



Understanding the need for and provision of speech and language therapy services for individuals with post-COVID syndrome in the UK

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Executive summary

What we know

Post-COVID syndrome (also known as Long COVID) is estimated to be currently affecting 1.7% of the UK population (ONS, 2021). Emerging research highlights that a substantial portion of these individuals may experience difficulties that are best supported by speech and language therapists (SLTs), including: difficulties finding words, changes to their voice, difficulties with swallowing and abnormal feelings in the throat (Seeble et al, 2021, Davis et al, 2021, Grahem et al, 2021, Blomberg et al, 2021). The provision of services for individuals with post-COVID syndrome in the UK is disparate, and access to specialists including SLTs is inconsistent across the nations, creating concern that there is a degree of unmet need which may result in negative outcomes for these individuals. An earlier survey of SLTs in the UK undertaken by the Royal College of Speech and Language Therapists (RCSLT) (RCSLT, 2021a) substantiated this, highlighting that speech and language therapy services for individuals with post-COVID syndrome are varied, as are the level of referrals received by SLTs, and the specific needs with which individuals present.

To build on the existing evidence regarding post-COVID syndrome and speech and language therapy, and to address some of its gaps, the RCSLT undertook a survey of practising SLTs in the UK throughout October 2021. The findings reveal that:

- **Over 86%** of SLTs who are seeing individuals with post-COVID syndrome have not received any additional or dedicated funding/provision, and are trying to absorb this into their 'everyday' services. Very few are operating in specially commissioned services.
- **More than half** of respondents reported concerns that they could not meet these individuals' needs in the timeframe expected of their service.
- Dysphagia (difficulties with swallowing) and dysphonia (difficulties with voice) made up **2/3 of the symptoms** that were reported to be seen in this group.
- **Almost 70%** of individuals being seen by SLTs for post-COVID syndrome are of working age.
- **Over 80%** believed that individuals' speech and language therapy needs impacted their mental wellbeing and ability to carry out everyday activities (including engaging with work or education).

- **SLTs' unique clinical knowledge**, commitment to person-centred care and specialist interpersonal skills are enablers to quality and meaningful rehabilitation for individuals with post-COVID syndrome.
- **SLTs face barriers to delivering quality care**, which include ensuring all individuals who need speech and language therapy get access to services, and the obstacles encountered in navigating the **complex and inconsistent care pathways** for these individuals when seen.

These survey findings build on the emerging evidence base and elaborate on the findings from our earlier exploration of post-COVID syndrome. They bring to light the issue of **variation in provision** of speech and language therapy for individuals with post-COVID syndrome. They highlight the **essential role of SLTs** in the assessment, intervention, and management of individuals with post-COVID syndrome. Furthermore, findings expose the **unique value of SLTs' expertise** in the management of these individuals, which may have profound economic benefits, emphasising a return on investment.

In this document, the RCSLT outlines recommendations for immediate and dedicated changes, to ensure that those with speech and language therapy needs associated with post-COVID syndrome receive the highest quality support and achieve the best outcomes, so they can live the life they wish to live.

We call for:

1. National and local policy makers to highlight the breadth and extent of needs (including speech and language therapy needs) of individuals with post-COVID syndrome and the professionals best placed to support them
2. Service commissioners to provide better support to individuals with post-COVID syndrome, including through speech and language therapy; to expand post-COVID syndrome services to accommodate this; and to ensure these services are appropriately resourced across every local area
3. Service managers to embed systems for routine and robust data collection about individuals with post-COVID syndrome, as well as ensuring speech and language therapists have the time, knowledge and skills to use this data
4. National policy makers and local health leaders to invest in and nurture the clinical workforce, including speech and language therapists
5. Researchers and research funders to focus on speech and language therapy needs and interventions in post-COVID syndrome in local and large-scale projects

Acknowledgements

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An extended thank you goes to the RCSLT members who voluntarily joined the expert working group: Gemma Clunie, Kate Harrall and Sophie Chalmers. Their dedication to the work, including their support in designing the survey, data analysis and production of the report, was invaluable.

Definitions

'Speech and language therapy needs'

Throughout this report, where we refer to 'speech and language therapy needs', we use the term to encompass all speech and language therapy needs, including eating and drinking difficulties, voice difficulties and upper airway disorders. Examples of speech and language therapy needs referred to within this report include:

- Dysphagia: eating, drinking and/or swallowing difficulties
- Dysphonia: changes in the way that the voice sounds, eg hoarse, weak and/or strained
- Dysarthria: difficulties with producing clear, intelligible speech sounds because of damage to the muscles used to speak
- Aphasia: difficulties with understanding and using spoken and/or written language, caused by damage to the brain
- Cognitive communication disorder: changes in communication caused by cognitive changes, such as reduced attention, memory difficulties and/or impaired processing skills, which can be a part of broader cognitive difficulties
- Dyspraxia: difficulties with speaking, caused by damage to the areas of the brain that plan and co-ordinate the muscles used in speech
- Laryngeal hypersensitivity: continued irritation or feeling of irritation of the vocal cords leading to long-term or chronic coughing, changes to how the voice sounds or feels, or the feeling of a lump in the throat

- Upper airway difficulties: difficulties with breathing which can include asthma-like attacks and/or chronic coughing
- Dysfluency: difficulties with 'getting words out', often called stammering or stuttering

'Post-COVID syndrome'

There is inconsistency in the literature regarding the terminology used to refer to the longer-term symptoms experienced by people who have had COVID-19. The National Institute for Health and Care Excellence (NICE) has developed a set of definitions for use in its guidance. It uses 'post-COVID-19 syndrome' to denote:

"Signs and symptoms that develop during or after an infection consistent with COVID19, continue for more than 12 weeks and are not explained by an alternative diagnosis." (NICE NG 188)

This is the definition we have adopted here. Healthcare services in the UK are expected to implement NICE guidance, therefore to maintain consistency of approach and maximise our influence, we have opted to use 'post-COVID syndrome' throughout.

Long COVID is a term that has also been widely adopted, often by individuals with these needs themselves, and by the World Health Organization (WHO). WHO use the term to refer predominantly to symptoms present at 12 weeks or longer (WHO, 2021a). Conversely, NICE has proposed this definition for Long COVID: "Signs and symptoms that continue or develop after acute COVID-19. It includes both ongoing symptomatic COVID-19 (from 4-12 weeks) and post-COVID-19 syndrome (12 weeks or more)." (NICE NG 188).

Due to the contentions and inconsistencies, we have adopted a pragmatic approach. Whilst we use 'post-COVID syndrome' as the primary terminology in this report, we acknowledge that the terms 'post-COVID syndrome' and 'long COVID' are often used interchangeably, including in NHS policy (NHS England, 2021). Where respondents in this survey have provided information citing 'long COVID', we have interpreted this to be the same as post-COVID syndrome, and report on it as such.

Background

The role of speech and language therapists in COVID-19 and post-COVID syndrome

Individuals with COVID-19 or post-COVID syndrome may require SLT expertise to manage dysphagia (swallowing difficulties), dysphonia (voice difficulties), upper airway symptoms including chronic cough and laryngeal hypersensitivity, and tracheostomy and ventilatory weaning support including issues related to laryngeal trauma. Alternative and augmentative (AAC) communication support may be required, and there is increasing appreciation of other communication difficulties in those with post-COVID syndrome who were never hospitalised, alongside more 'global' cognitive difficulties that may impede communication (RCSLT, 2021a). Many individuals with post-COVID syndrome report such global cognitive difficulties more colloquially as 'brain fog'. The prevalence and degree of severity of these needs in post-COVID syndrome is yet unclear, however estimates are emerging in the literature.

In one cohort study looking at patients who were reporting persisting symptoms following COVID-19, 'finding words' was one of the most common symptoms – reported by 32.3% of patients at 12 months post-infection (Seeble et al, 2021). In another cohort study, by Davis et al (2021), almost 50% of participants who had persisting symptoms following COVID-19 cited speech and language needs as symptoms, including 'difficulty finding the right words' (47%) and 'difficulty communicating verbally' (28%). Additionally, 35% of participants reported a 'lump in throat/difficulty swallowing'. 'Brain fog' may affect as much as 80% of individuals with post-COVID syndrome (Graham et al, 2021) and severe fatigue is also common, a predominant symptom of which has been found to be 'difficulties finding words' (Blomberg et al, 2021).

Given the prevalence of speech and language therapy needs highlighted in research studies, and with an estimated 1.1 million individuals in the UK currently experiencing post-COVID syndrome (ONS, 2021) – a figure that is likely to continue rising – it is reasonable to assume a substantial proportion of individuals in the UK will benefit from SLT input. Meeting their needs will subsequently have (and has had) a profound impact on speech and language therapy services. A known challenge is the recognition of the SLT role and expertise both in the wider health services workforce but also by individuals experiencing them, and the subsequent navigation of referrals and care pathways.

Speech and language therapy services for individuals with post-COVID syndrome

At present, publicly available services for individuals with post-COVID syndrome are widely varied across the UK. NHS England committed to opening 69 specialist centres in 2020 (NHS, 2020), whilst NHS Scotland has recently announced a fund for the development of existing services, and ‘‘long COVID clinics’ *if appropriate*’ (Scottish Government, 2021), with a similar approach taken in Wales (Welsh Government, 2021). In Northern Ireland, reflecting the plans made in England, ‘one-stop shops’ dedicated to multidisciplinary clinics will reportedly be available soon to individuals with post-COVID syndrome (Department of Health, 2021). Yet, even with the existence of dedicated services, evidence increasingly suggests that many individuals with post-COVID syndrome face difficulty in accessing them (Long COVID Support, 2021).

The support for individuals with post-COVID syndrome across the UK is thus highly fragmented – and so it is expected that this is also reflected in speech and language therapy services more specifically. Indeed, earlier findings from the RCSLT (2021b) also signalled these uncertainties and suggested a fragmented picture of speech and language therapy services for individuals with post-COVID syndrome. It’s imperative to note that even where dedicated or specially funded services exist, the professionals comprising the teams are not centrally defined, so disparities to care are still inevitable. Availability of different professionals, including SLTs, for supporting individuals with post-COVID syndrome (whether within specially dedicated services or not) is likely to be influenced by recognition of their role by policymakers. For much of the UK, the National Institute of Health and Care Excellence (NICE) or the Scottish Intercollegiate Guidelines Network (SIGN) are the key policy-influencers in health and social care. Public services are expected to design services and implement care in accordance with the evidence-based guidance set by these groups, who consult a range of stakeholders and the latest evidence. However, the November 2021 update to the NICE/SIGN clinical guidance for management of post-COVID syndrome did not name SLTs as core members of the multidisciplinary team (MDT). The RCSLT is continuing to work with NICE to supply evidence of speech and language therapy needs in this population, and the role of SLTs in supporting them, with a view for this to be changed in future updates.

This omission further perpetuates the risk of significant variation in speech and language therapy service provision for individuals with post-COVID syndrome, which will subsequently result in unidentified and unmet speech and language therapy needs. In particular, the RCSLT is concerned this risk is higher for those who were not hospitalised when ill with COVID-19 and thus are not by

default 'in the system' from the onset of their difficulties. There is also a concern that individuals with post-COVID syndrome themselves may not recognise their speech and language therapy needs or be aware that there is professional help available for them. Furthermore, referral to speech and language therapy would be dependent on other professionals (such as GPs) recognising these as needs warranting management by SLTs and referring them into services.

What this report adds

In the eight months since the first RCSLT survey exploring post-COVID syndrome was conducted, there has been an increase in published research pertaining to post-COVID syndrome and service provision, the symptoms and needs of individuals, as well as a surge in anecdotal intelligence and enquiries from the RCSLT membership regarding the increase in the number of individuals with post-COVID syndrome to their services and their varied needs. Hence, there was a significant need to re-evaluate the context of speech and language therapy and post-COVID syndrome.

More broadly, post-COVID syndrome is also now receiving greater attention in policy, practice, and research. This is likely to be related to the sheer size of this group, which is ever increasing as COVID-19 infection rates continue to grow in the UK. The British media has also given post-COVID syndrome much coverage recently, highlighting 'celebrity' stories of the COVID-19 experience. For example, author Michael Rosen has spoken to the BBC about his experiences with SLTs as part of his post-COVID rehabilitation (BBC Radio 4, 2021), and the SLT role in post-COVID rehabilitation has also been highlighted in other mainstream media (eg see as told to Johnson, 2020, in the Guardian). Further to this, there have also been some powerful movements by patient-led lobbying groups, particularly on social media (see for example the community and resource group 'Long COVID support'). These pressures have driven policymakers to take post-COVID syndrome considerably more seriously.

Now that there is greater shared knowledge of post-COVID syndrome it is necessary to explore the contemporary picture and latest evidence on how speech and language therapy services are operating to meet the needs of individuals with this syndrome; the specific clinical manifestations it involves; and indeed the impact of this on SLTs themselves. Providing this evidence will enable the role of the SLT to be more widely recognised and valued as integral to the management of these individuals, and enable the needs of people with speech and language therapy related needs to be identified and met.

The RCSLT survey, reported on here, aimed to identify some of these gaps in the evidence and capture current experiences from the profession by gathering key information about the speech and

language therapy needs of individuals with post-COVID syndrome, as well as the support currently available.

This report makes a call to action for wider recognition of the valuable role of SLTs in supporting individuals with post-COVID syndrome. It makes recommendations for policy, practice and research to make this happen, and to ensure effective and equitable support is given to all those with speech and language therapy needs across the UK.

Aim

This part of the survey aimed to answer the following questions::

- Where are individuals with post-COVID syndrome and speech and language therapy needs being seen?
- What is the level of need for speech and language therapy provision for individuals with post-COVID syndrome?
- Are SLTs able to equitably manage the demand for individuals with post-COVID syndrome and their non-COVID caseload?
- What are the common speech and language therapy needs of patients with post-COVID syndrome?
- What are the common ways of supporting speech and language therapy needs of patients with post-COVID syndrome?
- What are the experiences of SLTs and services in managing individuals with post-COVID syndrome?

Methods

The RCSLT established an expert working group consisting of SLTs who held research roles and had experience working with individuals with speech and language therapy needs after COVID-19 or working in dedicated long COVID services. The working group was involved in developing and testing a set of questions to form the basis of a survey for RCSLT members. Part of this included reviewing and amending the questions that were included in an earlier survey about understanding the mid- to long- term speech and language therapy needs and the impact on services (RCSLT, 2021a). In addition, new questions were developed through consultation with RCSLT staff from different parts of the organisation based on their intelligence from interactions with members. Questions were

developed iteratively, and were based on current research evidence, clinical experience and expertise. Closed and open questions were included in the survey, covering the following categories: background information about respondents; organisational arrangements in which they were working; referrals they received; speech and language therapy needs identified; speech and language therapy support given; and experiences of SLTs.

The questions were built into an online survey (using Survey Monkey (Survey Monkey Inc, 2021)). Questions were piloted for content and face validity as well as usability, with item reduction taking place as required.

The survey was disseminated to the RCSLT membership via numerous channels including e-newsletters, social media and member networks. All members currently subscribed to RCSLT e-communications were also sent a specific email about completing the survey. Practising SLTs were invited to complete the survey and could do so either independently or on behalf of their team/service (note: not all those that received information about the survey would have been eligible to complete it). The survey was open for the duration of one month, between 01-31 October 2021.

The data generated by the survey were analysed, and the full findings are detailed in the appendix of this document. For quantitative data, descriptive statistics were produced using Microsoft Excel. For the qualitative data, thematic analysis was used to identify key themes (Braun and Clarke, 2006). All qualitative data was coded and analysed by two independent raters. Detail of the thematic process can be found in the appendix.

Results

Survey respondents

Responses were obtained from 676 participants. This represented 555 individual SLTs (82.1%) and 116 speech and language therapy teams/services (17.1%), as well as 5 'unknown' (0.7%).

All 676 respondents answered the first part of the survey exploring the demand on service resources. Of these, 111 respondents (16.4%) reviewed and answered the questions in the second part of the survey specifically exploring post-COVID syndrome.

For clarity and coherency, the results reported henceforth refer exclusively to the findings from the second part of the survey exploring post-COVID syndrome.

The 111 respondents to this part of the survey represented mostly individual SLTs (65.8%, n=73), with 32.4% (n=36) responding on behalf of their team/service, and an unknown 1.8% (n=2).

All four nations were represented, with 7.3% (n=8) of responses identifying Northern Ireland as their regional base, and 5.5% (n=6) each for Scotland and Wales. A large proportion of responses (81.7%, n=87) indicated England, which comprised responses from all RCSLT Hub regions except for the Channel Islands and Isle of Man.

Most respondents were employed (at least in part) by the NHS (74.8%, n=82), with 10.2% (n=11) being independent practitioners (sole traders). A range of other sectors were also represented (such as the third sector and higher education institutions) by respondents, though these were much fewer in number.

There was still a reasonable spread of clinical areas represented by respondents, covering all clinical areas suggested in the survey. The most frequently selected was adult dysphagia, which accounted for 8.2% (n=72) of responses, followed by acquired speech difficulties (7.1%, n=62), progressive neurological disorders (6.5%, n=57) and voice (6.3%, n=55). Six respondents described additional clinical areas. Interestingly, two of these referred to '*functional neurological disorder*', two referred to '*airways*' and the remaining two related to '*facial palsy*' and '*tracheostomy*'.

Most responses indicated that their service accepted referrals for adults (38.6% of responses indicated *18-24 years* (n=100), 37.1% indicated *25 years +* (n=96)). There was also representation from services for children, with *under 2 years* accounting for 5.4% of responses (n=14), *2-11 years* at 9.3% (n=24) and *12-17 years* at 9.7% (n=25). (*N.b. this is different to the age of individuals referred to services with needs arising from post-COVID syndrome. Please see below for this specific data*).

Respondents from specially commissioned/funded or dedicated 'Long COVID' services

Respondents were asked: "*Are you working within a specially commissioned/funded or dedicated 'long-COVID' service?*", to which 15 respondents (13.8%) identified that they were. However the majority of respondents indicated that they were not (86.2%, n=94).

Most respondents working in dedicated services were employed by the NHS (81.3% of responses, n=13), though there was one respondent for each of independent practice (more than one SLT working), schools (either NHS or independent) and social enterprise/public sector mutual.

Most dedicated services represented in the survey were in England (80.0%, n=80), though 2 respondents (13.3%) were from Wales and 1 (6.7%) was from Northern Ireland. No respondents to this section were based in Scotland (0.0%). There was a degree of regional spread of respondents across in England, though no responses were obtained from Channel Islands and Isle of Man, East Midlands, South Central or West Midlands.

Although already identified as working within specially dedicated post-COVID syndrome services, respondents also provided information on clinical areas in which they worked (as indicated earlier). From these, there was reasonable representation across a range of clinical areas, however the predominant areas identified by this cohort were post-COVID syndrome, adult dysphagia and voice. These were all selected by at least 10 of the 11 respondents working in dedicated services who answered this question (comprising 8.6%, n=11, 7.8%, n=10, and 7.8%, n=10 of all responses, respectively).

The majority of those working in specially dedicated services, who answered this question, were providing services to adults (43.8%, n=14, to those aged between 18-24, a further 40.6% to 25 years+, n=13). A small number of these services received referrals for children (with ages 2-11 years comprising 9.4%, n=3 and 12-17 years an additional 6.3%, n=2).

Organisational arrangements

Non-dedicated services

Respondents who were not working in a specially dedicated service were asked: "*How does your service operate?*". Nearly half (48.4%, n=45) identified that they worked within a uni-disciplinary service (ie just speech and language therapy), with 44.7% (n=42) working in an MDT service and 6.4% (n=6) working within a tertiary/specialist service.

Respondents were also asked to indicate which settings they worked in from a given list of 15, with the option to describe other settings. The most selected setting was in an 'out-patient setting/clinic' (comprising 18.8% of responses, n=62), followed by 'the individual's usual place of residence' and 'via telehealth', each representing 15.2% (n= 50) of responses. Respondents could also describe additional settings, which 8 did – 75.0% (n=6) of these described differing inpatient rehabilitation settings.

Dedicated services

All dedicated services were providing assessment and therapy, and all were part of a multidisciplinary team.

Relationship between private and public sector provision

Respondents were asked: *"For those seeing individuals with post-COVID syndrome in an NHS service, what is the extent to which individuals have consulted with or seen an independent therapist prior to being seen by your service (if known)?"*. Most who answered (78.0%, n=39) indicated that 'no individuals' had been seen by a private therapist, some (18.0%, n=9) said a 'few' had. One respondent indicated that 'most individuals' had seen a private therapist. Most of those working in dedicated services reported that no individuals had accessed an independent therapist (80.0%, n=8) and 2 reported 'some' had (20.00%, n=2).

When those who were seeing individuals with post-COVID syndrome in an independent service were asked about the extent to which the individuals have been referred to or seen by an NHS therapist prior to being seen by them, 70.0% (n=7) indicated that 'no individuals' had accessed NHS therapy, 20.0% (n=2) reported that 'some' had, and just one individual reported that 'most' individuals had (10.0%, n=1). No respondents working in dedicated post-COVID syndrome services answered this question.

Referrals

Number of referrals

Respondents were asked to select how many referrals they have received for individuals with post-COVID syndrome, from list of given ranges (eg 1-10 referrals, 11-20 referrals and so on) which they estimated best reflected their number of referrals. Overall, '1-10' was selected most frequently (35.0% of responses, n=26), with a general trend of decreasing frequency as the range increased. However, there were multiple services reporting referrals in the higher ranges, and importantly this was not just from those working in dedicated services (with 1 non-dedicated service reporting more than 100 referrals for post-COVID syndrome).

Of those working in dedicated post-COVID syndrome services the pattern was different. The most frequently selected was referrals in the 61-70 range (23.1%, n=3).

Managing referrals

A large proportion of respondents (52.9%, n=46) identified that their service was not able to meet the needs of the referred individuals with post-COVID syndrome within the timeframe expected of their service, while 47.1% (n=41) said they could. This was slightly higher in dedicated services, where 57.1% (n=9) of respondents reported that they could meet their needs, compared with 45.2% (n=42) from non-dedicated services who said they could.

When those not working in specially dedicated services were asked the question: *"Does the ability of your service to meet the needs of individuals with post-COVID syndrome differ to your ability to meet the needs of other individuals on the caseload (ie, those who do not have post-COVID syndrome)?"*, less than half (45.8%, n=33) said that their service could meet the needs of both groups of individuals equally and sufficiently. A substantial portion (40.3%, n=29) indicated that the service was unable to meet the needs of either. A further 9.7% (n=7) indicated they could meet the needs of individuals on their caseload who did not have post-COVID syndrome but not those who did, and 4.2% (n=3) suggested they were more able to meet the needs of those who had post-COVID syndrome over those who did not.

Respondents were offered a space to provide any further information regarding this. Few did, but some issues identified here included an observed increase in referrals for voice or upper airway disorders generally (not associated with post-COVID syndrome), or of those with post-COVID syndrome and other conditions. Other reflections included a lack of staffing capacity to manage the increase in demand, as well as a lack of funding to provide support for the new volume of individuals with post-COVID syndrome.

Sources of referrals

The most frequently identified source of referral was from medical consultants (constituting 22.3% of responses, n=19), closely followed by GPs (19.3%, n=17) and other allied health professionals (comprising 17.0%, n=15).

Of those working in dedicated post-COVID syndrome services, most referrals came from post-COVID hubs or clinics (26.8%, n=11) and GPs (24.4%, n=10). Respondents *not* working in dedicated services predominantly received referrals from medical consultants (23.2% of responses, n=52) and GPs (18.3%, n=41), with post-COVID hub/clinics accounting for 13.0% (n=29) of referrals.

Respondents could also identify other sources of referrals that were not captured in the list provided with the question. There were very few responses given, but some identified referrals were being made by SLTs/teams, or specific medical teams (including stroke, critical care or paediatrics).

Reasons for referral

The most frequently reported reasons given for referral to speech and language therapy were dysphonia and dysphagia (accounting for 21.9%, n=68, and 21.6%, n=67, of responses, respectively). Upper airways disorder, laryngeal hypersensitivity and cognitive communication disorder were also frequently reported (12.6%, n=39, 11.4%, n=37, and 11.3%, n=35, respectively).

A similar pattern was maintained when looking at reasons for referrals in both dedicated and non-dedicated services, with these being the 5 most common reasons given in both groups.

Respondents operating in 'dedicated' services were also asked: *"Out of the referrals for individuals who have/had speech and language therapy needs and post-COVID syndrome, how many received care in each of the following settings when they were most ill with COVID-19?"* Responses to this were varied, indicating a range of experiences. Whilst the 'usual place of residence' was the setting most often selected to represent the experiences of 'most (75+%)' of individuals on a caseload (42.9%, n=6), there was a considerable number of respondents indicating that 'few (1-24%)' or 'some (25-49%)' of their caseload had been in critical care (35.7% for both, n=5).

Age of individuals referred

The most common age range of individuals who had been referred was *50-69 years* (26.6% of all responses, n= 74) closely followed by *35-49 years* (24.0%, n=68). When divided into three key groups (children, working age, 70 years+) the largest represented cohort is the typical 'working age' cohort (69.8% of responses, n=191). When broken down into those working in a dedicated service or not, the patterns were largely maintained.

Make-up of caseloads in non-dedicated services

In the majority (66.7%, n=44) of cases, respondents who were not working in a dedicated service reported individuals with post-COVID syndrome make up 'less than 10%' of their caseload. The pattern continued in that there were fewer indications given, as the proportion increased.

Speech and language therapy needs

Commonly identified needs

Respondents were asked: "*Following initial assessment by a speech and language therapist, what are the most common speech and language therapy needs identified as impacting these individuals?*".

Respondents were asked to rank a set of 10 given needs in order of 1-10, where 1 indicated 'most common' and 10 indicated 'least common'.

The speech and language therapy need most frequently identified as being 'the most common' in individuals with post-COVID syndrome was *dysphagia* (rated as the number one most common type by 34.7% of respondents (n=26)). This was closely followed by *dysphonia* (33.3%, n=25). Laryngeal hypersensitivity was rated as the most common by 12.0% (n=9) of respondents, and upper airway difficulties and cognitive-communication disorder were each rated similarly by 8.0% (n=6) of respondents.

The picture was very mixed regarding the speech and language therapy needs most frequently identified as being 'the least common'. Overall, these were *dyspraxia* and *dysfluency*, which were both rated as the least common by respondents (10.4%, n=8).

The patterns did not change substantially when broken down by those who were working in 'dedicated' services or not.

When asked to describe any other kinds of speech and language therapy need often seen in this group that were not captured in the given list of 10, many respondents offered additional observations. Those cited by multiple respondents included symptoms related to *mood* and *social-emotional or behaviour difficulties*. Others that were described included *fatigue* and *respiratory difficulties* (including chronic cough and breathlessness).

Level of pre-existing speech and language therapy needs

There were errors in the logic of the question pertaining to the level of existing speech and language therapy needs of the individuals with post-COVID syndrome that respondents were seeing. However, most respondents (78.7%, n=48) did indicate that 'few' or 'no' individuals that they were seeing had pre-existing speech and language therapy needs. However, 52.1% (n=32) also reported that individuals with one or more speech and language therapy need represented 'most' or 'many' of the individuals they see.

Impact of speech and language therapy needs

Speech and language therapy needs were reported to impact 'many' or 'all' individuals' *wellbeing* in 83.3% (n=66) of instances. Similarly, the *ability to carry out activities of daily living* was thought to be affected in 'many' or 'all' individuals, by 61.2% (n=48) of respondents. The corresponding pattern was also observed with regards to individuals' *ability to stay in, return to, or fully engage with work* (59.5%, n=47), *ability to perform their self-identified roles*, (51.9%, n=41) or *ability to fully engage with education* (22.8%, n=18). A very similar pattern was observed for both dedicated and non-dedicated services.

Other services being accessed

Some respondents (36.4%, n=28) identified that individuals on their caseload for post-COVID syndrome were accessing other services. Where further information was offered, the predominant type (31.7%, n=9) of service identified was services for mental health, psychological or wellbeing support. Other services highlighted by several respondents were respiratory services, services for financial support, and occupational therapy (each representing 8.3% of responses, n=2).

Speech and language therapy support

Type of speech and language therapy support

The type of support most frequently identified as being 'the most common' was 'delivery of speech and language therapy (face to face or remotely) aimed at 'rehabilitation'' (rated as the number one most common type 35.5% of respondents, n=22). Other types of support frequently identified as being common were:

- *Provision of advice and signposting to online information and resources to support self-care* (eg, Your Covid Recovery), which was rated as either the most common type by 19.4% of respondents (n=12).
- *Delivery of speech and language therapy (face to face or remotely) aimed at 'enabling'*, which was rated as the most common type by 11.3% of respondents (n=7).

The type of support most frequently identified as being 'the least common' was 'discharge from speech and language therapy without any other input- due to too many constraints on the service' (rated as the least common type by 56.9%, n=29). Other types of support frequently identified as being uncommon were:

- *Delivery of speech and language therapy (face to face or remotely) aimed at 'palliative' care, which was rated as the least common by 13.7% (n=7) of respondents.*
- *Discharge from speech and language therapy without any other input- where the individual does not require speech and language therapy, either because the speech and language therapy needs have resolved, or the referral was not appropriate, which was rated as the least common) by 11.8% (n=6) of respondents.*

When asked to describe any other types of support that respondents were providing that were not captured in the given list of 16, several respondents identified that they were providing a degree of support specifically for psychological effects of post-COVID syndrome, and support for the families of individuals affected.

Management in non-dedicated services

The majority (91.4%, n=64) of respondents working in non-dedicated services reported that they were *not* necessarily seeing individuals with post-COVID syndrome any quicker than 'others' on their caseload, indicating that services are not under pressure to treat such patients preferentially.

Outcome measures

Respondents identified 36 independent formal outcome measure tools used for individuals with post-COVID syndrome. Therapy Outcome Measures (TOMs, Enderby and John, 2019) – either via general reference to the tool, or reference to specific scales within the tool – was the most frequently reported tool (accounting for 28.9%, n=22, of the responses identifying formal tools). The Voice Handicap Index (VHI) (Jacobson et al, 1997) was the next most common (constituting 11.1% of responses, n=10) followed by the Newcastle Laryngeal Hypersensitivity Questionnaire (NLH-Q, Vertigan et al, 2014) (7.8% of responses, n=7). Other tools mentioned by several respondents were the Reflux Symptom Index (6.7%, n=6) (Belafsky et al., 2002), the Leicester Cough Questionnaire (5.6%, n=5) (Birring et al, 2003) and the Grade, Roughness, Breathiness, Asthenia and Strain scale (GRBAS, as in Omori, 2011) (4.44, n=4). 10.0% (n=6) of respondents identified that they used informal outcome measures.

SLTs' experiences

Perceived challenges

Common themes were identified pertaining to the challenges for an individual therapist and service providing support to individuals with post-COVID syndrome. The five overarching themes were:

1. The patient with COVID

- Complex presentation, many symptoms including mental health challenges, impact of symptoms on recovery and ability to engage with therapy, relatively younger cohort than usual requiring support for family or work commitments for example

2. COVID as an unknown

- Lack of knowledge, understanding and awareness, uncertainty with regards to recovery/trajectory, not having answers or clear management plan

3. Infrastructure and resourcing

- Capacity, resource and funding limitations, services changing or currently being set up, lack of clear referral pathways, disjointed pathways, speech and language therapy not resourced in long COVID pathways, absence of paediatric services, knock-on impact of COVID on other patient groups

4. Therapist experience

- Clinical and professional isolation, absence of relevant evidence base, lack of experience, no time for research, compassion fatigue and burnout, time being given to support non-speech and language therapy symptoms, staff recruitment difficulties

5. The MDT

- Lack of MDT clinic or co-ordinated approach, poor communication between specialities, but lots of professionals involved in care can be fatiguing for patients, lack of recognition of value of speech and language therapy, lack of psychological support

Perceived enablers

Common themes were further identified pertaining to the perceived enablers of individual or service management of individuals with post-COVID syndrome. The 4 overarching themes were:

1. Therapeutic skills, knowledge, and strategies

- A thorough initial assessment, clinical areas (rehab, voice, instrumental assessment, sensory challenges), compassion and counselling skills, acceptance, managing

expectations. Greater understanding of COVID, access to rehab and more recognition of the SLT role would help going forward.

2. Communication and resourcing

- Joined-up approaches, clear care pathways, funding for enough staff and all relevant staff, communication between services (eg ICU to outpatients), early referral and diagnosis, long COVID specialist services. Regular contact with and access to specialist staff and joint working/embedding in the MDT, more funding to accommodate demand on resources and training were identified as things that would help in future.

3. Support networks and research

- Support from others, across peers, teams, profession and the professional body, in future more guidance and supporting resources, research and supervision would help.

4. Person-centred care

- Long-term support and regular contact, joint goal setting, support for mental health and for the family. Specific support for individuals with learning disabilities was identified as a useful consideration for future, as well as more time and mental health support.

Discussion

The work presented here provides a snapshot of the current arrangements of speech and language therapy services for individuals with post-COVID syndrome in the UK, as well as an updated picture of the needs of and required support for these individuals. Only a relatively small subset of survey respondents identified that they were receiving referrals for individuals with post-COVID syndrome, and the sample this provided cannot give a complete picture of the nations' experiences. However, those who did respond constitute a reasonable spread, from all nations, clinical areas, employment sectors, and those seeing individuals of a range of ages. This report represents generalisation of these findings for SLTs within the acknowledged limitations.

The provision for individuals with post-COVID syndrome and speech and language therapy needs is inconsistent across the UK. According to this survey, most individuals were being supported in services that do not have additional or dedicated funding or provision for managing post-COVID syndrome. This raises questions about the ability of community rehabilitation teams to meet the needs of people

with post-COVID, as well as their existing clients within existing resource constraints. The identification and intervention backlog facing speech and language therapy services is significant (RCSLT, 2021b). Community therapy services are already seeing an increase in demand among people of all ages because of the pandemic, as well as the need to provide therapy to people with post-COVID syndrome. However, there was a five-fold increase in the number of respondents working in 'dedicated' services compared with our survey conducted in February 2021, which collected data on just three of these services. Notably, in the prior survey all identified dedicated services were based in Wales, whereas in this current survey we also saw a small increase in representation in England and Northern Ireland. This may indicate that, over time, more SLTs have been funded within these provisions, or indeed more provisions of this kind have been set up; however these are still very few. This does indeed align with the informal intelligence the RCSLT receives from on-the-ground clinicians who have been involved in setting up new 'long COVID clinics' or awarded additional funding for resources in these areas. However, it is important to note that while this indicates a possible increase in such services since February, given that there should supposedly be 69 dedicated 'long COVID clinics' in England alone, the representation of SLTs within this is therefore likely to be devastatingly small. Further systematic exploration would be required to determine the actual representation of SLTs within these types of dedicated services, as well as triangulation with those in receipt of additional funding in pre-existing services. Given the current lack of acknowledgement of SLTs as a core member of the multidisciplinary team in services for post-COVID syndrome (see eg, NICE 2021) it is plausible to suggest our survey findings may indeed hold true.

Based on our survey responses, dedicated services appear to be the minority type of provisional arrangement for individuals with post-COVID syndrome; it is therefore likely that most individuals are being 'absorbed' into existing services, and thus represent a new clinical cohort added onto existing services' caseloads. The survey suggests that, of these, there is substantial divide between those working in siloed speech and language therapy services and those within a multidisciplinary team. Since people with post-COVID syndrome can present with a constellation of symptoms requiring a range of professional support, this potentially poses a risk to the effectiveness of interventions offered. In comparison, all therapists who were working in dedicated services were working within a multidisciplinary team. When directly asked about challenges to the management of individuals with post-COVID syndrome, SLTs identified that the absence of a multidisciplinary approach or sufficient dedicated pathways/services for this group of patients posed major challenges to their effective management. Conversely, where a joint approach was possible, this was identified as an enabler. These experiences also reflect the findings from our earlier survey exploring this question (RCSLT,

2021a). These findings call for nationwide action to reconsider the organisation of provision for individuals with post-COVID syndrome, who require input from a range of professions, including speech and language therapy, to best manage their symptoms, and whose needs may be best met through a multidisciplinary approach. To accommodate this, additional resource is likely to be required – whether it is an injection into existing services (for example, in the community), greater ‘dedicated’ provision, or infrastructure support to embed a multidisciplinary approach where this is currently not an option. If not, there is a risk of unwarranted variation, in that those individuals with post-COVID syndrome who are not managed through a multidisciplinary approach may receive less effective support and potentially poorer outcomes.

The findings presented here with regards to the number of referrals that services have received for individuals with post-COVID syndrome are interesting. While in our earlier survey respondents were asked to report on the number of referrals they had received in the year since the outbreak of COVID-19 in the UK, in this version we asked for an estimated number of referrals *of all time*; therefore some of the results might ‘overlap’. Interestingly, there was not an increase in the average range of referral numbers reported across the two surveys. Results from the February 2021 survey indicated an average of 6-10 referrals, and in this survey the most selected option was 1-10 referrals. Respondents did not report large proportions of their caseloads being represented by individuals with post-COVID syndrome (where they were not operating in ‘dedicated’ services). It is difficult to ascertain therefore if there has been any average change or influx of patients. However, it is important to note that this survey had nearly 3 times the number of respondents (and indeed includes 8 months of passed time), so inevitably the actual number of individuals being seen with post-COVID syndrome has increased. It would be interesting in future to follow speech and language therapy services over time with repeated measures of their referral numbers, which would offer more reliable information on the volume of need (or indeed, recognition of need, or lack of) and how this changes over time.

This survey has also identified that a substantial proportion of the individuals with post-COVID syndrome requiring speech and language therapy are of *working age* and likely to not have any *pre-existing speech and language therapy needs*. This is in line with national statistics (ONS, 2021) and indeed our earlier findings (RCSLT 2021a). Further substantiating this evidence is critical, as it inarguably distinguishes this group as distinctly novel and with very specific needs, especially pertaining to their likely activities of daily living including work. Typical cohorts of speech and language therapy services users are children (where facilitating access to education and social opportunities may be a key element of their support), or people with conditions that are more prevalent in an older (non-working) population such as stroke or dementia (where support may be

based on ensuring they can eat and drink safely or communicate basic needs). A much smaller proportion of individuals, traditionally, would require speech and language therapy aimed at enabling engagement with parenting or carer responsibilities, employment, and so on (there are of course some exceptions, such as patients with head and neck cancer, which may reflect this profile). For most community rehabilitation teams however, it is perhaps not the norm.

Yet it is this 'working-age' population that has emerged from our survey as being the most predominant group with post-COVID syndrome and speech and language therapy needs. Supported by anecdotal evidence from SLTs on the ground, it could be speculated that the 'milder' post-COVID syndrome symptoms such as laryngeal hypersensitivity or word-finding difficulties may not appear too problematic to these individuals until they indeed return to work, causing therefore a delay in their own recognition (and potentially, the delay in recognition of this by policy makers). The longer-term impact of unmet speech and language therapy needs in this group could be significant to both the economy and to people's livelihoods. Indeed, respondents to this survey reported that the speech and language therapy needs of individuals with post-COVID syndrome frequently impacted on these kinds of roles in the individuals they were seeing. Moreover, a substantial impact of these needs on individuals' wellbeing was identified, adding additional weight to our earlier findings (RCSLT, 2021a) – arguably something that may underpin engagement in any other activity – whether this be rehabilitation or other roles in their lives, including work. It is perhaps unsurprising that the range of additional services that were reported as being accessed by all individuals with post-COVID syndrome is vast, but predominantly included psychological support. Respondents also highlighted that the atypicality of this population requiring speech and language therapy presented a challenge to their management, and that person-centred care was an essential facilitator. This set of findings substantiates the need for a holistic approach to management for individuals with post-COVID syndrome that will need to be highly personalised and may involve mental health support, family liaison, vocational services and advice pertaining to financial circumstances.

The survey, consistent with our earlier work in February 2021, and indeed the research literature discussed, highlighted that the most common speech and language therapy need in individuals with post-COVID syndrome was dysphagia, closely followed by dysphonia. What is important to note is that despite this, these kinds of symptoms are persistently overlooked in national guidance and are also possibly undermined in the literature. For example, the newly revised NICE guidance (NICE, 2021) does not include swallowing difficulties/dysphagia as a common symptom. It does make a reference to 'sore throat' but this is the extent to which speech and language therapy needs are referred to, and without the warranted nod to pathology. Similarly, in much literature, descriptions of common

symptoms of post-COVID syndrome such as 'a lump in the throat' may be describing speech and language therapy needs, without such recognition. There is an emergence of informal intelligence from on-the-ground clinicians reporting, for example, an influx of cases of 'muscle-tension dysphagia' in relation to post-COVID syndrome – characterised clinically by the description of *a feeling of a lump in the throat*. This condition is relatively newly described in the literature and needs careful differential diagnosis and treatment by experienced SLTs and laryngology professionals (Kang et al, 2021). Furthermore, there are numerous reports referring to 'hoarse voice' and 'sore throat' as common symptoms in post-COVID syndrome (eg, see Davis et al, 2021) – again, quite possibly manifestations of unidentified speech and language therapy needs. Bringing together this evidence, it is plausible to question whether the lack of awareness or understanding of speech and language therapy needs such as dysphagia and dysphonia, and the role of SLTs, is resulting in these needs being under-reported (by patients, professionals, and researchers themselves) in research and thus under-recognised in policy in the UK – since, where expertise and knowledge is present (ie an SLT), these needs are being diagnosed to a high degree. Interestingly, the World Health Organization (WHO) has acknowledged speech and language therapy needs in the rehabilitation of post-COVID syndrome, and even has RCSLT members involved in specific working groups dedicated to them, including for dysphagia and dysphonia. The need for greater respect and awareness of SLTs in the UK is further validated by the descriptions of challenges and facilitators to managing individuals with post-COVID syndrome given by respondents in the survey, where *recognition of the value of SLTs* emerged as a key factor. This therefore poses a challenge whereby the awareness of possible symptoms and the value of SLTs in managing them must be raised amongst patients and other healthcare professionals. In addition, those conducting research should consider whether such descriptions of symptoms in fact align with what we understand to be speech and language therapy needs, and report on them as such. Policy-influencers must acknowledge the prevalence of speech and language therapy symptoms, and in parallel the key role of SLTs, to ensure that appropriate support is being provided to the individuals that need it.

In terms of the support people with post-COVID syndrome were getting from SLTs, the number of sessions were varied. The most common type of support given was for *rehabilitation*, though it was clear a range of targeted support is being provided. Interestingly, SLTs also reported that they were providing a degree of psychological support. The skills of SLTs in counselling and empathy were indeed noted, by respondents, as a facilitator in the management of individuals with post-COVID syndrome. However, when freely describing challenges to the management of individuals with post-COVID syndrome, the therapists' experiences emerged as a key theme – characterised by reports of

'compassion fatigue' and having to 'support non-speech and language therapy symptoms'. On the other hand, as discussed earlier, many respondents thought that individuals they were seeing were accessing additional services for wellbeing. Thus, the picture is varied and complex but does indicate that SLTs are providing a degree of psychological support above and beyond their speech and language therapy interventions specifically, and that this may have a negative impact on the wellbeing of the therapists doing so. This highlights the need for SLTs to be considered alongside all and any rehabilitation policies and pathways, as well as professionals especially concerned with mental health (psychologists, psychotherapists, counsellors and psychiatrists). The complex presentation of specific speech and language therapy needs in individuals with post-COVID syndrome should also not be dismissed – identified by both SLTs in their open responses, but also through the common symptoms that were identified (requiring, for example, airway management and potential recommendations pertaining to eating and drinking). There is a need therefore that SLTs have adequate experience and expertise to manage the speech and language therapy needs alone, as well as being able to understand how much support to offer for the wider symptoms. Thus, the range of support given to individuals with post-COVID syndrome indicates the requirement for a needs-led therapy programme, delivered by experts, and offers more evidence regarding the need for a holistic and multidisciplinary approach.

The findings reported here therefore provide an updated picture of the speech and language therapy support in place for individuals with post-COVID syndrome, the possible clinical needs of them and the most common forms of intervention offered to them. It has highlighted variability and inconsistency in this support and has exposed the many challenges the profession is up against in providing quality care to these individuals, as well as all others they see as part of their caseload. Broader awareness and recognition of speech and language therapy needs and the role of SLTs is needed at the level of policy, practice and indeed by researchers. More evidence is required to fully understand this novel syndrome and guide practice, and to ensure equitable and equal access to speech and language therapy services is given to all individuals who require it.

Limitations

The findings of this survey should be interpreted with caution. The findings are based on 111 respondents which may limit generalisability. However, this substantially builds on the respondent rate of our earlier survey (RCSLT, 2021a). As a method, surveys have well-documented limitations. Nevertheless, the findings outlined here do concur with what has been reported previously by the

RCSLT, as well as through the anecdotal evidence gathered by the RCSLT during conversations with members and the emerging evidence base.

This survey was designed to gather insights into the experiences of RCSLT members working across the UK, rather than to provide a detailed study. Most questions contained in the survey were closed-ended questions, which required respondents to choose from a list of pre-set options. While these options were based on current and expert understanding, it is possible this narrowed respondents' thinking. However, each question was accompanied by an optional space for respondents to freely describe anything they wanted to that was not represented in the given options. The data yielded through this was considered highly valuable and provides further contexts to the responses. Furthermore, open-ended questions were also asked to specifically understand the experiences of SLTs, which substantiated much of the findings.

The analysis procedure did lack some rigour. Due to the nature of the methods, the quantitative analysis was limited to descriptive evaluation only. Therefore, it is not possible to use this to make any observations that refer to differences between groups in a statistically robust way. It does, however, offer some useful insights. The qualitative data that was extracted was varied in terms of the relevance of the information that respondents offered regarding the given question, which posed some challenges to analysis and may be a limitation. The qualitative data was however analysed by two independent raters which offers a degree of reliability.

While it is acknowledged that the findings of the survey may not necessarily reflect the experiences of the RCSLT membership, it does provide some useful insights of a snapshot of time that may be used to guide future policy and practice.

Conclusions

Despite its limitations, this survey has offered a contemporary and unique insight into the demand for and provision of speech and language therapy for individuals with post-COVID syndrome. The evidence provided here shows that there is a high degree of need from individuals with post-COVID syndrome to access speech and language therapy services, and that those who are doing so are going via a range of different routes, including referees and indeed the kinds of services they are seen by. There is variability in where individuals are being seen, and a lower-than-expected proportion of individuals with post-COVID syndrome presenting to those services (given the statistics identified earlier, it may be that there are some 33,000 individuals in the UK with speech and language therapy needs in post-COVID syndrome), suggesting a high likelihood of individuals being missed and falling

through the gaps. Where individuals have accessed services, there is variation – with some treated through ‘dedicated’ resources, pre-existing NHS services, or the independent sector. This is significant in light of the risk it poses to the equitability of care, and it raises questions about the ability of existing services to absorb this increase in demand within existing constraints. This would suggest that dedicated and funded post-COVID services are the best way to meet people’s needs, allowing existing speech and language therapy services to focus on the identification and intervention backlog facing speech and language therapy services as a result of the pandemic. Furthermore, this survey has revealed an advocacy by the profession for a multidisciplinary approach to support individuals with post-COVID syndrome, access to which varies depending on the structure of local services, and also what kind of service the individual presents to initially in order to be referred to speech and language therapy. SLTs are working in difficult situations, which can have profoundly personal effects including on their emotional and mental wellbeing. They are experiencing varying kinds of pressure and, coupled with this, are navigating unclear and uncertain pathways, treatment plans and trajectories. It is imperative that the needs of and pressures placed on speech and language therapy services resulting from post-COVID syndrome are acknowledged and appropriately addressed.

Recommendations

In our report in May 2021 (RCSLT, 2021a) reporting findings from our earlier survey exploring the speech and language therapy needs of individuals with post-COVID syndrome, we made a set of 11 recommendations of actions that needed to be taken at a national, system and workforce level as well as those relating to raising awareness among the wider public. While progress has been made toward these, much more is needed, and the findings of this survey further substantiate their necessary action.

We are particularly concerned that the lack of speech and language therapists in post-COVID syndrome services means that existing community speech and language therapy teams are having to absorb this extra demand, at a time when they are trying to address the backlog (meeting the needs of people who have not received speech and language therapy for a long time and who are at risk of significantly negative outcomes) resulting from the pandemic, and to fight for funding for posts to support this.

The RCSLT firmly believes that any person with post-COVID syndrome and any speech and language therapy need should have access to timely, highly quality, person-centred rehabilitation that

maximises their mental health and wellbeing, participation in society, education or work, and the ability to engage with their roles in life.

Our survey findings clearly highlight that that all clinicians, including SLTs, work best in a multidisciplinary team (MDT) when managing post-COVID syndrome, where they can learn from each other and provide the best care and support for the benefit of the person.

SLTs also specifically need greater support in terms of developing the evidence-base and their clinical expertise related to post-COVID syndrome as well resources to protect their own personal wellbeing.

To achieve this, the following action needs to be taken now:

1. National and local policy makers should highlight the breadth and extent of needs (including speech and language therapy needs) of individuals with post-COVID syndrome and the professionals best placed to support them, and specifically:

- Recognise the significant impact of speech and language therapy needs of individuals with post-COVID syndrome
- Acknowledge speech and language therapists as integral to post-COVID syndrome core MDT services
- Improve other healthcare professionals' understanding and recognition of speech and language therapy needs

2. Service commissioners should provide better support to individuals with post-COVID syndrome including through speech and language therapy, expand post-COVID syndrome services and ensure that they are appropriately resourced across every local area, specifically by:

- Ensuring that all post-COVID services include the full breadth of the MDT to provide the best care and support for individuals with post-COVID syndrome
- Fund dedicated SLT roles as part of the core post-COVID team to meet individuals' needs
- Ensure that early identification and support for speech and language therapy needs is integral to COVID planning

3. Service managers must work to:

- Embed systems for routine and robust data collection about individuals with post-COVID syndrome within services and nationally including a consensus on outcome measures
- Ensure SLTs have the time, knowledge and skills to collect and analyse local data to better understand the types of speech and language therapy needs, the ages of individuals affected, and outcome measures to evaluate the impact of provision and intervention and contribute to the evidence base

4. National policy makers and local health leaders leads must invest in, and nurture, their clinical workforce by:

- Offering continued investment in mental health and wellbeing advice to all clinical staff to help them cope with the fatigue and burnout both in the short-term and the longer-term
- Meeting the complexity of speech and language therapy needs of individuals with post-COVID syndrome through providing appropriate training for SLTs and the wider workforce, including to upskill and develop specialist knowledge and skills

5. Researchers and research funders must focus on speech and language therapy needs and interventions in post-COVID syndrome in local and large-scale projects, specifically:

- Support the development of research capacity and capability within clinical services to enable SLTs to carry out and drive forward research into post-COVID syndrome and speech and language therapy needs
- Major research funders should commission studies exploring the rehabilitation needs of individuals with post-COVID syndrome which specifically include speech and language therapy needs
- Speech and language therapy needs should be integral to major funded clinical studies related to post-COVID syndrome, with representation of SLTs on steering groups and data collection protocols that collect information on speech and language therapy needs

Next steps

As before, there are still many gaps in our understanding and knowledge of post-COVID syndrome and associated speech and language therapy needs, as well as how services are operating to meet them. To develop this further, the RCSLT will consider repeating this survey once more in future, and strengthen the questionnaire based on more recent evidence and developments. Furthermore, we may invite interested respondents to engage in focus groups that would enable us to understand some of the complexities highlighted in this survey in more detail. Another valuable next step would be engaging with individuals with post-COVID syndrome and speech and language therapy needs directly.

Additionally, in response to the findings of this survey, the RCSLT will:

- Share the findings with our members to support innovation and practice, service improvements and improve outcomes for service users
- Share the findings with government as part of our continued lobbying for people's speech and language therapy needs in post-COVID syndrome to be identified and supported
- Publish the findings in scientific journals and heighten awareness in the academic and multi-professional community
- Develop information and resources about the speech and language therapy needs experienced by those with post-COVID syndrome, to improve awareness within the profession and with colleagues, stakeholders (such as NICE and other policy makers) and the wider public
- Triangulate the information gathered with other sources of data, including clinical outcomes data collected routinely via the RCSLT Online Outcome Tool and the COVID-19 data collection tool, to inform our future work on post-COVID syndrome
- Closely monitor the evolving picture and make revisions to our data collection tools as required
- Continue to facilitate the sharing of learning across the profession and the broader healthcare workforce about post-COVID syndrome
- Undertake further consultation with members and other stakeholders to inform future workforce models

Appendix

Respondent information

Table 1

Employer	All services		'Dedicated' services	
	n	%	n	%
National Health Service (NHS)	95	74.8%	13	81.3%
Independent practice – sole trader	13	10.2%	0	0.0%
Independent practice – more than one SLT working	2	1.6%	1	6.3%
Independent practice – sole trader or more than one SLT working, contracted into the NHS	0	0.0%	0	0.0%
School (NHS or independent)	4	3.2%	1	6.3%
Justice (NHS or independent)	1	0.8%	0	0.0%
Not-for-profit organisation/third sector	1	0.8%	0	0.0%
Social care/services (NHS or independent)	2	1.6%	0	0.0%
University or other higher education institution	3	2.4%	0	0.0%
Local authority	0	0.0%	0	0.0%
Private health service	2	1.6%	0	0.0%
Voluntary sector	2	1.6%	0	0.0%
Social enterprise/public sector mutual	2	1.6%	1	6.3%
Other (please specify)	0	0.0%	0	0.0%
<i>TOTAL</i>	127	100.0%	16	100.0%
Clinical area				
Acquired speech difficulties	62	7.1%	8	6.3%
AAC	46	5.2%	6	4.7%
Aphasia	54	6.2%	8	6.3%
Autism Spectrum Disorder	15	1.7%	1	0.8%
Bilingualism	9	1.0%	1	0.8%
Brain injury	51	5.8%	7	5.5%
Cleft lip and palate / craniofacial	5	0.6%	0	0.0%
Critical care	30	3.4%	6	4.7%

COVID-19 (acute infection)	31	3.5%	8	6.3%
Deafness	5	0.6%	1	0.8%
Dementia	48	5.5%	8	6.3%
Developmental language disorder	10	1.1%	1	0.8%
Dysfluency	32	3.6%	5	3.9%
Dysphagia (adults)	72	8.2%	10	7.8%
Dysphagia (paediatrics)	5	0.6%	0	0.0%
Head and neck cancer	31	3.5%	5	3.9%
Learning disabilities	21	2.4%	1	0.8%
Mental health (adults)	19	2.2%	2	1.6%
Neonatal care	4	0.5%	0	0.0%
Post- COVID syndrome/ 'Long COVID'	47	5.4%	11	8.6%
Progressive neurological disorders	57	6.5%	9	7.0%
Respiratory care	36	4.1%	6	4.7%
Selective mutism	10	1.1%	0	0.0%
Social communication difficulties	23	2.6%	1	0.8%
Social, emotional and mental health	9	1.0%	0	0.0%
Speech sound disorders	15	1.7%	1	0.78%
Stroke	52	5.9%	8	6.3%
Trans and gender-diverse voice and communication	15	1.7%	4	3.1%
Visual and multi-sensory impairments	3	0.3%	0	0.0%
Voice	55	6.3%	10	7.8%
Other	6	0.7%	0	0.0%
TOTAL	878	100.0%	128	100.0%
Region				
Channel Islands and Isle of Man	0	0.0%	0	0.0%
East Midlands	9	8.3%	0	0.0%
East of England	9	8.3%	2	13.3%
London	16	14.7%	1	6.7%
North East & Cumbria	8	7.3%	1	6.7%
North West	4	3.7%	2	13.3%
Northern Ireland	8	7.3%	1	6.7%
Scotland	6	5.0%	0	0.0%

South Central	3	2.8%	0	0.0%
South East	16	14.7%	3	20.0%
South West	5	4.6%	1	6.7%
Wales	6	5.5%	2	13.3%
West Midlands	8	7.3%	0	0.0%
Yorkshire & the Humber	11	10.1%	2	13.3%
<i>TOTAL</i>	109	100.0%	16	100.0%
Age of referrals				
Under 2 years	14	5.4%	0	0.0%
2-11 years	24	9.3%	3	9.4%
12-17 years	25	9.7%	2	6.3%
18-24 years	100	38.6%	14	43.8%
25 years +	96	37.1%	13	40.6%
<i>TOTAL</i>	259	100.0%	32	100.0%

Organisational arrangements

Table 2

Organisational arrangement of 'non-dedicated' services	Responses	
	n	%
Within a MDT service	42	44.7%
Within a tertiary/specialist service	6	6.4%
Within a uni-disciplinary service (ie. just speech and language therapy)	46	48.9%
<i>TOTAL</i>	94	100.0%

Table 3

Settings worked in (of respondents from 'non-dedicated' services)	Responses	
	n	%
Individual's own home/usual place of residence	50	15.2%
Hospice	11	3.3%
Via telehealth (e.g. virtual ward or clinic)	50	15.2%
Critical care/Intensive care unit	24	7.3%
Care/nursing home	31	9.4%

Secure hospitals or custodial settings	4	1.2%
Out-patient setting/clinic	62	18.8%
Community hospitals	21	6.4%
Early years settings/children's centre	10	3.0%
Acute wards	32	9.7%
Schools	12	3.6%
Day centres	4	1.2%
University or HEI	1	0.3%
Further education college	3	0.9%
Private practice setting	6	1.8%
Other (please specify)	8	2.4%
TOTAL	329	100.0%

Table 4

Organisational arrangements of 'dedicated services'	Responses	
	n	%
Working in a multi-disciplinary team	14	100.0%
Not working in a multi-disciplinary team	0	0.0%
TOTAL	14	100.0%
Providing assessment and therapy	14	100.0%
Providing assessment only	0	0.0%
TOTAL	14	100.0%

Referrals

Table 5

Number of referrals	Responses					
	All services		Dedicated services		Non-dedicated services	
	n	%	n	%	n	%
1-10	26	34.7%	0	0.0%	26	41.9%
11-20	14	18.7%	2	15.4%	12	19.4%
21-30	9	12.0%	2	15.4%	7	11.3%
31-40	2	2.7%	0	0.0%	2	3.2%
41-50	8	10.7%	1	7.7%	7	11.3%
51-60	2	2.7%	0	0.0%	2	3.2%
61-70	3	4.0%	3	23.1%	0	0.0%
71-80	2	2.7%	1	7.7%	1	1.6%

81-90	2	2.7%	2	15.4%	0	0.0%
91-100	5	6.7%	1	7.7%	4	6.5%
101-110	2	2.7%	1	7.7%	1	1.6%
I don't know	6	0.0%	0	0.0%	6	0.0%
TOTAL	81	100.00	13	100.0%	68	100.0%

Table 6

Sources of referrals	Responses					
	All services		Dedicated services		Non-dedicated services	
	n	%	n	%	n	%
GPs	51	19.2%	10	24.4%	41	18.3%
Post-COVID hub/long COVID clinics	40	15.1%	11	26.8%	29	12.9%
Social care	9	3.4%	1	2.4%	8	3.6%
Discharge coordinators	10	3.8%	2	4.9%	8	3.6%
Medical consultants	59	22.3%	7	17.1%	52	23.2%
Allied health professionals	45	17.0%	5	12.2%	40	17.9%
Nurses	19	7.2%	0	0.0%	19	8.5%
Critical care outreach	9	3.4%	2	4.9%	7	3.1%
Self-referral	18	6.8%	2	4.9%	16	7.1%
Other	5	1.9%	1	2.4%	4	1.8%
TOTAL	265	100.0%	41	100.0%	224	100.0%

Table 7

Reasons for referrals	Responses					
	All services		Dedicated services		Non-dedicated services	
	n	%	n	%	n	%
Dysphagia	67	21.6%	13	18.1%	54	22.7%
Dysphonia	68	21.9%	14	19.4%	54	22.7%
Dysarthria	20	6.5%	3	4.2%	17	7.1%
Aphasia	15	4.8%	3	4.2%	12	5.0%
Cognitive communication disorder	35	11.3%	10	13.9%	25	10.5%
Dyspraxia	3	1.0%	0	0.0%	3	1.3%
Laryngeal hypersensitivity	37	11.9%	9	12.5%	28	11.8%
Upper airways disorder	39	12.6%	10	13.9%	29	12.2%

Dysfluency	10	3.2%	4	5.6%	6	2.5%
Other SLT needs	16	5.2%	6	8.3%	10	4.2%
<i>TOTAL</i>	310	100.0%	72	100.0%	238	100.0%

Table 8

Age of referrals	Responses					
	All services		Dedicated services		Non-dedicated services	
	n	%	n	%	n	%
Under 2 years	0	0.0%	0	0.0%	0	0.0%
2-11 years	3	1.1%	1	1.6%	2	0.9%
12-16 years	2	0.7%	0	0.0%	2	0.9%
17-24 years	13	4.7%	4	6.6%	9	4.1%
25-34 years	39	14.0%	10	16.4%	29	13.4%
35-49 years	68	24.5%	12	19.7%	56	25.8%
50-69 years	74	26.6%	14	23.0%	60	27.6%
70-79 years	46	16.5%	11	18.0%	35	16.1%
80-89 years	24	8.6%	7	11.5%	17	7.8%
90+ years	9	3.2%	2	3.3%	7	3.2%
<i>TOTAL</i>	278	100.0%	61	100.0%	217	100.0%

Speech and language therapy needs

Table 9

Speech and language therapy needs identified post-assessment by SLT	Responses indicating specified need as 'most common'					
	All services		Dedicated services		Non-dedicated services	
	n	%	n	%	n	%
Dysphagia	26	34.7%	23	37.10%	0	0.0%
Dysphonia	25	33.3%	21	33.87%	2	0.9%
Dysarthria	0	0.0%	0	0.00%	2	0.9%
Aphasia	1	1.3%	1	1.61%	9	4.1%
Cognitive communication disorder	6	8.0%	5	8.06%	29	13.4%
Dyspraxia	0	0.0%	0	0.00%	56	25.8%

Laryngeal hypersensitivity	9	12.0%	6	9.68%	60	27.6%
Upper airway difficulties	6	8.0%	4	6.45%	35	16.1%
Dysfluency	2	2.7%	2	3.23%	17	7.8%
No communication or swallowing needs	0	0.0%	0	0.00%	7	3.2%
<i>TOTAL</i>	75	100.0%	62	100.00%	217	100.0%

Table 10

Proportion of individuals whose speech and language therapy needs impact the domains	Domains									
	Wellbeing		ADL		Roles		Work		Education	
	n	%	n	%	n	%	n	%	n	%
All individuals	28	35.9%	24	35.8%	12	15.2%	14	17.7%	5	6.3%
Many individuals	37	47.4%	17	25.4%	29	36.7%	33	41.8%	13	16.5%
Some individuals	12	15.4%	23	34.3%	28	35.4%	20	25.3%	15	19.0%
No individuals	0	0.0%	0	0.0%	2	2.5%	2	2.5%	19	24.1%
Not sure	1	1.3%	3	4.5%	8	10.1%	10	12.7%	27	34.2%
<i>TOTAL</i>	78	100.0%	67	100.0%	79	100.0%	79	100.0%	79	100.0%

Table 11

Types of additional support accessed by individuals with post-COVID syndrome, as described respondents	Responses	
	n	%
Chronic fatigue service	1	1.7%
Cardiology	1	1.7%
Neurology	2	3.3%
ENT	3	5.0%
Respiratory	5	8.3%
Private yoga	1	1.7%
Mental health/ wellbeing/ psychology	19	31.7%
Citizen's Advice Bureau	2	3.3%
Financial support	5	8.3%
Occupational therapy	5	8.3%
Allied health professionals (nos)	1	1.7%
Physiotherapy	4	6.7%

Occupational health	4	6.7%
Social support/social care	4	6.7%
Signposting to groups	1	1.7%
Secondary care medical services	1	1.7%
Long COVID clinic	1	1.7%
<i>TOTAL</i>	<i>60</i>	<i>100.0%</i>

Speech and language therapy support

Table 12

Type of support*	Rank position indicating commonality (1= most common, 16= least common)																															
	1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
1	12	19.4%	3	4.9%	8	13.8%	7	12.1%	1	1.8%	2	3.8%	5	9.3%	3	5.8%	3	5.8%	3	5.9%	4	7.7%	0	0.0%	1	1.9%	0	0.0%	1	2.0%	0	0.0%
2	3	4.8%	7	11.5%	3	5.2%	2	3.4%	4	7.0%	5	9.4%	6	11.1%	3	5.8%	3	5.8%	3	5.9%	3	5.8%	3	6.7%	2	3.8%	2	3.8%	1	2.0%	2	3.9%
3	2	3.2%	7	11.5%	6	10.3%	6	10.3%	5	8.8%	5	9.4%	5	9.3%	4	7.7%	4	7.7%	4	7.8%	3	5.8%	1	2.2%	0	0.0%	0	0.0%	1	2.0%	0	0.0%
4	3	4.8%	4	6.6%	8	13.8%	9	15.5%	4	7.0%	9	17.0%	6	11.1%	5	9.6%	3	5.8%	2	3.9%	0	0.0%	1	2.2%	1	1.9%	1	1.9%	0	0.0%	0	0.0%
5	1	1.6%	1	1.6%	5	8.6%	2	3.4%	6	10.5%	7	13.2%	5	9.3%	3	5.8%	9	17.3%	7	13.7%	3	5.8%	0	0.0%	1	1.9%	1	1.9%	2	4.0%	1	2.0%
6	0	0.0%	2	3.3%	4	6.9%	6	10.3%	9	15.8%	6	11.3%	9	16.7%	6	11.5%	6	11.5%	3	5.9%	2	3.8%	0	0.0%	1	1.9%	0	0.0%	1	2.0%	0	0.0%
7	7	11.3%	7	11.5%	6	10.3%	5	8.6%	4	7.0%	6	11.3%	5	9.3%	6	11.5%	3	5.8%	2	3.9%	1	1.9%	1	2.2%	0	0.0%	0	0.0%	1	2.0%	1	2.0%
8	6	9.7%	4	6.6%	2	3.4%	5	8.6%	3	5.3%	4	7.5%	2	3.7%	9	17.3%	3	5.8%	4	7.8%	5	9.6%	2	4.4%	0	0.0%	3	5.8%	0	0.0%	1	2.0%
9	22	35.5%	14	23.0%	5	8.6%	3	5.2%	2	3.5%	2	3.8%	1	1.9%	3	5.8%	5	9.6%	2	3.9%	0	0.0%	1	2.2%	1	1.9%	0	0.0%	0	0.0%	0	0.0%
10	3	4.8%	7	11.5%	7	12.1%	6	10.3%	7	12.3%	4	7.5%	5	9.3%	3	5.8%	2	3.8%	9	17.6%	2	3.8%	0	0.0%	1	1.9%	1	1.9%	0	0.0%	0	0.0%
11	1	1.6%	0	0.0%	1	1.7%	0	0.0%	2	3.5%	1	1.9%	1	1.9%	1	1.9%	1	1.9%	1	2.0%	10	19.2%	12	26.7%	5	9.4%	5	9.6%	4	8.0%	7	13.7%
12	0	0.0%	0	0.0%	0	0.0%	1	1.7%	3	5.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	4	7.8%	8	15.4%	12	26.7%	8	15.1%	6	11.5%	4	8.0%	1	2.0%
13	0	0.0%	0	0.0%	1	1.7%	1	1.7%	1	1.8%	0	0.0%	0	0.0%	1	1.9%	1	1.9%	3	5.9%	4	7.7%	4	8.9%	19	35.8%	10	19.2%	6	12.0%	3	5.9%
14	1	1.6%	2	3.3%	1	1.7%	5	8.6%	5	8.8%	1	1.9%	2	3.7%	2	3.8%	5	9.6%	2	3.9%	4	7.7%	3	6.7%	6	11.3%	13	25.0%	2	4.0%	0	0.0%
15	1	1.6%	0	0.0%	1	1.7%	0	0.0%	1	1.8%	1	1.9%	1	1.9%	3	5.8%	4	7.7%	2	3.9%	2	3.8%	5	11.1%	4	7.5%	7	13.5%	15	30.0%	6	11.8%
16	0	0.0%	3	4.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	1.9%	0	0.0%	0	0.0%	0	0.0%	1	1.9%	0	0.0%	3	5.7%	3	5.8%	12	24.0%	29	56.9%
TOTAL	62	100.0%	61	100.0%	58	100.0%	58	100.0%	57	100.0%	53	100.0%	54	100.0%	52	100.0%	52	100.0%	51	100.0%	52	100.0%	45	100.0%	53	100.0%	52	100.0%	50	100.0%	51	100.0%

Table 12* Type of support given defined as:

1. Provision of advice and signposting to online information and resources to support self-care (e.g. Your Covid Recovery)
2. Referral for further investigations/to another speech and language therapy service (e.g. tertiary service)
3. Referral to medical professionals for diagnostics to further inform SLT input
4. Referral to tertiary MDT health service (e.g. ENT, gastro, respiratory) to further inform SLT input
5. Delivery of speech and language therapy (face to face or remotely) aimed at 'Prevention'
6. Delivery of speech and language therapy (face to face or remotely) aimed at 'Maintenance'
7. Delivery of speech and language therapy (face to face or remotely) aimed at 'Enabling'
8. Delivery of speech and language therapy (face to face or remotely) aimed at 'Curative' care
9. Delivery of speech and language therapy (face to face or remotely) aimed at 'Rehabilitation'
10. Delivery of speech and language therapy (face to face or remotely) aimed at 'Supportive' care
11. Delivery of speech and language therapy (face to face or remotely) aimed at 'Palliative' care
12. Delivery of speech and language therapy specifically to provide vocational support
13. Delivery of an SLT prescribed rehabilitation package by another member of the MDT (of which the speech and language therapist is a member)
14. Referral on to another healthcare provider/wider MDT to support ongoing non SLT needs (e.g. fatigue, emotional wellbeing, breathlessness)
15. Discharge from speech and language therapy without any other input- where the individual does not require speech and language therapy, either because the SLT needs have resolved, or the referral was not appropriate
16. Discharge from speech and language therapy without any other input -due to too many constraints on the service

Table 13

Outcome measure described	Responses	
	n	%
TOMs- scale not specified	22	22.2%
TOMs- Long COVID scale	1	1.0%
TOMs- dysphagia scale	1	1.0%
TOMs- AAC scale	1	1.0%
TOMs- dysphonia scale	1	1.0%
TOMs- vocal tract discomfort scale	1	1.0%
Voice handicap index	10	10.1%
Informal measures	9	9.1%
Newcastle hypersensitivity questionnaire	7	7.1%
Reflux symptom index	6	6.1%
Leicester cough questionnaire	5	5.1%
GRBAS	4	4.0%
EAT	3	3.0%
EKOS	2	2.0%
GAS	2	2.0%
VCD-Q	2	2.0%
Yorkshire rehab	2	2.0%
Dysphagia handicap index	1	1.0%
VOISS	1	1.0%
FACE-Q	1	1.0%
FDI	1	1.0%
SFCS	1	1.0%
S:Z RATIO	1	1.0%
Max phonation time	1	1.0%
Brompton	1	1.0%
Modified Borg	1	1.0%
EQ-5D-5L	1	1.0%
Post-covid functional status scale	1	1.0%
Care aims	1	1.0%
patient aims	1	1.0%
CCCABI	1	1.0%
Latrobe	1	1.0%
SW-QOL	1	1.0%
AuTOMs	1	1.0%
Modified Ranking Scale	1	1.0%
Royal Brisbane	1	1.0%

Cough severity index	1	1.0%
TOTAL	99	100.0%

SLT experiences

The tables below illustrate the key themes and corresponding extracts as identified by both coders, as mapped onto each other demonstrating reliability of the analysis.

Respondents' perceived challenges to quality care at individual and service level			
Coder 1		Coder 2	
Key themes	Illustrative excerpts	Key themes	Illustrative excerpts
<i>1. Patient with COVID</i>	"Complex, multifactorial"	<i>1. Clinical challenges</i>	"complexity... many needs"
	"complex interplay between symptoms"		"how variable the presentation is"
<i>2. COVID as an unknown</i>	"high levels of fatigue"		"fatigue and breathlessness impacting everything"
	"new clinical cohort"		"little understood"
<i>3. Infrastructure/resourcing</i>	"limited understanding"		"limited understanding"
	"no additional funding"	<i>2. Organisational arrangements</i>	"setting up service was a challenge"
"setting up service was a challenge"	"referral pathway is main challenge"		
<i>4. The MDT</i>	"lack of coordinated team approach"		"lack of coordinated team approach"
	"disparate MDT and psychological services"	"lack of an MDT"	
<i>5. Therapist experiences</i>	"lack of an MDT"	<i>3. Professional and personal issues</i>	"compassion fatigue"
	"feeling clinically"		

	<p>isolated"</p> <p>"lack of experience with this population"</p> <p>"trying to find time to produce research"</p> <p>"compassion fatigue"</p>		<p>"no clinical supervision"</p> <p>"having the knowledge to know where to go for assistance for other symptoms"</p>
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Respondents' perceived enablers to quality care at individual and service level			
Coder 1		Coder 2	
Key themes	Illustrative excerpts	Key themes	Illustrative excerpts
<p>1. <i>Therapeutic skills, knowledge and strategies</i></p>	<p>"early diagnosis"</p> <p>"empathy, counselling skills"</p> <p>"admitting this is a new virus and we still don't know"</p> <p>"Validating experiences"</p> <p>"Good knowledge and experience of voice"</p> <p>"having access to ENT assessment"</p> <p>"thorough initial assessment"</p>	<p>1. <i>Validation for patients/ counselling</i></p>	<p>"admitting this is a new virus and we still don't know"</p> <p>"Validating experiences"</p> <p>"listening.. patient story being heard and understood"</p> <p>"being a listening ear"</p> <p>"empathy, counselling skills"</p>
		<p>2. <i>Clinical knowledge and management</i></p>	<p>"Good knowledge and experience of voice"</p> <p>"regular contact and goal setting jointly"</p>

			<p>"early diagnosis of ENT and voice therapy needs"</p> <p>"thorough initial assessment"</p>
<p>2. <i>Communication and resource for collaboration</i></p>	<p>"MDT approach"</p> <p>"having regular contact with specialist staff"</p> <p>"funding"</p> <p>"team communication is key"</p> <p>"more specific services for long covid"</p> <p>"enough staff"</p> <p>"having consultants involved in the MDT to guide onward referrals"</p>	<p>3. <i>Adequately resourced /organised provision</i></p>	<p>"more specific services for long covid"</p> <p>"early referral and more recognition"</p> <p>"clinics to be improved/ MDT working"</p> <p>"MDT approach"</p> <p>"permanent funding, stable team members"</p>
<p>3. <i>Support networks and information</i></p>	<p>"develop guidelines"</p> <p>"advisory group support"</p> <p>"support from others involved with COVID-19"</p> <p>"guidance and resources centrally produced"</p> <p>"a post-COVID CEN"</p> <p>Education"</p>	<p>4. <i>Professional activity</i></p>	<p>"develop guidelines"</p> <p>"a post-COVID CEN"</p> <p>"liaising with other SLTs with knowledge in the field"</p> <p>"training from long covid specialist services"</p> <p>"team CPD and peer supervision"</p>

	"fully funded service research"		
4. <i>Person-centred care</i>	<p>"goal setting jointly with service users"</p> <p>"earlier initial appointment could really reduce distress"</p> <p>"virtual consultations to reduce travel for patients with fatigue"</p> <p>"spending time understanding the patients difficulties"</p> <p>"holistic and compassionate approach"</p> <p>"support from their family"</p>	5. <i>Evidence-based practice</i>	<p>"holistic and compassionate approach"</p> <p>"understanding patients difficulties"</p> <p>"fully funded service research"</p> <p>"more evidence-based treatments"</p> <p>"offering patient option of face to face or virtual or hybrid"</p> <p>"position paper and guidance towards evidence base"</p>

References

- Archer, S.K., Iezzi, C.M., Gilpin, L., 2021. Swallowing and Voice Outcomes in Patients Hospitalized With COVID-19: An Observational Cohort Study. *Arch Phys Med Rehabil* 102, 1084–1090. <https://doi.org/10.1016/j.apmr.2021.01.063>
- BBC Radio 4 - Word of Mouth, Speech and Language Therapy [WWW Document], 2021. BBC. URL <https://www.bbc.co.uk/programmes/m000vp3y> (accessed 12.1.21).
- Belafsky, P.C., Postma, G.N., Koufman, J.A., 2002. Validity and Reliability of the Reflux Symptom Index (RSI). *Journal of Voice* 16, 274–277. [https://doi.org/10.1016/S0892-1997\(02\)00097-8](https://doi.org/10.1016/S0892-1997(02)00097-8)
- Birring, S.S., Prudon, B., Carr, A.J., Singh, S.J., Morgan, M.D.L., Pavord, I.D., 2003. Development of a symptom specific health status measure for patients with chronic cough: Leicester Cough Questionnaire (LCQ). *Thorax* 58, 339–343. <https://doi.org/10.1136/thorax.58.4.339>
- Blomberg, B., Mohn, K.G.-I., Brokstad, K.A., Zhou, F., Linchausen, D.W., Hansen, B.-A., Lartey, S., Onyango, T.B., Kuwelker, K., Sævik, M., Bartsch, H., Tøndel, C., Kittang, B.R., Bergen COVID-19 Research Group, Madsen, A., Bredholt, G., Vahokoski, J., Fjelltveit, E.B., Bansal, A., Trieu, M.C., Ljostveit, S., Olofsson, J.S., Ertesvåg, N., Sandnes, H.H., Corydon, A., Søyland, H., Eidsheim, M., Jakobsen, K., Guldseth, N., Hauge, S., Cox, R.J., Langeland, N., 2021. Long COVID in a prospective cohort of home-isolated patients. *Nat Med* 27, 1607–1613. <https://doi.org/10.1038/s41591-021-01433-3>
- Braun, V., Clarke, V., 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology* 3, 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Davis, H.E., Assaf, G.S., McCorkell, L., Wei, H., Low, R.J., Re'em, Y., Redfield, S., Austin, J.P., Akrami, A., 2021. Characterizing long COVID in an international cohort: 7 months of symptoms and their impact. *EClinicalMedicine* 38, 101019. <https://doi.org/10.1016/j.eclinm.2021.101019>
- Enderby, P.M., John, A., 2019. *Therapy Outcome Measure User Guide*. J&R Press Limited. Hampshire, England.
- Graham, E.L., Clark, J.R., Orban, Z.S., Lim, P.H., Szymanski, A.L., Taylor, C., DiBiase, R.M., Jia, D.T., Balabanov, R., Ho, S.U., Batra, A., Liotta, E.M., Koralnik, I.J., 2021. Persistent neurologic symptoms and cognitive dysfunction in non-hospitalized Covid-19 “long haulers.” *Annals of Clinical and Translational Neurology* 8, 1073–1085. <https://doi.org/10.1002/acn3.51350>
- Jacobson, B.H., Johnson, A., Grywalski, C., Silbergleit, A., Jacobson, G., Benninger, M.S., Newman, C.W., 1997. The Voice Handicap Index (VHI). *American Journal of Speech-Language Pathology* 6, 66–70. <https://doi.org/10.1044/1058-0360.0603.66>

- Johnson, S., 2020. "We give patients their voices back": the speech therapists on the Covid-19 frontline. The Guardian. [WWW Document]. URL <https://www.theguardian.com/society/2020/jul/30/give-patients-voices-back-speech-language-therapists-covid-19-frontline> (accessed 11.29.21).
- Kang, C.H., Zhang, N., Lott, D.G., 2021. Muscle Tension Dysphagia: Contributing Factors and Treatment Efficacy. *Ann Otol Rhinol Laryngol* 130, 674–681. <https://doi.org/10.1177/0003489420966339>
- Office for National Statistics, 2021. Prevalence of ongoing symptoms following coronavirus (COVID-19) infection in the UK - Office for National Statistics [WWW Document]. URL <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/bulletins/prevalenceofongoingsymptomsfollowingcoronaviruscovid19infectionintheuk/7october2021> (accessed 11.29.21).
- Omori, K., 2011. Diagnosis of Voice Disorders. *JMA journal*, 54, 4, 248-253.
- Royal College of Speech and Language Therapists (RCSLT) 2021a. Long COVID and speech and language therapy: Understanding the mid- to long-term speech and language therapy needs and the impact on services [WWW Document]. RCSLT. URL <https://www.rcslt.org/wp-content/uploads/2021/05/RCSLT-Long-Covid-Survey-Report-May-2021.pdf> (accessed 11.30.21).
- Royal College of Speech and Language Therapists (RCSLT) 2021b. Speech and language therapy services after COVID-19 [WWW Document]. RCSLT. URL <https://www.rcslt.org/get-involved/building-back-better-speech-and-language-therapy-services-after-covid-19/> (accessed 11.30.21).
- Scottish Government, 2021. Coronavirus (COVID-19): Scotland's Long Covid service [WWW Document]. URL <http://www.gov.scot/publications/scotlands-long-covid-service/> (accessed 11.29.21).
- SeeBle, J., Waterboer, T., Hippchen, T., Simon, J., Kirchner, M., Lim, A., Müller, B., Merle, U., 2021. Persistent Symptoms in Adult Patients 1 Year After Coronavirus Disease 2019 (COVID-19): A Prospective Cohort Study. *Clin Infect Dis* ciab611. <https://doi.org/10.1093/cid/ciab611>
- Vertigan, A.E., Bone, S.L., Gibson, P.G., 2014. Development and validation of the Newcastle laryngeal hypersensitivity questionnaire. *Cough* 10, 1. <https://doi.org/10.1186/1745-9974-10-1>

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