Impact of the initial COVID-19 response in the UK on speech and language therapy services: a nationwide survey of practice

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Abstract

Purpose: Globally 'non-urgent' health care services were ceased in response to the 2020 outbreak of COVID-19, until 2021 where restrictions were lifted. In the UK, this included speech and language therapy services. The implications of COVID-19 restrictions have not been explored. This study aimed to examine the impact of the UK's COVID-19 response on speech and language therapy services.

Methodology: An online survey of practice of speech and language therapists (SLTs) in the UK was undertaken. This explored SLTs' perceptions of the demand on their services at a time where COVID-19 restrictions had been lifted, compared with before the onset of the pandemic. Analysis was completed using descriptive statistics and content analysis.

Findings: Respondents were mostly employed by the UK's National Health Service (NHS) or the private sector. Many participants reported that demands on their service had increased compared with before the onset of the pandemic. Needing to address the backlog of cases arising from shutdowns was the main reason for this. Contributing factors included staffing issues and redeployment. Service users were consequently waiting longer for NHS therapy. Private therapy providers reported increased demand, which they directly attributed to these NHS challenges.

Originality: This presents the only focused account of the impact of COVID-19 on speech and language therapy services in the UK. It has identified that services continue to face significant challenges and indicates a two-tier system is emerging. Healthcare system leaders must work with service managers and clinicians to create solutions and prevent the system from being overwhelmed.

Key words

speech and language therapy, COVID-19, service provision, NHS, redeployment, two-tier

Article type:

research article

Introduction

In many countries worldwide, the onset of COVID-19 in late 2019 and early 2020 resulted in drastic efforts within healthcare services to manage unprecedented increases in hospital admissions of those acutely ill with the virus at the same time as curtailing the transmission of COVID-19. In many nations, this resulted in the suspension of or restricted access to 'non-essential' or non-urgent services following recommendations from the World Health Organisation (WHO) (World Health Organization, 2020), with governmental restrictions imposed, such as lockdowns and social distancing measures.

In the UK, from March 2020, many National Health Service (NHS) functions were suspended, and clinical staff were then redeployed or upskilled to fulfil urgent clinical duties ranging from supporting patients in critical care, to serving as hospital porters (NHS England, 2020). Speech and language therapists (SLTs) in the UK contributed to this effort and thus services underwent significant change and, in many places, reduction. Whilst the health of people infected with COVID-19 and those most

vulnerable to infection was prioritised, a negative impact on those requiring *other* health and care services was inevitable (Topriceanu *et al.*, 2021).

Health and social care services were delivered minimally, alternatively and intermittently in response to numerous 'waves' of the virus during this period (British Medical Association, 2023), until when in July 2021, all restrictions on social contact were removed and every sector was re-opened in the UK. Yet by October 2021, the Omicron COVID-19 variant began to spread, and whilst businesses were protected, in November, face masks were mandatory for public transport and inside shops (Institute for Government, 2022). Thus, in the UK, the time between July-October 2021 signified the closest to 'normal' times that had been witnessed in a year and a half since the onset of COVID-19.

This article describes a UK-wide survey of practice of SLT services at this point, approximately 18 months after the initial COVID-19 lockdown in March 2020, at a time where restrictions had been lifted. The study explored the demands placed upon services, the perceived reasons underlying the level of demand and the consequences of such demand. The originality of this paper is enhanced by the authenticity of the clinician voice. The aim of sharing these findings is to support organisational change through signalling a call to action for health system leaders, service managers, clinicians, commissioners, and policymakers to ensure services are fit for purpose and health inequalities and inequities are mitigated.

Background

The knock-on effects of acute and urgent stages of the pandemic and the health care services' responses to it were vast. The acceleration of telehealth (referring to all types of health service delivered remotely or virtually using information technology) triggered by COVID-19, across the globe, was significant (Doraiswamy *et al.*, 2020). In the UK, the NHS swiftly adopted telehealth – referred to as its 'digital first' approach- that had been promised for some time in its long-term plan (NHS, 2019). . Where staff were available and not redeployed, many services were indeed changed to telehealth (NHS Digital, 2021) , enabling some continuity of access. However, implementation and provision of

quality services via telehealth is not without its own set of challenges including implementation costs, technology acceptance, and access to equipment (Kalal *et al.*, 2022). Allied health professionals share concerns that a mainstream telehealth approach may exacerbate inequalities of access to services for some populations due to digital poverty and/or digital literacy (Eddison *et al.*, 2022) as well as simply being inadequate for certain kinds of health services, for example the need for physical touch during physiotherapy (Ayotunde Aderonmu, 2020). Similar concerns around access and suitability of telehealth have been raised by SLTs in terms of patient safety in relation to dysphagia and risk of choking though this issue is less reported in the literature (Malandraki *et al.*, 2021). Nonetheless, the uptake of telehealth in speech and language therapy inevitably increased during the pandemic in the UK (Charlton *et al.*, 2023; Jayes *et al.*, 2022; Patel *et al.*, 2022; Puttasiddaiah *et al.*, 2023; Southby *et al.*, 2021) and globally (Furlong and Serry, 2023; Gallant *et al.*, 2023; Shahouzaie and Gholamiyan Arefi, 2022).

Evidence from across the globe suggests that telehealth alone was not sufficient to respond to all (non-COVID-19 related) health care needs during (and after) the initial COVID-19 healthcare response. Studies have shown reductions and delays in patients accessing services ranging from paediatric cardiology and respiratory diseases to maternity health and HIV services (Choubey *et al.*, 2021; Monroe *et al.*, 2022; Sinha *et al.*, 2022; Teo *et al.*, 2022; Yamaguchi *et al.*, 2022).Delays to diagnoses have also been evidenced in a wide range of other physical and mental health conditions (Williams *et al.*, 2020) and neurodevelopmental disorders (Spain *et al.*, 2022). Further, people with existing disabilities have also been particularly vulnerable to disrupted care (Schwartz *et al.*, 2021).

The UK was not immune to these challenges, despite early warnings and clear forecasts on the scale of the impending problem (Macdonald *et al.*, 2020) . For example, the number of people reporting to emergency services with suspected strokes in the lockdown period was observed to be considerably lower than expected (Padmanabhan *et al.*, 2021) and there have been reductions in urgent cancer referrals and first treatments (Watt *et al.*, 2022). Restricted access to occupational therapy in this period has also been illustrated (Ward, 2020) and there has been a noted decline in

physiotherapy provision (Livingstone *et al.*, 2021). Indeed the non-availability of services resulting from the onset of COVID-19 is reported across health and medicine sectors, worldwide (Núñez *et al.*, 2021).

Earlier work carried out in the acute stages of the pandemic response by the Royal College of Speech and Language Therapists (RCSLT), the professional body for SLTs in the UK, similarly indicated that there was an overall reduction in the provision of speech and language therapy during this time despite an increase in telehealth adoption (Chadd *et al.*, 2021). Other changes in provision that were reported included an increase in advice being provided to others compared with usual practice, which is an example of a therapeutic activity typically performed within 'universal' speech and language therapy models (where SLTs may not directly support an individual but provide expertise to others who will provide supportive environments for communication or swallowing (Royal College of Speech and Language Therapists, 2021a)

Evidence from across the globe illustrated a similar picture. For example, in Saudi Arabia, almost three quarters of caregivers partaking in survey reported that services for their children had been entirely suspended (Awaji *et al.*, 2021) and in South Africa, SLTs frequently reported stopping of outpatient services (Adams *et al.*, 2021).

An article published in the *Health Service Journal* – widely read by NHS healthcare leaders in the UK - contained leaked information on NHS England waiting lists and reported there was a "backlog of more than 74,300 young people for speech and language therapy" (Townsend, 2022). As a recent report on the 'State of Care' in England from the Care Quality Commission (the regulator of health and social care in England) plainly states: "Our health and care system is in gridlock" highlighting a "tsunami of unmet need" across sectors (Care Quality Commission, 2022).

At the same time, it is vital to acknowledge that patients were not the only group affected by healthcare services' responses to COVID-19. Internationally, healthcare workers and staff became a focus of enquiry, with many studies illustrating a negative impact of the pandemic on 'front-line' clinicians' wellbeing (Cabarkapa *et al.*, 2020; De

Kock *et al.*, 2021; Singh *et al.*, 2021; Vizheh *et al.*, 2020) which echo that from reports by RCSLT regarding SLTs' wellbeing during the acute stages of the pandemic (Royal College of Speech and Language Therapists, 2021b). Yet, in the UK, this was not a novel issue. A year *prior* to the onset of COVID-19, a Commission on NHS Staff Mental Wellbeing had set out a series of recommendations in response to already identified mental health needs of NHS staff (Health Education England, 2019). Additionally, the NHS staffing issues exacerbated by the pandemic also received public (see example from ITV News, 2022) and scholarly attention, with reports highlighting staffing 'crises' arising from absence, resignations and recruitment difficulties (Abuown *et al.*, 2021; Iacobucci, 2022; McCay, 2022) though it should be noted that again, these issues existed long before COVID-19; the 2019 NHS Long Term Plan explicitly referred to SLTs being in short supply (NHS, 2019). Thus, staff wellbeing and staffing issues have a legacy of being challenging in the NHS and speech and language therapy more specifically, with both likely to be vulnerable to additional strain since the onset of COVID-19.

Evidence suggests that the negative consequences of the compromises made in the initial response to COVID-19 are wide-reaching and potentially longstanding, thus, further information and possibly action is required. UK policy has begun to offer some potential solutions for addressing the crisis in both volume and severity of patient needs and staffing: its 'levelling up' agenda provides promises of additional funding and resources into the NHS (Department for Levelling Up, Housing and Communities, 2022), and the 'Build Back Better' report provides a more detailed plan of how this might come to be (Department of Health and Social Care, 2022; UK Government, n.d.). Whilst these key policy papers provide ambitious promises and suggestions for change, there is a significant need for greater evidence and research on what is happening on the ground in services for organisational change efforts to be targeted in the right areas, and with the desired outcomes. Therefore, the aim of the study is to provide an account of the impacts of COVID-19 on speech and language therapy services for the purpose of influencing organisational leaders to make informed and impactful changes that benefit service users and staff.

Methods

The study as described here aligns with the reporting guidelines provided in the 'Consensus-Based Checklist for Reporting of Survey Studies (CROSS)' (Sharma *et al.*, 2021) and the 'Improving the quality of Web surveys: the Checklist for Reporting Results of Internet E-Surveys (CHERRIES)' (Eysenbach, 2004).

Ethical considerations

This study was a survey of practice run by the UK professional body for speech and language therapists, which according to the outcome of the UK's Health Research Authority decision-making tool is not considered research, and as such did not require research ethics committee approval (Health Research Authority, 2022). The study proposal and survey were reviewed and approved by the Head of Research at the professional body organisation, and the principles of ethical research were adhered to (Office for Human Research Protections, 2018). Participants were provided with information about the aims of the evaluation and made aware of the use of data for the purposes of research including academic publications. They were also given information regarding their right to withdraw at any time, including their right to request the removal of any given data upon request (as much as this would be possible given the anonymised nature of data collection (ie. by deduction and estimation only). Implicit consent was provided through completion of the survey. No identifiable information was collected, except for respondents optionally providing their email address if they wanted to be contacted about project updates. These were stored in a password protected online account and were not included in the offline dataset used for analysis. Stored email addresses were deleted upon completion of the project.

Survey development

The survey formed part of a larger questionnaire designed for RCSLT members which explored the impact of COVID-19 on the profession and experiences of SLTs receiving referrals for individuals with long COVID. The second part of the survey is reported

elsewhere (article in press). For coherence, we only report here on the part exploring the impact of COVID-19 on all speech and language therapy services.

An expert working group of SLT representing a wide range of practice areas and employment was established to develop the survey. The working group developed and tested a set of questions iteratively, based on current research evidence, clinical experience and expertise. Survey content was also supported through consultations with the RCSLT Covid Advisory Group and RCSLT staff. The questions were built into an online survey (SurveyMonkey, 2021).

Questions were piloted by clinicians and other staff for content and face validity as well as usability, with item reduction taking place as required. The survey comprised nine closed questions. Five gathered information about respondents, with four questions addressing the study aims which could be answered by multiple-select of a list of possible responses (See Appendix for survey questions). All these questions were also accompanied by a space to provide additional answers which were not considered in the given list.

Survey dissemination

The survey was disseminated to the RCSLT membership (*n*=17, 689) via numerous e-communications, inviting its 15,443 registered, practising SLTs to take part. Due to limitations in the membership reporting system, it was not possible to ascertain the number practising SLTs that had opted into e-communications and therefore the exact number of target recipients is not known. The survey was also disseminated via social media and professional networks. The sampling method used was voluntary response. As we were not testing a set hypothesis or performing inferential statistics a power calculation was not necessary. However, a previous evaluation conducted by the RCSLT on the acute impact of the pandemic received 544 respondents, therefore it was hoped this response rate could be maintained. The survey was open throughout the month of October 2021.

Data analysis

For quantitative survey data, descriptive statistics were produced using Microsoft Excel. This involved calculating frequencies and proportions of respondents across various demographic variables (such as region of the UK, clinical area of work) and number and proportion of respondents indicating each answer given the survey.

The content analysis method (Krippendorff, 2018) was drawn on to analyse the qualitative data obtained through the open-ended questions, however, with some deviations. The research questions were already established prior to data collection, therefore text responses analysed were in response to specific questions within the survey. Data were interpreted in the context of the demand on speech and language therapy services, and all were categorised by the lead researcher and a secondary analyser.

Data were compiled in Excel and the read through by the researchers for familiarisation. The lead researcher assigned phrase-level categories to each response and recorded instructions for the second analysers - but withholding the specific categories they generated. The instructions suggested that phrase-level categories be developed deductively based on emergent key concepts in the data that were directly relevant to the question posed, e.g., describing a 'reason' or a 'consequence'. A category for 'irrelevance' was also suggested to capture responses that did not directly refer to the targeted question/topic (for example, if respondents asked professional enquiries, or took the opportunity to raise other research questions). Secondary analysers then independently developed and assigned phrase-level categories to each response. The lead researcher compared categories from both sets of analysis to determine agreement. Where different terminology was used to describe a similar concept, these were harmonised. For example, where one analyser had categorised a response as 'long NHS waiting lists' and another categorised the same thing as 'too long to wait for therapy in the NHS', these were considered as 'agreed' with a category of 'waiting times

in the NHS'. Discrepancies in categories were discussed and final categories agreed upon.

Frequency of categories was not counted specifically, although the organisation of data enabled the researchers to identify the more frequent and less frequent categories. The categories that were assigned to more sets of data (ie more frequent) are reported as key findings.

Results

Respondents

Six hundred and seventy-six SLTs responded to the survey. More than half the respondents were employed by the NHS (56.6%), though respondents did have a range of employers, and worked across a breadth of clinical areas. Many respondents worked in multiple clinical areas, though some areas were not well-represented (for example, critical care comprised just 1.3% of responses). Responses were received from SLTs around the UK with proportional representation in the devolved nations as well as England (Table 1). The volume of respondents represented approximately 4% of the practising SLT membership at the time.

[TABLE I HERE]

Legend: Table I. Respondent information.

Survey completion

Six hundred and thirty three (93.6% of initial participants) answered the first question asking: "Thinking about your referrals, current caseloads, wait times and other factors, compared with before the pandemic, [what] has the overall demand on your service 'been]?". Response rates remained high in proportion to eligible respondents for each question, depending on survey logic (ranging from 88.1%-97.5%) (Table 2). .

[TABLE II HERE]

Legend: Table II. Survey question response rates.

Evaluation of services

The findings from each survey question are presented in turn here, first with the breakdown of the quantitative analyses from the multi-select item answers, followed the findings from the qualitative data from the open-text boxes.

Overall demand on services

In response to the first question ('Thinking about your referrals, current caseloads, wait times and other factors, compared with before the pandemic, has the overall demand on your service…'), the largest group (49.0%) reported the demand placed on their services had increased since the pandemic, with 28.6% indicating they perceived it to have 'at least doubled' (given as a prompt in the multi-select answer options). Few respondents indicated demands had reduced (5.9%) though some suggested it was much the same (14.7%) (Figure 1).

[FIGURE 1 HERE]

Legend: Figure 1. Breakdown of respondents indicating each answer describing the current level of demand on services in comparison to before the COVID-19 pandemic.

From the qualitative data, the most frequently cited categories describing respondents' answers to this question were '*fluctuating service demand',* and '*waiting times in the NHS*'. '*Fluctuating service demand*' often included descriptions of how demand had changed in line with the different stages of the pandemic and related to different kinds of services. For example, SLTs working in acute services (for example, in hospitals) reported that at the initial stages of the pandemic the demand was significant but had reduced more recently. For those in schools, on the other hand, the demand was low initially (many respondents reported schools were shut and that their speech and language therapy service could not resume) but it was these services that were experiencing significantly high demand at this later point.

Respondents working in the independent sector often highlighted that '*waiting times in the NHS*' were having an impact on the demand on their services, where they were receiving greater numbers of referrals from service users wanting to be 'seen sooner' than possible through the NHS.

Consequences of an increase in demand

The second question asked: "Thinking about your referrals, current caseloads, wait times and other factors, compared with before the pandemic, has the overall demand on your service…". The most frequently reported consequence was 'longer waiting times' for patients to be seen by services (24.3% of all responses). Other consequences were common but to a lesser degree, including 'less face-to-face therapy given/ more remote-therapy given' (14.8%) and 'service redesign' (for example, entire redevelopment of care pathways or substantially altering a service's offer) (10.2%) (Figure 2).

[FIGURE 2 HERE]

Legend: Figure 2. Breakdown of respondents indicating each answer describing the consequences following an increased demand on services following the initial onset of the COVID-19 pandemic.

The qualitative data highlighted the impact on staff that an increased in demand had. Frequently, '*Staff wellbeing*' and '*Staffing related issues'* were highlighted. Respondents described the increased pressure negatively affected their wellbeing and causing 'staff burnout'. Several described that they had left their jobs because of these pressures, and others remarked that many staff were doing a lot of unpaid overtime to attempt to meet the demands.

'S*ervice delivery model changes'* were also commonly referred to, which – distinct from complete redesign - described consequences such as an increase in the use of 'consultative' or 'universal' models, where speech and language therapy activities are outside of individualised care. Other changes to provision included greater use of

'delegation' to assistants or 'advice only' provision, where SLTs discharge service users without providing a programme of targeted therapy.

Factors contributing to an increase in demand

The final question was asked respondents: 'What do you understand to be contributing factors to this increased demand?' The most identified factors contributing to increase in demand were 'addressing the backlog' (24.0%) and 'an increase in individuals requiring speech and language therapy due to deterioration/exacerbation of needs during lockdown' (22.7%). Staff-related issues collectively comprised over 40% of responses which included staff sickness related to acute COVID-19 infection (8.1%), long-term sickness related to the pandemic or shielding(7.8%), an increase in vacancies due to staff leaving(11.1%) and difficulty recruiting to vacancies(13.0%) (Figure 3).

[FIGURE 3 HERE]

Legend: Figure 3. Breakdown of respondents indicating each answer describing the factors contributing to an increased demand on services following the initial onset of the COVID-19 pandemic.

The open-text data highlighted again concerns specifically from the independent sector who experienced an increase in demand due to 'private [sector] compensating for public [sector]'. This included greater volumes of referrals from individuals seeking intervention whilst waiting for NHS services, as well as people seeking face-to-face therapy when the NHS had only offered remotely delivered therapy. Another frequent code '*redeployment of SLTs in the NHS*' described how reallocating the profession's expertise to roles combating the virus in the acute response had a knock-on effect to their speech and language therapy service capacity and capability at a later point.

Discussion

This study has shown that the demand placed upon speech language therapy services in the UK since the initial onset of the COVID-19 pandemic has radically changed. The

change has been variable throughout the course of the pandemic, but nonetheless, this study highlights that at 18 months post initial response, *overall*, speech and language therapy services were grappling with an unprecedented high level of demand and were struggling to meet the needs of those who require their support. Whilst some of these issues have been highlighted in policy and the press, this study provides on-the-ground insight, allowing for a more nuanced understanding of where the specific issues lie. Our findings have exposed not just input and output factors relating to waiting lists or the type of service provision but pinpoints some specific forces that are unlikely to be captured through typical service audits, such as staff wellbeing and exacerbation of service-user needs during the lockdown periods. Furthermore, it is important to contextualise these findings in the knowledge that the system was already struggling prior to the pandemic, thus our evaluation suggests that not only have these challenges been exacerbated, but a range of new issues have also made the situation much worse.

Therefore, there is a significant need for change. The evidence gathered through this survey of practice suggests areas for intervention to improve the situation. For example, the evidence pertaining to the fluctuation in demand across the period of the pandemic is useful for forward planning for instances where similar severe responses may be executed, such as a new pandemic, climate disasters or warfare. In so doing, we can anticipate the knock-on effects on different kinds of services and thus plan for this more effectively. Further research monitoring the ongoing status of speech and language therapy capacity and demand as the nation moves into the endemic stage of COVID-19 will be valuable.

One clearly identified contributing factor to an imbalance in demand and supply, was the redeployment of SLTs in the acute response. Since the survey took place, the RCSLT published a statement on redeployment explicitly confirming that it “does not support the redeployment of speech and language therapists away from services that are already under extreme pressure as they attempt to restore services, reduce waiting lists and meet targets” (Royal College of Speech and Language Therapists, 2021c), and based on this evidence, we would encourage health service leaders and managers to heed this advice.

Other substantial solutions are also be required, particularly to address the staffing crises, which according to The King's Fund (an independent UK charity) may be the "key limiting factor" on NHS efficiency (The King's Fund, 2022). Recent work by the RCSLT has further signalled a staffing predicament, as a survey revealed the SLT vacancy rate across the UK was 23%, with most SLT respondents specifying that recruitment had worsened since 2020 ((Royal College of Speech and Language Therapists, 2023). Interim or 'stop-gap' measures may be warranted but should not be without sustainable longer-term strategies. Notably, our findings relating to reduced staff wellbeing and increased resignations in the NHS suggest that there were reasons intrinsic to the NHS during the COVID-19 response that worsened a pre-existing crises. These findings resonate with evidence of the wider health and social care workforce (House of Commons Health and Social Care Committee, 2021). Collectively, the evidence highlights that while interventions that target workforce supply are valuable, there is an urgency to address other retention factors which may include for example, greater valuing of staff, autonomy, and targeted wage increases (Bimpong *et al.*, 2020). Though the occupational wellbeing of SLTs has been explored previously (Ewen *et al.*, 2021), it is timely to revisit this, given our findings and those from others, to explore how wellbeing may link to staffing issues.

Interestingly, our study did identify that some services experienced a reduction in or maintenance of their level of demand, following the pandemic. This group comprised a little over 20% of the sample, therefore, warrants exploration. Post-hoc data inspection indicated that respondents indicating as such were working across a range of clinical settings and age groups; some felt they were 'waiting' to address a backlog – thus perhaps could still be defined by being in 'high demand'. Others reported a "levelling off" in the period that the survey was undertaken, following a rapid decline in demand in the acute response, an overwhelming demand in the 6 months or so after, and a period of greater stability in the present Other reports identified a similar pattern in the initial COVID-19 response (for example, see Health Foundation, 2020). Additionally, a report from the Royal College of Occupational Therapists (RCOT) indicated that for some occupational therapists (OTs), some of the services that had closed in acute response

had simply not restarted (Royal College of Occupational Therapists, 2020). Since OTs and SLTs often work closely together, this may indeed be the case for some of our respondents thus presumably the demand may be perceived to have 'decreased'. . Other possible explanations involve a lack of referrals into the services made by others (e.g. Health visitors or GPs), reduced awareness or understanding of speech and language therapy arising from the termination of public health initiatives, barriers to accessing care from the patient perspective – all of which raise concerns. Of course, these services may also simply be well-managed, designed and appropriately resourced. More research from specific types of speech and language therapy services and the effect of COVID-19 may be helpful here, which could unpack nuanced factors contributing to the varied levels of demand. Understanding the precise nature of the services reporting these results would make for highly valuable further research, especially if it highlights solutions that could be implemented in others, or if it signals other areas requiring improvement.

The evaluation has also highlighted a specific concern around inequity and inequality, where the independent SLT sector appears to be compensating for perceived limitations of current NHS provision to a degree. Whilst this is, of course, beneficial for those who can afford SLT services, it is not benign in the risk that this dependence poses for the less advantaged, and the chances of perpetuating health inequality. This resonates with findings from elsewhere in the UK health sector. The Institute for Public Policy Research (IPPR) describe this observed 'trend' of supplementing 'low quality' NHS services following the pandemic with private healthcare as the 'opt-out'. The IPRR warn that, without action, they believe the NHS could turn into a two-tier system (akin to dentistry in the UK, where anything beyond a basic level of care is at a cost to the individual) which has a direct impact on the less privileged (Institute of Public Policy Research, 2022). This may be one aspect contributing to health inequalities created or exacerbated by the pandemic, but research also indicates that the disruption to healthcare services alone disproportionately affected – and thus increased inequalities for – the more vulnerable parts of society (Coronini-Cronberg *et al.*, 2020; Maddock *et al.*, 2022). Though actioning health inequalities is of strategic importance to the NHS

(NHS, 2019), understanding the currently highly complex interplay between private and public sectors must be further explored and understood by those healthcare organisations to develop effective ways of mitigating inequalities, including within speech and language therapy.

A unique finding from this evaluation is that it indicates there may have been an increase in the application of universal speech and language therapy services. 'Universal services' are defined variably, but overall describe ways of working to improve the lives of those with speech, language, communication and swallowing needs that are 'outside of individualised care' (Royal College of Speech and Language Therapists, 2021a)This may be through SLTs training others to embed therapy approaches within other contexts (for example, teachers to employ vocabulary enrichment in their lessons) or on even wider scales such as public health initiatives (for example, working on creating a communication inclusive society). Universal services are often considered as beneficial in extending the reach of SLT expertise, which can be particularly valuable for individuals and families who may experiences barriers to accessing services otherwise, underserved by other models or who have unidentified needs. Universal services are often contrasted with 'targeted' or 'specialist' services, which describe more individualised therapy (Law *et al.*, 2013). The evidence-base for universal approaches is limited and not unequivocal, not least due to challenges in their definition and implementation, and in measuring its effects (Ebbels *et al.*, 2019; Gallagher *et al.*, 2022) and the volume of work is extremely small in comparison to that done exploring the effectiveness of 'targeted' and 'specialist' approaches. However, there is some indication that universal interventions are potentially effective (for example, McCartney *et al.*, 2015).. However, a common theme in the literature on universal services is that scholars frequently recommend that it should *not be used as a replacement* for direct therapy in stretched services, when a targeted or specialist approach is the most appropriate (Law et al. 2013). More research is required that fully explores the benefits of universal services, and how speech and language therapy services can be organised to ensure a balance across these delivery models, particularly in times of austerity and continued recovery of services following the initial onset of COVID-19.

Thus, the finding that SLTs were increasingly applying these approaches to manage the demand placed upon their services is potentially not optimal – yet, to a degree, understandable as a short-term solution to dealing with current pressures with little option of immediate alternatives. However, this change in approach raises questions in terms of the long-term needs and outcomes for the individuals with a range of needs that may be missing out on individualised therapy, and/or a lack of timely intervention. Whilst greater funding and resource for SLT may be an obvious way to resolve this, given the staffing challenges already described, it is unlikely that this would be sufficient in isolation. Scholars and practitioners advocate for more substantial action for long-term improvements in healthcare: a systems approach (Komashie *et al.*, 2021) that includes integrated workforce planning (Anderson *et al.*, 2021) and that is sensitive to local needs and challenges (O'Sullivan *et al.*, 2020). These are all highly relevant for the current context of speech and language therapy services which may benefit from these higher-level interventions. SLTs themselves can consider demand and capacity in their local area to design an evidence-based service – which may provide a different profile of need post-pandemic. Health organisations may therefore also benefit from investing in greater leadership development training, including for SLTs, which would support the evaluation and implementation of new local service structures. Further research to establish effective service delivery models, designs, and interventions at all levels in speech and language therapy would be valuable to assist in selecting the optimal changes to implement to improve services.

Limitations

This study was an online survey of practice, therefore the results need to be interpreted with a degree of caution. Online surveys have their own inherent biases (Andrade, 2020) which are likely to be perpetuated by the voluntary / opt-in nature of the survey. Whilst the number of respondents to the survey was quite high, as a proportion of the practising speech language therapy profession this was relatively low (roughly 4%). However, some of these respondents were completing the survey on behalf of their team or Trust therefore it is likely that the relative number of speech and language therapy services represented is much higher. In addition to this, the respondents

represented a spread of regions across the UK, different types of services, clinical areas supported and service providers, which increases the relevance, and thus confidence, in the interpretation of the results. Understanding the consequences of the COVID-19 response on speech and language therapy services from the perspective of stakeholders other than SLTs is valuable, and such information would have provided greater context for interpreting our survey findings. There are some examples of this in the literature, such Southby et al. who examined perspectives of parents/caregivers of children born with cleft palate on speech and language therapy services following COVID-19 (Southby *et al.*, 2021). Their findings resonate with ours, including that parents reported a significant challenge to accessing therapy in the immediate lockdown period, but that there was variation in access across the different waves of the virus. Bringing together different stakeholder perspectives from the same service(s) would be a valuable avenue of inquiry to fulfil this research gap and inform provide a richer and nuanced understanding of the longer lasting impacts.

A further limitation of the work was that there was little to no opportunity in the survey for respondents to report positive impacts of the pandemic response. Other research has identified that SLTs employed changes to practice in the initial response to COVID-19 that were favourable and that they wish to maintain, for example an increase in use of telehealth and greater contact with service user's families (Morgan *et al.*, 2023). A recent survey of practice of UK SLTs specifically explores the changes in practice around telehealth since COVID-19, and signals a positive shift in SLTs' recognition and acceptance of technology use in practice (Patel *et al.*, 2022). Extending the scope of our survey to capture positive effects way would have strengthened the study, and enriched the contribution through potentially offering new solutions that could be applied in clinical practice. Further inquiry into sustained innovations in health care management and practice would be valuable for services tackling persisting challenges arising from the initial COVID-19 response.

Finally, the questions asked in the survey relied on a subjective judgement of current services compared with pre-pandemic services, which may be vulnerable to biases arising from recency effects or simply the respondent's current mood or status.

Nonetheless, because the responses were analysed according to frequency or commonality, this potential bias is somewhat mitigated as we are looking at the *overall* picture of the *overall* profession.

In conclusion, this survey of practice has contributed to the important body of literature emerging about the impact, and potential long-lasting effect, of the COVID-19 response on health services and is the first to specifically expose the experiences of SLTs in the UK within this timeframe. It has highlighted some key considerations for the planning of services especially in the ongoing recovery period from the pandemic which include interventions for staff retention and creating a positive culture and a systems level approach to improvement, with careful workforce planning and local service redesign informed by the evidence-base and delivered by skilled leaders. The findings also draw some important attention to the increase in people accessing the private speech and language therapy sector, effectively operating as a two-tier health system, which has important implications for health inequity. It is hoped that the lessons learnt through this study can be used to support decision-making by policy makers and those responsible for the organisation of healthcare services.

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