defined by Schein (1978) and summarised by Ibarra (1999) as a “relatively stable and enduring constellation of attributes, values, motives, and experiences in terms of which people define

themselves in a professional role.” (p764-765). Yet, we are not the sole creators of our professional identity. Although a self-concept constructed at an individual level, it is shaped by interactions with the work we do, the people we connect with and the communities in which we belong. It is to be distinguished from ‘professionalism’, a concept constructed by society and regulatory bodies that govern our profession (Ibarra 2007; Wilson 2013, Warren and Braithwaite 2020). In practice, professional identity links an individual’s motivations and values of a chosen profession. It helps to establish an ethical compass and allows critical examination of our professional behaviours whilst developing attributes through experiential learning as physiotherapists (Holden 2015, Wilson 2013).

Although professional identity is considered relatively stable, its formation is an active process (Holden 2015). It is believed to develop at the undergraduate level and to continue to evolve throughout our professional career under exposure to contextual factors and events (Ibarra, 1999; Kyratsis et al., 2017 Lindquist et al., 2009, Hammond et al., 2016). In times of imposed and unprecedented transformation, clinicians are thought to be at risk of experiencing detachment between professional identity and work (Chen and Ray, 2020). Understanding of, and reflection on the components that underpin our identity, can help us remain responsive to the dynamic needs of the population and create new ways of working (Chen and Reay, 2020).

The Professional ‘I’ Identity model

Through continuous framework analysis (methodology described in detail in the [Introduction and Methodology section](#)), embedded in a grounded theory approach (Denzin and Lincoln 2011, Ritchie 2014) and collective mapping across this powerful body of data, patterns of association and reoccurring characteristics across the survey domains were revealed. These are summarised and presented in the form of a Professional ‘I’ Identity model, offering a visual representation of the survey findings (figure 1).

The model illustrates five core dimensions identified *across* the survey domains: Competence, Collaboration, Adaptability, Authenticity and Ethos. Each dimension is represented by four inner ring components that convey findings *within* the survey domains, corresponding to the Caseload, Role, Research and Education and Continuing Professional Development sections. Dimensions and components were agreed with confidence and underpinned by respondent data. Dimensions are discussed below in detail, accompanied by supporting ‘I’ questions that are included to aid reader’s own reflection. Several of the components are interlinked and appear across multiple dimensions. To avoid repetition and support reader clarity, each component appears within the framework once, underpinning one core dimension. The circular diagram has been chosen to emphasise that dimensions and their corresponding components are not graded or ranked.

The model aims to guide the critical reflection, both individually and collectively, on fundamental elements of professional identity, including potential drivers and threats to this complex concept imposed by COVID-19.

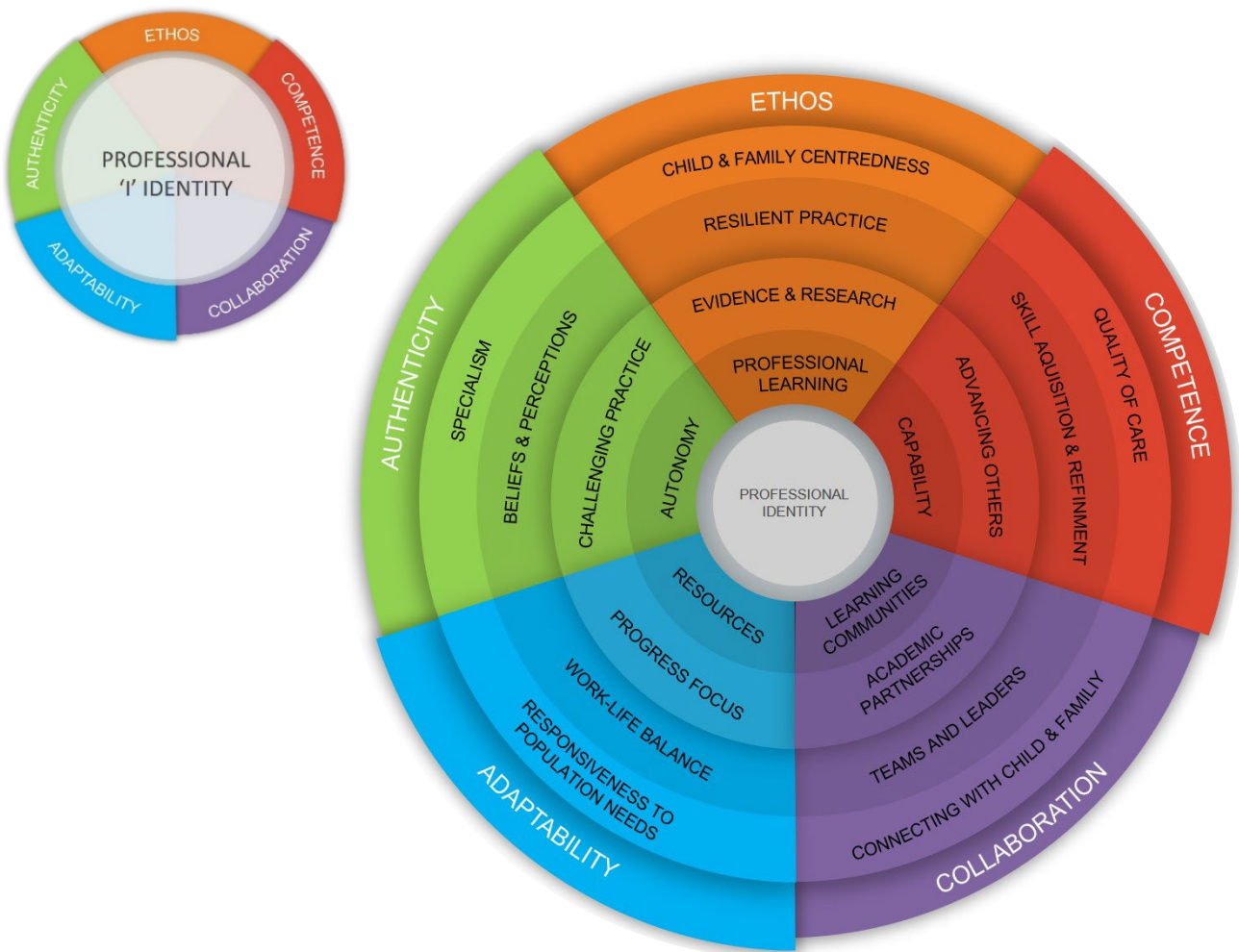


Figure 1 *The Professional 'I' Identity model* – a visual representation of the findings. The outer ring conveys the **Dimensions** ethos, competence, collaboration, authenticity and adaptability. The inner four rings convey the **Components** focused on caseloads, roles, research and education, and professional development aligned within Dimension.

Competence: How do 'I' do this successfully and safely?

Competence here follows the CSP definition of competence as a set of knowledge, behaviours and attributes that enables physiotherapists to work safely, effectively, and legally within their particular scope of practice at any point in time (CSP 2011a). Implications of COVID-19 initiated a number of changes that destabilised professional competence across physiotherapy. The rapid implementation of digital solutions raised concerns about safety and effectiveness of practice, particularly towards vulnerable patient groups requiring continuous physiotherapy input. Furthermore, concerns regarding an unknown impact of virtual therapy provision was emphasised in respondents accounts of practice challenges during COVID-19.

The survey observed many paediatric physiotherapists redeployed from areas of specialist knowledge and skills to areas of immediate clinical priority. This urged respondents to embrace this new way of working, drawing upon their transferable physiotherapy skills and demonstrating flexibility in their professional competencies. This was typically supported by access to redeployment-specific training and support from new teams in which they were redeployed to. Many of the respondents continued to engage in professional development opportunities, maintaining self-awareness, self-motivation and a desire to learn and progress.

These respondents demonstrated resilience towards building competence, in the face of uncertainty and change. This is not just evident in this survey but portrayed across the CSP profession, through sharing redeployment stories on the CSP website and UK-wide prevalence of webinars.

The concept of digital competence was represented in all domains of this survey. Clinicians, educators and researchers portrayed a universal shift to virtual platforms, describing significant learning curves and variable technology capabilities, with limited access to digital training. Traditional strategies to enhance competency and advance others through educational events, mentorship and supervision were also delivered virtually. Furthermore, virtual platforms were imposed upon children, young people and their families who were perceived to experience similar challenges around resources and capabilities. Due to these unprecedented and often unmet digital competencies, respondents questioned the 'value' of virtual platforms and raised significant concerns about the safety and effectiveness of practice, particularly towards vulnerable patient groups requiring continuous physiotherapy input. Furthermore, unknown impact of virtual therapy provision was emphasised in respondent accounts of practice challenges during COVID-19. It is important to consider how digital competence influences the perceived digital 'value' and highlights essential universal training needs to embrace digital physiotherapy in collective perception of professional identity.

Collaboration: Where do 'I' belong?

Collaboration here is defined as the process of building and maintaining links between individuals and within communities (Walters 2016). It was broadly perceived that collaborations and interactions were important for individual's professional identity, including collaborations with children, young people and their families. These relationships were often regarded as facilitating the trajectory of service delivery and practice re-development. Communities of practice (with team members and team leaders) and learning communities (supervisors, peers and mentors) were found to be important and often interconnected. The shift to virtual environments of practice and learning provided an opportunity to engage with wider networks, often beyond teams and departments, opening broader access to national and international collaborations. It gave the opportunity to broaden communities of practice, widen professional learning groups and research networks. The latter highlighted the importance of strengthening academic-clinical partnerships to ensure academic contribution is driven by clinical need and facilitating the research-to-practice knowledge transfer.

The pursuit of staying connected with colleagues through technology posed serious challenges for many respondents. Challenges to collaborate contributed to destabilisation of teams and informal communities of practice and learning, posing a threat to professional identity and a broader sense of belonging. Moreover, the analysis revealed that connections with other paediatric physiotherapists, with patients and their families, and other learners were valued beyond their driving impact on developing practice, skills and delivering care, but were important to well-being and self-esteem of paediatric physiotherapists as individuals.

Adaptability – How do ‘I’ adapt?

Adaptability here is defined as the ability to adjust to new conditions (CSP 2011b). Transformation of practice, learning and research conditions were posed by the major unprecedented change to service delivery, health policy and workforce strategy mediated by technology and enforced in an extremely short period of time. The survey respondents reported various ways that rapid change impacted on paediatric physiotherapy practice: it was often considered a challenge to service provision and reorganisation of practice; yet it has given rise to unique opportunities for innovation and advancement. Paediatric physiotherapists’ have demonstrated adaptability, driven by their responsiveness to population needs (whether within paediatric service redesign or transferability of skills into other practice areas including adults) and negotiation of work-life balance. The flexibility of the latter has been unanimously shown to be an important factor contributing to physiotherapists’ wellbeing and enhanced the ability to adapt to changing practice demands.

Whether the changes were positive or negative in nature the professionals still had to show capacity to adapt, regardless of the effect on professional identity. The magnitude of changes posed discord between respondent expectations of practice, professional standards, and workplace reality. Encouragingly, findings indicated that paediatric physiotherapists were predominantly progress focused. Practice gaps and barriers were not only recognised, but frequently already addressed with suitable methodologies and tools (including educational, research, practice-specific techniques). The importance of focused and compassionate leadership was recognised as a strong facilitator of adaptability which resulted in acceptance of new ways of working. The question of sustainability of this change posed by paediatric physiotherapists cannot be ignored. The ability to adapt and seek new ways of working must not only be celebrated and promoted, but supported by policy, investment and training for change to be sustainable. Sustainability will require more than just willingness of frontline staff but will have to be supported by investment, policy, training to support professionals.

Authenticity – Am ‘I’ a real practitioner?

Authenticity here can be defined as a set of beliefs and perceptions that respondents expressed about themselves as practitioners (Wong and Cummings 2009). Analysis suggested that most paediatric physiotherapists perceive their profession and specialism as a “hands-on” trade, constructed by myriad of psychomotor skills rooted in practical learning and interpersonal physical contact. This perception was found to be deeply embedded in collective professional identity. The shift to virtual environments had an impact on how professionals perceived their roles and the quality of delivered outputs (whether it was patients’ care, clinical education or research). Physiotherapists often challenged the value of the ‘on-screen’ therapist. Discrepancy between perception of self as a hands-on therapist versus practice reality during the pandemic has been a source of strong internal conflict. Analysis has shown that this conflict was amongst the largest threats to the paediatric physiotherapists’ professional identity. The active and favourable engagement with technology during practice change has been noted as a positive driver of identity transformation or realignment within this dimension, emphasising the roles of physiotherapists as facilitators and teachers which extend beyond the ‘hands-on’ treatment sessions.

Another aspect of the authentic practitioner was linked to the paediatric specialism and subspecialties within it. Necessitated by the redeployment or service pressures, paediatric physiotherapists often moved away from their specialist knowledge and expertise in conditions of children and young people, to support areas of clinical need in adult populations, respiratory specialities, and acute hospital settings. This was often perceived as abandoning specialism and was a destabilising factor across the domains. Autonomy of practice and learning was found to be important in maintaining the links with specialism and reiterating the authenticity of self as a physiotherapist and evoking confidence to challenge practice in clinical and academic settings. Efforts to make autonomous learning choices, engage in reorganisation of practice and translate guidance of governing bodies was assuring authenticity in times of redeployment and practice transformation.

Ethos – What do ‘I’ believe are my attitudes and aspirations?

Ethos here is understood as a set of attitudes and beliefs. Analysis has shown that patient-centredness is at the heart of the respondents’ ethos of practice. It forms an internal compass tuned around the principle of caring, regulating and shaping practice. Altruistic aspirations to care for those in need and to go the extra mile in professional actions are inherent qualities of healthcare professions and professional role modelling (Jones 2002). These attributes were restricted in time of the highly contagious pandemic. Physiotherapists’ efforts to continue to interact, understand and respond to children’s needs holistically were underpinned by profound safety concerns at several levels. Firstly, there were concerns about maintaining professional standards for interactions - safety of patients, colleagues, students, but also professional’s own safety, including loved ones. Secondly, there were concerns about the outputs of these interactions i.e. delivery of ‘products’ whether it was patients’ care, educational resources or services of suboptimal quality.

Professional resilience of paediatric physiotherapists was apparent in times of redeployment, cessation of services, understaffing, new learning needs and new service user needs. The role of physiotherapists is often described as encouraging resilience in patients, it is in fact increasingly recognised as a protective factor for population’s health and well-being (Department of Health 2011, CSP 2014). Here however, analysis of paediatric physiotherapists’ accounts identified the ‘resilient professional practice’ that comes from within the profession, motivated by compassion, courage and integrity. It appears that the resilient professional practice is not a concept that emerged over-night, but the ethos that is cultivated within professional identity throughout the lifespan of practice, established on the foundations of research and ongoing professional learning.

The significance of research, clinical expertise and evidence-based practice was emphasised by respondents during times of uncertainty and rapid service transformation. Healthcare population safety, satisfaction and effectiveness of care came under scrutiny by clinicians and researchers alike, accompanied by a desire to reflect on and understand the impact of practice changes. This extended to reflection of oneself, in which a commitment to continuing professional learning was preserved alongside rapidly evolving healthcare transformations.

In summary...

The national survey of APCP members was delivered to explore and further understand the changes, opportunities and challenges that paediatric physiotherapists faced during the time of the COVID-19 pandemic. The authors recognise the generous accounts of personal and professional experiences of these incredibly challenging times and have presented this survey in a series to give due attention to the information shared. Findings document the breadth of COVID-19 impacts on healthcare, education and research settings, professional practice and personal lives of the respondents. Results highlight key drivers (including positive relationships, compassionate leadership that encourages autonomy, training and educational opportunities, sense of work-life balance), aligning with the original values of the APCP network and informing priorities for future direction within this professional community ([[introduction link](#)]). The results also highlight key threats (like change to usual roles, new work responsibilities, ongoing professional uncertainties), that can lead to considerations of professional retirement or practice cessation and therefore loss of expertise within the paediatric physiotherapy community. The concept of professional identity requires further, scientific investigation to yield findings which can be generalised and validated within the profession and within the paediatric specialism.

Our report concludes with the Professional Identity model, which seeks to convey findings across the survey domains in a systematic and organised way. It can support readers to consider potential drivers and threats to in-practice identity and professional development, at an individual and a collective level. Authors hope that this APCP Survey Report, in its entirety can facilitate reflection of the journey through the COVID-19 crisis and its' impact on our professional identity. Are we close? Are we there yet? Not quite. But we are moving ahead, and we are travelling together.

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Dear Colleague,

The APCP is committed to providing a forum for physiotherapists working with children. During these unprecedented times it is imperative that the experiences of the membership are captured. The content of this questionnaire will be used to inform and shape the future work of the APCP.

As a member of APCP, you are invited to complete this short anonymous questionnaire. Your contribution to this survey will be of enormous value in helping to share your story during the Covid-19 pandemic. You are invited to share any aspect of your experience that you feel will be of interest to other paediatric physiotherapists.

The responses to this survey will be shared with APCP members and the wider CSP community. Participation is voluntary and you may withdraw at any time. The information you provide will remain confidential and anonymous at all times.

If you have any further comments or queries regarding this survey please contact office@apcp.org.uk

Thank you for taking the time to contribute to this piece of work

Section 1

Background

Please specify your speciality within paediatric physiotherapy

Respiratory	Neonatal
MSK	Neurodisability
Neuromuscular	Independent/private sector
Education/ research	Other

Please specify your job role band (if applicable)

Band 5

Band 6

Band 7

Band 8

Please specify if your employer is NHS, private sector, charitable or academic

NHS

Charity

Academic

Independent/ Private Sector

Please specify if you work within the primary, secondary, tertiary or other sector

Primary/ Community

Secondary/ DGH

Tertiary/ Specialist centre

Please specify the UK region in which you work

Scotland

Wales

Northern Ireland

England - North East & Yorkshire

England - North West

England - East of England

England - Midlands

England - London

England - South East

England - South West

Section 2

Your role during Covid-19?

Has your role changed as a result of Covid-19?

YES

NO

What have been the greatest challenges to the change in your role?

What has been positive or worked well?

Have you felt supported in your role during Covid-19?

What were/ are the implications of Covid-19 for your usual role?

What has helped you adapt to new ways of working?

Section 3

Caseload Management

What has been your experience of managing your caseload during this period?

Were you / are you able to continue seeing patients face-to-face?

What changes have you had to make in managing your caseload during this period

Section 4

Technology

Has the use of technology changed within your role over the past 3 months?

YES

NO

Please specify what technology (e.g. Zoom, Attend Anywhere) you use and for what purpose

Please share any technology related challenges that you have experienced during this period

Please share any technology related opportunities that you have experienced during this period

Will the use of technology influence your practice in the future (how you assess and deliver treatment)?

Section 6

Continuous Professional Development

How has your access to CPD changed during this period?

Do you access any online training resources?

Please share any challenges in accessing CPD during this period

Please share any opportunities in accessing CPD during this period

Please list any suggestions for the APCP on-line educational events i.e. webinars you would like to access in the future.

Section 7

Does your role involve education (i.e. clinical education, lecturing or research)?

YES

NO

How has your education / research role changed within this period?

Please share any education / research **challenges you have experienced during this period**

Please share any education / research **opportunities you have experienced during this period**

Section 5

Well-being

Our working lives can often present challenges especially in times of change. The Covid-19 outbreak has led to massive changes to our professional and personal lives. Can you share the effect this situation has had on your wellbeing?

Section 8

Moving forwards

What changes/ ways of working would you like to retain for future practice and what have you changed/ learned that will continue to influence your practice?

Please share any further comments or reflections

Section 9

Contact details

Email

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