

Module BNPF 7010

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**Exercise Prescription for Voice Therapy: Speech and Language
Therapists (SLT) perceptions and practice.**

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Exercise Prescription for Voice Therapy: Speech and Language Therapists (SLT) perceptions and practice.

Project Proposal

The Context

Voice therapy is offered to clients who present with persistent changes to their voice quality (dysphonia) following a laryngeal examination by an Ear, Nose and Throat (ENT) consultant (RCSLT, 2019). It is carried out by a Voice Specialist Speech and Language Therapist and is usually the first line of treatment offered to clients with a range of benign voice disorders. Up to 40,000 referrals for voice therapy are made in the UK each year (Wilson, 1995). Voice disorders can be complex and multifactorial and a range of approaches are often required to treat the client. Voice therapists offer a combination of both direct and indirect therapy techniques to effect change on client's voices and usually suggest a range of lifestyle changes and exercises to support improvement in voice quality (De Cuhna Pereira *et al.*, 2017). While there is evidence to support the efficacy of SLT voice exercises in the treatment of voice disorders, there is little evidence currently to support exercise prescriptions and the modalities of resources which will offer the most efficient outcomes for patients (Madill *et al.*, 2021). Little is currently known about the impact of different levels of exercise on the laryngeal musculature or of effective lengths of treatment to restore acceptable voice quality (Meersman *et al.*, 2018; Sandage and Hoch, 2017).

Current waiting list and budget pressures across the NHS, and particularly in the field of Allied Health Professionals (AHPs) are compounded by staff shortages and resource restrictions (NHS, 2022). This means that clinicians need to offer the most efficient, evidence-based approaches through their intervention, yet there are few resources to support decision making around exercise programmes, and few patient-ready programmes to support client's independent therapy practice between therapy sessions (Batista *et al.*, 2022). There are few standardised treatment pathways within the field of voice therapy to inform workforce planning and waiting list management (RCSLT, 2025).

The Justification

There is little qualitative research looking at how SLTs make their decisions around exercise prescription and what factors may be considered in suggesting a treatment plan for clients. Few resources currently exist to support decision-making around treatment prescription, and relatively little is understood about the evidence base to support decisions around different treatment choices. These decisions include the type of exercises offered, the frequency and

duration of exercise, the effectiveness of resources provided to support exercise, the influence of individual client factors and methods of motivation which may be required. Decisions may also be influenced by caseload pressure and efficiency targets, particularly in the NHS setting. A qualitative research approach using interviews with individual therapists from a range of services nationally could contribute to a greater understanding of what factors are considered in the decisions around exercise prescription and offer an insight into what resources and training may be useful for therapists to enable evidence-based decision-making around exercise prescription. It offers an opportunity to establish any consistency of decision making approach and whether any general principles of exercise prescription could be applied to voice therapy decision-making.

The Intended Impact

This research could provide a benchmark for SLT services to support a greater understanding of the complexities of decision-making for voice patients, and more clarity of treatment practices to inform treatment pathways. It may reveal a pattern of established treatment protocols which could be standardised and tested for treatment efficacy through further research. It may help to establish what clinicians find to be the most helpful and motivating resources to support patient practice which will inform the most efficient and effective clinical practice. In my own practice, it will help to clarify whether my own assumptions around exercise practice are in line with other members of my profession, and with current research evidence. As the lead clinician of a voice service, it could help to inform my workforce planning and lead to effective waiting list management if general patterns of treatment pathways were better understood and implemented. It could help commissioning bodies to understand what skills and workforce are required for effective management of voice disorders, and support evidence-based practice for specific treatment pathways.

Aims

1. To understand how SLTs make decisions about exercise prescriptions.
2. To understand what factors influence decisions around exercise prescriptions.
3. To investigate whether there is a consensus within the SLT profession on what exercise prescriptions are offered.
4. To understand what modalities of resources are most commonly offered to patients to support exercise programmes.

Objectives

1. To complete a literature review of current research around exercise prescription in SLT voice therapy
2. To develop a questionnaire to gain information on SLT current practice around exercise prescription
3. To complete a series of interviews to further inform how SLTs make decisions around exercise prescription
4. To complete a reflexive thematic analysis of the data collected from questionnaires and interviews

The Outlined Intention

I intend to have approximately 20 questionnaires completed by qualified SLTs regularly working with benign voice disorders. These will provide a broader perspective and allow for participants to express their views anonymously, thus reducing any restraint they may feel in expressing their views. 5-6 follow-up semi-structured interviews will then be completed. Participants will be given the opportunity to opt in or out of completing a follow-up interview after the questionnaire. Semi-structured interviews have been chosen to ensure the relevant themes are discussed, but to allow the interviewer to explore answers in greater depth to support greater understanding of the answers given. Interviews will be held online and recorded. Participants will be sought through the Clinical Excellence Networks (CENs) which are part of the Royal College of Speech and Language Therapists (RCSLT) Continuing Professional Development (CPD) network. Interviews will be transcribed and analysed using reflexive thematic analysis (Braun and Clarke, 2006). This will allow for data to be analysed for themes and patterns of practice, and to be compared with current literature and the researcher's current practice.

Ethics and Insider Research

The ethical framework set out by Costley *et al.*, (2010) will be considered throughout the project. Participants will be self-selected by replying to a request for participants to complete the questionnaire. They will largely be indirect professional colleagues who may be known remotely to the researcher but without close relationships. Informed consent will be sought from all participants as part of the questionnaire. In order to reduce any compulsion participants may feel to participate, it will be made clear that participation is entirely voluntary and questionnaire responses can remain entirely confidential if participant wish. This will allow for immediate team members to participate in the study without concerns around compulsion to participate or feeling the need to give answers which fit with the researcher's

perceived perspective. Participants who are willing to take part in a follow-up interview will be asked to provide an email address at the end of the questionnaire. Direct colleagues of the researcher will not be chosen for participation in interviews to reduce any impact on direct work-based relationships. Participants names will not be used during interviews and transcriptions will be coded. Any personally identifiable information will be redacted from the transcriptions. Interview recordings and transcriptions will be stored on a password protected personal computer, only accessible to the researcher. To reduce the risk of participants' distress during the interviews, participants will be aware that they can stop the interviews at any time and do not have to disclose any information they do not wish to discuss. Interviews will be held in non-work time to reduce any work-based pressures. Participants will be offered the opportunity to debrief at the end of the interview and will be directed to support via the RCSLT clinical supervisors if required. Participants will be given the opportunity to check their interview transcriptions for accuracy.

As an insider researcher, it will be necessary to try and maintain a neutral stance during the interviews. An interview guide will be developed to ensure that all participants are offered the same opportunities and prompts to express their views, however some flexibility will be allowed to ensure views can be clarified and expanded on for a deeper, nuanced understanding of their views (Weiss, 2019). SLTs who work directly with the researcher will be excluded from the study, as they are more likely to be influenced by knowledge of my views on the topic, and seek to confirm them (Bell, 2005). A reflective diary will be kept exploring my thoughts throughout the project and compare with research and participant data to mitigate against the influence of my own bias (Braun and Clarke, 2006).

Expected Learning Outcomes

1. To deepen my knowledge and understanding of how SLTs make decisions around exercise prescription to enhance professional understanding of the complexity of SLT practice.
2. To increase my knowledge of the evidence base for exercise prescription for voice therapy in order to offer the most efficient and effective treatment for clients.
3. To increase my knowledge on what resources and strategies motivate clients to complete exercise programmes to inform SLT practice and planning around resource development.
4. To improve my interviewing skills.
5. To improve my qualitative data analysis skills.

Introduction

Dysphonia, or problems with the voice, are known to affect around 30% of the US population over a lifetime (Roy *et al.*, 2005; Verdolini and Ramig, 1998), and 6.6% at any one time. The majority of these are benign, functional disorders for whom the first line of treatment is Speech and Language Therapy (SLT) (Lucchini *et al.*, 2018). Around 40,000 referrals are made for voice therapy each year in the UK (Wilson, 1995). Dysphonia has a range of impacts on the individual's quality of life including emotional, psychological, social and financial implications through loss of occupational earnings, all of which has wider implications for the health service in general (Wenke *et al.*, 2014; Dietrich *et al.*, 2008).

The causes of dysphonia can be complex and multifactorial, involving a range of physiological, psychological, behavioural and neurological factors (Van Houtte *et al.*, 2011; Misono *et al.*, 2018; Hacki *et al.*, 2022; Tezcaner *et al.*, 2017). It presents with a wide range of signs and symptoms including changes in voice quality, strength and stamina, muscle tension and vocal fatigue (Watts *et al.*, 2019; Kolbrunner and Seifert, 2017). Once malignancy has been ruled out by Ear, Nose and Throat (ENT) Specialists, patients are referred to SLT Voice specialist services for rehabilitation of their voice (RCSLT, 2019). Faced with a complex picture of wide ranging diagnoses, nomenclature and presentations, SLTs offer a wide range of treatment approaches to treat dysphonia.

Referrals to SLT have increased dramatically in the last 10 years throughout the NHS with little uplift in staffing levels. The impact has therefore been increasing waiting times for treatment and pressure on services and therapists to reduce waiting times whilst achieving efficiency and efficacy of treatment (RCSLT, 2025). While clinical guidelines exist for treatment of voice patients (RCSLT, 2019) there are no competencies for voice specialists to adhere to and few evidence-based practice protocols or treatment pathways for therapists to follow. Research has shown that SLTs use a variety of direct and indirect therapy techniques in practice to change both lifestyle and behavioural factors influencing the voice, as well as offering exercises aimed at strengthening or rebalancing the complex systems involved in voice production (Mackenzie *et al.*, 2001; Carding *et al.*, 1999; Ruotsalainen *et al.*, 2008). These are carried out simultaneously to offer the most time-efficient treatment for patients (Chan *et al.*, 2013; Pedrosa *et al.*, 2016; Watts *et al.*, 2019; Ribiero *et al.*, 2018), the impact being that little practice-based evidence exists to support one technique or approach over another (Madill *et al.*, 2021). Home practice is often recommended to patients to maximise the effectiveness of treatment and achieve efficient carry-over of techniques into everyday voice use. Little research currently exists however on how to ensure exercise programmes are carried out effectively and what is the optimum exercise prescription to achieve the

therapeutic goals. There is also little research into how SLTs decide on the treatments offered, and less on how decisions are reached regarding exercise prescription (Chan *et al.*, 2013; Burg *et al.*, 2015; Madill *et al.*, 2021).

By carrying out a deeper study into the decision making processes used by SLTs around exercise prescription, I intend:

1. To deepen my knowledge and understanding of how SLTs make decisions around exercise prescription.
2. To increase my knowledge of the evidence base for exercise prescription for different treatment targets.
3. To increase my knowledge on what resources and strategies motivate clients to complete exercise programmes.
4. To improve my interviewing skills.
5. To improve my qualitative data analysis skills.

This will enable me to offer treatment programmes and exercise prescriptions based on the most effective and efficient, evidence-based therapy to effectively manage individual patients, whilst having a positive impact on waiting list pressures. It may also inform the training of SLTs in my current team to streamline our current therapy process and practice and inform on the training offered to therapists starting their careers in voice therapy.

Literature Review

Voice Specialist SLTs have been working with patients with a range of voice disorders since the inception of the profession in the 1940s. Voice disorders are known to be complex and multifactorial, and the treatment process is equally complex in terms of the range of treatment strategies used to manage them (Patel *et al.*, 2011; De Bodt, 2015). SLT has been shown to be effective in the treatment of voice disorders, but little is understood about the factors involved in achieving the optimum treatment dosage and the active ingredients involved in effective treatment (Roy, 2012; McCurtin and Carter, 2015; Desjardins *et al.*, 2017). There has been a significant increase in the last 15 years into the study of what factors contribute to effective treatment and how to support patients' motivation to implement the strategies and exercises recommended to them to ensure the most efficient and effective recovery of their voice. This increased interest is undoubtedly partly related to the increase in referrals over recent years, and the ongoing pressure within health services to offer the most efficient treatment in order to manage ever-increasing waiting lists on a background of tightening resources (RCSLT, 2025).

Clinical Decision Making

SLT clinical decision making in voice is as complex and multifactorial as the voice disorder itself, drawing from neurobiology, exercise physiology, motor learning, psychology and language therapy disciplines (Patel, 2011). The RCSLT clinical guidelines for working with voice disorders encourage an Evidence Based Practice (EBP) approach to treatment decisions (RCSLT, 2019) which involves incorporating current research, clinical experience and patient priorities into treatment decisions (McCurtin and Carter, 2015). EBP is not always viewed positively by SLTs due to the challenges of applying and implementing research evidence into clinical practice. Questions exist around the ability to apply researched strategies into the practical application of therapy, given the inability to control variables, and frequently working without clear diagnoses (McCurtin and Carter, 2015). Research articles do not always produce clear guidance on optimal dosage and intensity of treatment, and efficacy can be limited by the length of the research project rather than seeking to evidence the optimum required length of treatment (Baker, 2012; De Bodt, 2015; Bane *et al.*, 2019). A lack of understanding of the active ingredients involved in therapeutic intervention also contributes to a lack of confidence within SLT in applying research evidence directly into clinical practice (Kamhi, 2012; Roy 2012; Turkstra *et al.*, 2016; Eastwood *et al.*, 2024).

In the last 10 years, efforts have been made to try and conceptualise the elements involved in voice therapy practice, often referred to as the 'black box' phenomenon due to the lack of

specificity and limited understanding of the active elements in treatment (Desjardins *et al.*, 2017; Eastwood *et al.*, 2024). Madill *et al.* (2020) developed the Motor Learning Classification Framework (MCLF) (see Appendix 1) to identify the elements involved in the pre-practice phase of treatment which included modelling, verbal information, modification and feedback. Clinicians were observed and these behaviours were identified. Modification and feedback were found to be the most difficult to measure with poor inter-rater reliability between those recording observations. The MCLF was revised by Eastwood *et al.* (2024) to place greater emphasis on attentional focus and self-evaluation. Both models focus on the pre-practice phase of therapy which occurs face to face with clinician and patient, but do not address the internal decision making process involved in deciding what treatment to offer. Van Stan *et al.* (2021a) applied the Rehabilitation Treatment Specification System (RTSS) to voice treatment to attempt to classify the different elements of treatment into organ functions (e.g., exercises to improve strength), skills and habits (to change behaviours) and representations (to change emotions or thoughts around the voice e.g., through education). Each is separated into an ingredient (what is done), from which a mechanism of action is hypothesised and a target for change is identified, all of which may feed into one overall aim (see Appendix 2). While the RTSS-Voice has been shown to cover the majority of treatment ingredients, further work is required to understand the impact of how different clinicians address different targets and how decisions are made regarding dosage of targets and disorder specific protocols (Wolfberg *et al.*, 2024). While the MLCF and RTSS are significant steps forward in understanding the ingredients of voice therapy, they are yet to be integrated into wider SLT practice (Madill *et al.*, 2020). The decision-making practice of SLTs therefore remains largely invisible through observational study (McCurtin and Carter, 2015; Turkstra *et al.*, 2016; Kwong *et al.*, 2020).

Treatment Dosage Decisions

Another complex area of decision-making for SLTs is the dosage recommendations for treatment, including both the frequency of therapy sessions and recommendations for independent practice. As yet, little research exists into the optimal quantity and effectiveness of dosage recommendations (Baker, 2012; De Bodt, 2015; Bane *et al.*, 2019; Batista *et al.*, 2022) and is impacted by confusion over the variety of components included in a dosage decision. Warren *et al.* (2007) suggested five aspects involved in dosage prescription: the task itself, number of repetitions in a session, number of intervention sessions, the duration of intervention and cumulative intervention intensity. Traditionally, direct therapy sessions have been offered up to once a week over a period of months (Wenke *et al.*, 2014). More recently, it has been suggested that intensive voice therapy can have similar positive outcomes, but has the benefit of enhancing motor learning resulting in more effective

transfer of techniques into everyday life (Meersshman, 2018; Bane *et al.*, 2019; Wenke *et al.*, 2014). Lee Silverman Voice Treatment (LSVT), (Ramig *et al.*, 1996) and Vocal Function Exercises (VFE), (Stemple *et al.*, 1994, Bane *et al.*, 2019) are currently the only prescriptive treatment programmes to be researched in terms of treatment intensity. Both demonstrated positive outcomes of intensive treatment, however high dosage of VFEs did result in higher patient withdrawal suggesting treatment can be too intense for some participants.

Consideration of the treatment goals may also be a relevant factor in dosage decisions. A different dosage may be required for hyperfunctional disorders such as Muscle Tension Dysphonia (MTD) where the goal is to change vocal behaviour and rebalance muscle tension (Van Stan *et al.*, 2017; Eastwood *et al.*, 2024), as compared to hypofunctional disorders such as Presbyphonia (elderly voice) where the goal may be a more physiological strengthening-based approach based on upregulation of the muscles involved in voice production (Johnson and Sandage, 2021). A behaviour change approach may require an intensive dosage at the early stage of treatment as new behaviours are learned, then reducing over time as these behaviours are transferred into normal voice production (Madill *et al.*, 2020; Maas *et al.*, 2008). In contrast, an increasing and maintenance dosage may be required when muscle strengthening and prevention of deterioration is the treatment goal (Johnson and Sandage, 2021; Sandage and Hoch, 2017).

While SLTs are keen to offer gold standard treatment to their clients, pressure of waiting times and busy caseloads also influence treatment decisions (Kenny and Lincoln, 2012; RCSLT, 2025). Treatment length can be curtailed or a limited number of sessions is sometimes offered in order to free time to take another patient off the waiting list. The NHS national focus on waiting times unfortunately means patients can be discharged while still in recovery which can have long term implications on health. SLTs are therefore under pressure to work as flexibly and efficiently as possible to achieve the best possible outcomes which may not be in line with evidence-based practice (McCurtin and Carter, 2015; Venkatraman *et al.*, 2022).

Decision Factors in Home Practice

Key to the effectiveness of SLT intervention is carry-over of the techniques into everyday communication (Madill *et al.*, 2020; Van Leer *et al.*, 2019). Both behavioural and reconditioning interventions require patients to practice their exercises and techniques in between face to face clinical interventions. Homework practice has been shown to be a predictor of success, yet non-adherence to therapy programmes has been shown to be as high as 74% for some caseloads (Wenke *et al.*, 2014; Van Leer *et al.*, 2021; Rubino and Abbott, 2024). It is essential therefore that SLTs consider a range of factors when deciding

on home exercise prescription to ensure the maximum motivation and adherence for effective and efficient intervention. As yet, the factors influencing motivation and adherence have not been clearly identified and it is currently unknown what quantities offer the most benefit (Roy, 2012; Almarcha *et al.*, 2024; Sulwarajan *et al.*, 2025).

From a motor learning perspective, there are some key features to be considered when prescribing an exercise programme. Ensuring that exercises have an appropriate level of challenge has been shown to increase motivation (Maas *et al.*, 2008; Madill, 2025). Variation in exercise application, including random exercise order, times of practice and situational variation have been shown to encourage faster learning and more accurate execution of vocal behaviours (Van Stan *et al.*, 2021b; Steinhauer and Eichhorn, 2025). Directing attentional focus to internal and external feedback has also been shown to reinforce new learning (Wulf and Shea, 2010). Short, frequent periods of practice with regular breaks has been shown to improve memory consolidation and long-term behaviour change (Maas *et al.*, 2008).

From a psycho-social perspective, adherence and motivation is linked to a range of factors, the ultimate aim being to encourage confidence and motivation to complete any exercises prescribed (Almarcha *et al.*, 2024). The clinician–client relationship is considered to be key in developing a shared understanding of the client's goals, self-efficacy, understanding and competence to complete an exercise programme (Van Leer and Connor, 2015; Rubino and Abbott, 2024). Clients need to be educated to an appropriate level on the reasons for and theory behind any exercise strategy (Bane *et al.*, 2019, Collado-Mateo *et al.*, 2021). This encourages self-efficacy, ensuring that patients have reasonable expectations of what can be achieved, and reduces the risk of overdosing (Jones *et al.*, 2005; Roy 2012). Shared decision-making and goal setting encourages a sense of autonomy and can result in higher motivation and adherence to exercise programmes (Bane *et al.*, 2019; Meershman *et al.*, 2020; Almarcha *et al.*, 2024). These can all be considered active ingredients in the therapy process, but as yet little research has identified the extent to which these factors influence the effectiveness of therapy (Jones *et al.*, 2005; Kamhi, 2012; Van Leer and Connor, 2015; Turkstra *et al.*, 2016; Rubino and Abbott 2024).

In order to support home practice, a number of different resources are used and have been researched on a small scale. The advent of smartphones and apps has led to a significant increase in interest in using technology to support exercise practice (Angadi *et al.*, 2023). Angadi *et al.* (2023), Van Leer and Connor (2012) and Van Leer *et al.* (2012) found that video support for exercises increased exercise practice frequency, though this was still below the frequency suggested in the treatment programme. Patients also reported

increased accuracy and self-efficacy when following a video model, in line with social-cognitive theory because they felt connected to their therapist. A scoping review completed by Sulwarajan *et al.* (2025) found that messages, reminders, reward systems and feedback increased motivation and exercise adherence. Patients have however qualified this and reported the need to individualise the frequency of reminders, offer variety and increasing challenge and ensure that any feedback application can be interpreted easily without advanced clinical knowledge, as suggested by motor learning theory (Maas *et al.*, 2008; Van Leer *et al.*, 2021; Johnson *et al.*, 2022). Technology glitches and poor useability were also highlighted as having a negative impact on motivation, suggesting that a low tech back-up remains useful for continuity of practice and individual preference (Johnson *et al.*, 2022). The clinician–client relationship, and initial face to face teaching of exercises and behavioural modifications was still felt to be the most important aspect in treatment effectiveness, and the use of supportive resources considered supplementary rather than a replacement to live therapy treatment.

Treatment Decisions

Few attempts have been made to investigate the treatment decisions made by SLTs in practice. Three surveys have been completed investigating the range of techniques used by SLTs. Chan *et al.* (2013) surveyed Australian SLTs and found that treatment decisions were impacted by the client's goals and preferences, clinician experience and some knowledge of the supporting evidence. They suggested a Practice Based Evidence (PBE) approach rather than relying solely on research evidence. Clinicians reported flexibly using a range of techniques at the same time in order to improve treatment efficiency and referred to the lack of guidance in the literature on how to implement therapy, leading to the PBE approach. They did not however consider how the treatment decisions were made and what factors might influence individual treatment choices. Similarly, Burg *et al.* (2015) surveyed what treatments were used by SLTs and identified that patient variables such as psychological, motivational and learning theory characteristics influenced treatment decisions. No data was gathered on what recommendations were made by SLTs for home practice and why. More recently, Venkatraman *et al.* (2022) surveyed Indian SLTs who also stated that individual client variables influenced treatment decisions but again did not specify the what or why of those decisions. No reference was made to the prescription of home practice. All three studies were completed over wide geographical areas (Australia, Austria, Germany and Switzerland, and India), and with larger participant numbers, thus lending themselves to a survey research design. The focus in all three studies was the 'what' of therapy techniques rather than the 'why' of decision making, which again is perhaps more easily captured in a survey design. Chan *et al.* (2013) acknowledged that some nuance and detail was lost in the

single responses allowed in the survey format, suggesting further in-depth qualitative investigation may inform this subject further.

The aim of this study therefore is to investigate in more detail the gap in research knowledge as to what SLTs consider whilst making treatment decisions, why, and how they arrive at the exercise dosage and treatment choices they recommend for face to face therapy sessions and home practice. The research questions are as follows:

1. What do SLTs consider when deciding on treatment prescription and what influences those decisions?
2. What treatment approaches do SLTs find to be the most effective?
3. How do SLTs arrive at their decisions around home exercise prescription?

Methodology

The aim of this study is to investigate the perceptions and practice of SLTs working in the field of benign voice disorders, specifically considering their decision-making around treatment prescription. The ontological position of this project is that of critical realism. It is seeking to understand the perceptions of SLTs within the realities of their situation and the constraints of the context they are in (Braun and Clarke, 2022). While SLTs are working within one reality, they are likely to hold different, valid perspectives on it influenced by their individual situations and conceptualisation of that reality (Madill *et al.*, 2000; Maxwell, 2012). While these perspectives may not be directly observable, they are considered to be real and the causal relationships between them can be investigated through a critical realist ontology (Land, 2024; Swift *et al.*, 2017). A contextualist epistemology allows for a complete analysis of novel perspectives rather than looking for a convergence of perceptions, thus within the constraints of the reality of SLT decision-making, the individual contexts and perceptions of participants will be considered alongside looking for common themes (Madill *et al.*, 2000, Swift *et al.*, 2017)). While conflicting opinions and perceptions may exist, they are equally valid in the construction of this reality (Braun and Clark, 2022; Kelly and Moore, 2024).

A qualitative, inductive approach within the critical realist paradigm has been chosen for this research, as it seeks to gain an understanding of individuals perspectives from within the field of voice SLT. Previous research in this area has been conducted via surveys (Chan *et al.*, 2013; Berg *et al.*, 2015; Venkatraman *et al.*, 2022), but there is some limitation in the depth of information that can be gained from survey alone (Eastwood *et al.*, 2024).

Interviews offer the opportunity to probe further and deepen the understanding of the perceptions and contexts which may be impacting SLT practice (Swift *et al.*, 2017).

Eastwood *et al.* (2024) used interviews and observations to explore the 'black box' of SLT

practice. While this deepened the understanding of the behaviours used by SLTs to elicit targets from clients, it still did not address the cognitive processes and factors involved in decision-making used by SLTs when determining a treatment course or behaviour change required to achieve the therapeutic goal. While observation may have been a useful addition to this project, limitations around time for gaining ethical approval through multiple channels made this impractical. The decision to focus on clinician's views and practices via interview gave the opportunity to explore the hidden decision-making processes in more detail (Kelly and Moore, 2024).

An iterative design was chosen to allow for the construction of data around SLT decision-making for therapy treatment prescription. A literature review was completed to identify the key research questions and to ensure the content of the questionnaire was relevant to current research and practice. A questionnaire was chosen as the first stage of participant research, initially seeking objective views from clinicians. This allowed for wider sampling and anonymity of participants. The questionnaire was designed to take a short amount of time to encourage participation and identify those willing to take part at the interview stage. It also allowed for participants to be informed on the subject area of the research and invited some initial reflection on the ideas to be explored further through future interviews. The questionnaire responses were then used to inform the development of questions for the interview stage.

A semi-structured interview design was chosen to allow for the exploration of individual participants differing perspectives (Adeoye-Olatunde *et al.*, 2021). Whilst ensuring that interviews remained in the relevant subject area, a semi-structured design allowed for flexibility on the part of the researcher to probe more deeply for further information or clarity to ensure participants' perspectives had been correctly understood. Individual interviews were chosen as the most practical and appropriate approach for ease of timetabling interviews into the participant's (and researcher's) busy schedules, and also to ensure that individuals were able to express their thoughts and feelings confidently without being influenced by the presence of other participants with differing views (Kaplowitz, 2000; Brown, 1999). It also allowed for participants of differing levels of experience to participate in order to add a richer understanding of this topic throughout the different stages of an SLT career.

Insider positionality and ethics

As an insider researcher, it is essential to consider my own positionality within the research to be aware of how this may impact the quality and validity of the project. As an integral part of the process of knowledge development, my positionality needs to be transparent and reflexive (Galdas, 2017). As a practicing voice specialist SLT and in this context, a

researcher, I would consider my beliefs and approach to be largely pragmatist in nature. I believe that reality does exist, but that individuals may hold different views and have different perspectives on that same reality. When applied to my practice, I have some bias towards a belief in the benefits and effectiveness of SLT, but within that different approaches and strategies may be required to achieve the same goal for individuals (Swift *et al.*, 2017). As a researcher, I believe that different philosophical paradigms will be required depending on the research question. In the context of this project, I believe critical realism offers the most suitable approach, allowing for co-construction of knowledge about a context or reality which may be experienced differently by participants.

I believe that being an insider researcher is an advantage in the context of this research, enabling access to the SLT voice therapy community of practice and allowing easy rapport development between myself and participants (Mercer, 2007; Berger, 2015). My knowledge and understanding of the terminology, organisational structure and culture in which SLTs work will allow me to understand more of the subtleties and nuance of situations and views expressed by participants, who may find it easier to be honest with someone inside the profession than outside (Mercer, 2007).

The concept of insider/outsider positionality has been criticised for oversimplifying the complexities of the researcher's role within their project (Suffla *et al.*, 2015). The insider/outsider position has been referred to as a continuum in which many dimensions can be considered including knowledge base, power relationships, personalities and contexts (Mercer, 2007). In the context of this project, I consider myself an insider in terms of the shared knowledge base and terminology used by my participants. I may not however be fully aware of the individual contexts and experiences of my participants who work in different NHS trusts, or of the specific challenges faced in their contexts (Lyons and Coyle, 2016). I may also be less able to fully understand the situations experienced by SLTs who are at different stages of their career to myself, or who are working in different contexts and may therefore be considered an outsider to some extent.

Whilst considering my positionality within this project, I am aware that completing research within my own community of practice can present ethical challenges. While there may be advantages in terms of rapport building and depth of understanding of participants, I must be aware of the risk of making assumptions and taking for granted that participants views will mirror my own or projecting my own experiences to understand the individual experience of participants (Mercer, 2007; Berger, 2015; Darwin Holmes, 2020). When studying one's own colleagues, there may be a risk of participants not wanting to share more intimate or controversial opinions for fear of being judged (Shah, 2008), or of more junior colleagues

feeling compelled to answer questions resulting in a feeling of discomfort (Costley *et al.*, 2010; Merriam *et al.*, 2007). In order to mitigate against these risks, my questionnaires could be returned anonymously meaning that no one was compelled to complete the questionnaire or reveal their identity. Immediate colleagues were allowed to take part in the questionnaire stage but were not invited for interview. Direct working relationships were therefore not impacted by the researcher/ researched dynamic entering my direct workplace (Costley *et al.*, 2010). In order to try and achieve a broad perspective across a range of levels of expertise in voice, participants invited for interview were spread across the career span.

Bias

Considering the impact of the researcher's own biases on the validity of insider research is essential to ensure the validity of the project. While the critical realist approach allows for a degree of subjectivity in the creation of knowledge, this must be qualified and reflexively monitored throughout all stages of the project (Galdas, 2017; Moore and Kelly, 2024). My own ontological position has been stated above and my own interests and motivations have contributed to the subject chosen for this research. In an effort to reduce the impact of my own views on the researched area, Moore and Kelly's (2024) reflexivity checklist has been used at each stage of the project to provide justification and evidence of attempted objectivity (Madill *et al.*, 2000).

- 1) Reductive Reflexivity: A thorough literature review was completed to understand the range of perspectives that may be related to my research questions. This was used alongside a reflexive journal to support development of my initial questionnaire (see Appendix 4). The questionnaire was piloted with an SLT colleague and a non-SLT so that any evident bias or inaccuracies could be identified.
- 2) Epistemological Reflexivity: The individual interviewee's responses to the questionnaire were used to inform the prompts used for semi-structured interviews, to ensure that the subject area was led by the interviewee, rather than driven by my own motivations and biases, whilst ensuring the research subject area remained the focus of the interview (Swift *et al.*, 2017). The purpose of the interviews was to deepen the understanding of the mechanisms and contexts that lead to SLT decision-making (Pawson and Tilley, 2007). Participants were self-selected by giving their email address at the end of the questionnaire. Again, a reflexive journal was completed alongside interviews to highlight and acknowledge any potential bias or leading of participants during the interview stage (Mackieson *et al.*, 2019; Pillow, 2003; Bradbury-Jones, 2007) (see Appendix 8). Participants were given the

opportunity to check the transcriptions for accuracy and remove any data they did not want including in the analysis (Adeoye-Olatunde *et al.*, 2021; Cook *et al.*, 2024).

- 3) Evidentiary Reflexivity: The thematic analysis of interviews, using Braun and Clarke's Reflexive Thematic Analysis (RTA) (2006), was tested against current research and the reflexive journal to ensure that emerging themes, along with any differences in opinions were fully represented and considered in the analysis (see Appendix 12).
- 4) Ethical Reflexivity: Research choices were made with due consideration to the potential impacts on both the participants and myself at all stages of the project. These included keeping to timescales set for the project for my own time management and wellbeing (see Appendix 13), as well as ensuring participants had the opportunity for debriefing and were directed towards sources of support if required.
- 5) Political Reflexivity: Power dynamics were considered, particularly during interview selection (see Methodology section above) and the potential impacts of the research were reflexively considered throughout to ensure that data generation was not limited by any political agenda.

Method

Ethical approval for the project was granted by the University of Wales Trinity St David (UWTSD) (see Appendix 3). An extensive literature review was completed using Google Scholar, UWTSD Library and the RCSLT Journal Collection. This was used to consolidate the research questions and inform the structure of the questionnaire. The questionnaire was piloted by one voice SLT and a non- SLT to ensure content, length of time for completion and useability were appropriate (see Appendix 4). A purposive sampling approach was used to ensure participants had the right professional background and experience to take part in the study. The Trent Voice Clinical Excellence Network (CEN) and the London Voice CEN were contacted and agreed to forward the questionnaire to their membership. Questionnaires were completed in a one month time period for practical reasons to ensure the project could move forward and data analysis was manageable within the timescales set for completion. Thirty SLTs completed the questionnaire (see Appendix 5 for complete results). The questionnaire results were descriptively analysed and verbatim questions were briefly thematically reviewed to look for common patterns or novel responses (see Results section). Participants willing to take part in a follow-up interview waived their anonymity and gave their email addresses at the end of the questionnaire. A total of 11 participants offered their contact details for interview.

From the participants who had offered to be interviewed, 5 responded to a request to book an interview time. 4 had over 11 years' experience as a voice therapist, and 1 was in their first 5 years of practice. Participants were asked to sign and return an informed consent form prior to interview (see Appendix 6). Interviews were arranged within a two week period to keep the momentum of the project but allow time between interviews for reflection on the content of individual interviews. An interview guide (see Appendix 7) for the semi-structured interviews was created based on the research questions to be considered, however, the individual's responses to the questionnaire were also used to probe more deeply into the responses made in the questionnaire where this was felt to be beneficial for expanding the understanding of the research question (see Appendix 8). Initial questions were designed to gain rapport and understand the individual's working context and experience. Interviews were completed via Zoom and were planned to last approximately 40 minutes. Online interviewing was chosen for practical reasons due to the location of participants, time restraints of the project and the personal safety of both researcher and participants. Interviews were recorded to allow me to maintain rapport and concentrate on the responses of participants during the interview, and ensure a complete record was captured for analysis (Adeoye-Olatunde *et al.*, 2021). Brief notes were made of any immediately interesting observations or themes relating to the research question to be further considered in my reflexive journal (see appendix 8). Interviews were auto-transcribed by Zoom and then checked and edited by me for accuracy and redaction of any identifying content (e.g., names, work locations). Participants were then given the opportunity to check their transcript and point out any errors or remove any data they did not wish to be analysed. One participant responded with minor word changes and an addendum to the information she had given which she felt was important to the understanding of her answer. This was added into the transcription data in Appendix 9.

Braun and Clarke's (2006) six phase Reflexive Thematic Analysis (RTA) was completed following the steps below:

Phase of analysis	Description of phase
Phase 1	Familiarising myself with the data- by checking and editing the transcripts alongside any notes made during the interview- see Appendix 8/9
Phase 2	Coding using both semantic and latent coding- see Appendix 9
Phase 3	Generating initial themes through construction from the coding data, referring back to the research questions and insights recorded in the reflexive journal- see Appendix 8/10
Phase 4	Developing and reviewing themes- this involved several iterations of the themes, returning to the original data to ensure the codes accurately represented the interviews, finding salient quotations as supportive evidence of themes (see highlighted sections of Appendix 9) and deciding on the conceptualisation of the thematic map which enabled me to decide finally on the 3 equally important themes – see Appendix 11.
Phase 5	Refining, defining and naming themes- see Appendix 12
Phase 6	Writing up, where ongoing refinements were made by referring to the various stages of coding, original data and literature review, and a search for different evidence based on themes which had not been anticipated, namely that of the influence of context on decision-making.

Analysis was completed manually to maintain the connection between researcher and the data and allow for reflexivity at each stage of the analytical process (Braun and Clarke, 2022). This was particularly pertinent for the theme development around context influencing treatment decisions, as this was an unexpected feature of the decision-making process. Multiple reviews of the original transcripts were required to ensure that the different facets of this theme were accurately conveyed through the theme, and to ensure that it was given an appropriate level of importance in the thematic development. Further literature review and research was also completed to investigate whether any previous research or policy underpinned this unexpected angle. Results and analysis were recorded in the following sections of the report.

Questionnaire Results

The following research questions were identified following the literature review:

1. What do SLTs consider when deciding on treatment prescription and what influences those decisions?
2. What treatment approaches do SLTs find to be the most effective?
3. How do SLTs arrive at their decisions around home exercise prescription?

The questionnaire was designed to confirm the key themes involved in SLT decision-making around treatment prescription and any other influencing factors which may not have been identified in the literature review. Complete questionnaire results can be found in Appendix 5.

Research question 1 was addressed through questions 5,6 and 11-13. See graphs below:

Fig 1: Question 5

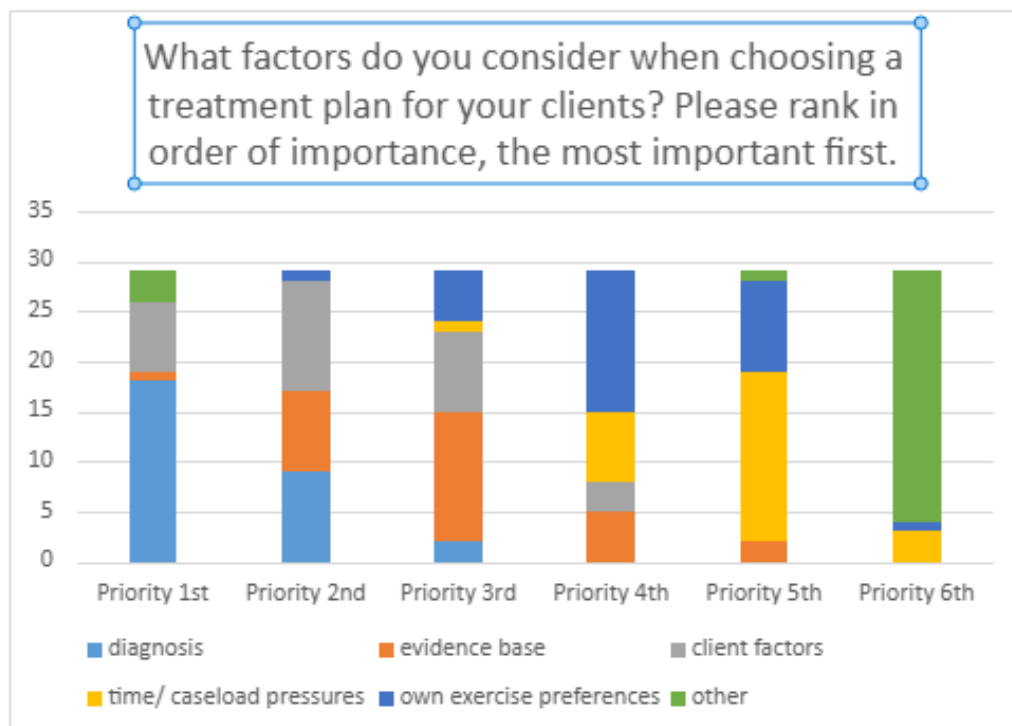


Fig 1: A graph demonstrating the spread of responses to Q5.

Figure 2:

Priority 1	Patient response to therapy trials
	What patient is stimuable for
	What am I seeing/hearing
Priority 5	Mode of therapy impacted by face to face/ online appointment
Priority 6	Pt's level of commitment and any other medical factors impacting progress Cognitive ability Onward referral to other services

Fig 2: A review of the 'other' answers identified by participants to Question 5 (Question 6 in the Questionnaire).

Figure 3: Question 12

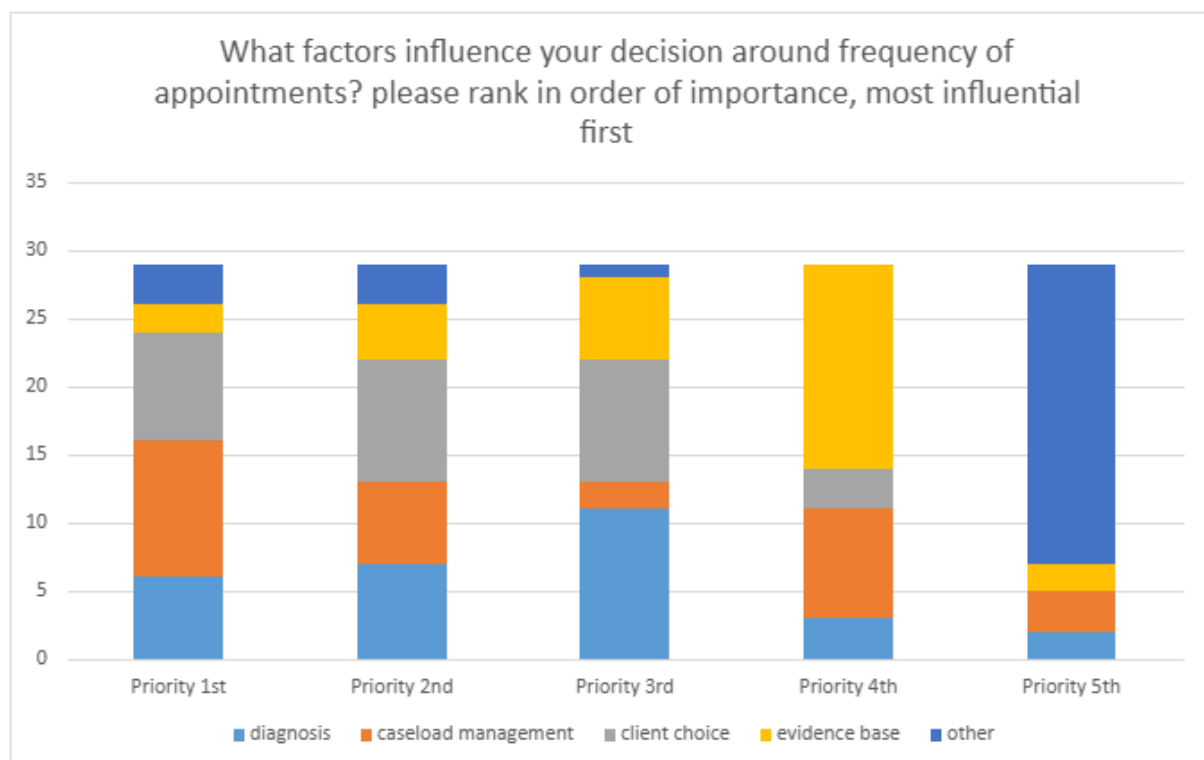


Figure 3: A graph demonstrating the spread of responses to Q12.

Figure 4:

Priority 1	What will be the most beneficial to patient progress
	Where there is space in the diary
	Dependent upon client awareness and ability to perform programme effectively. Step up/down activities
Priority 2	Dependent on client abilities- variable progress rates Size of current caseload. Has a maximum caseload limit to ensure the right frequency of appointments can be offered.
Priority 3	Impact on participation and wellbeing
Priority 5	Other clinical/ non-clinical requirements in the working day Venue- multiple sites with different patient preferences and therapist availability

Figure 4: A review of the 'other' answers given by participants to Q12, Question 13 in the Questionnaire.

Figure 5: Responses to Question 11:

Q11. Do you feel there are any barriers to you offering optimum treatment?	
Response	Theme
Pushback from employer on cost of equipment Limited funding/ time for ongoing training Funding	NHS budget restrictions
Delayed referral pre/post surgery	Poor referral timing
Capacity reduces due to waiting list pressure Unable to offer more than monthly appointments Caseload constraints Frequency of appointments Caseload size and capacity Caseload pressure x 4 Waiting list pressure x2	Caseload/ waiting list pressure
Access to laryngoscopy clinics/ MDT working Lack of time to develop resources Trust restrictions on number of offered appointments Variable admin support reducing efficiency	NHS local/specialist service restrictions
Geographical area/ patients being able to attend face to face appointments	Logistical challenges
Client engagement/ compliance In private sector, the number of sessions patients can afford	Client challenges
Technology limitations- connectivity and software, sound alteration	Technology limitations
Own knowledge and experience	Therapist skill level

Figure 5: Thematically collated responses to Question 11.

Results indicated that SLTs use a range of factors to influence their decision making. The most commonly reported factor influencing treatment decisions initially was diagnosis, followed by client factors. Evidence base was shown to be considered later in the processes by the majority of respondents. The 'other' responses were generally applicable to the client factors, however, it is suggested that participants felt that the broad categories in the questionnaire required further clarification of their ideas. Caseload management and client

choice were the most influential factors in decisions around the frequency of appointments, with less emphasis on evidence base for this question. Again, the 'other' responses largely fitted into the categories already provided but suggested that further clarity as to the complexities of each category was required.

Research Question 2 was addressed by Questions 7, 10 and 16 of the Questionnaire. See graphs below.

Figure 6: Question 7.



Figure 6: A graph indicating the treatment approaches used in SLT practice.

Figure 7: Question 10.

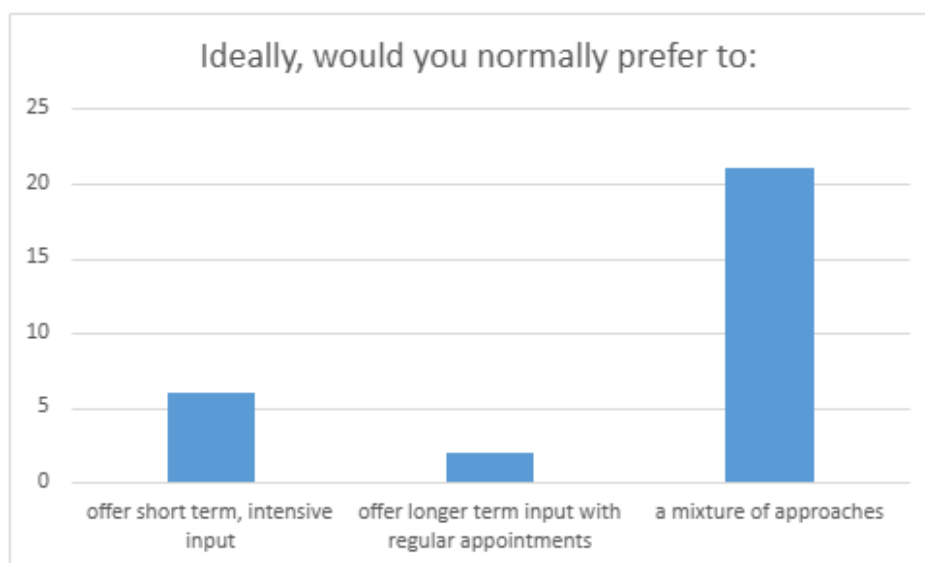


Figure 7: a graph indicating the timing of appointment considerations in SLT prescription.

Figure 8:

Collated Responses to Q16: What do you feel is the most effective way to support a client's independent practice?
Encouraging self-efficacy
Multiple resources to support exercises e.g. written/video
Clear contracting with patient
Coaching approach to encourage self- efficacy
Clear communication of rationale and prognosis for recommendations
Accurate modelling and feedback
Client-centred practice plan to match clients capacity and capability
Habit stacking
Summarising advice
Regular in-person check in to review progress
Intrinsic reward
Patient choice to improve self- efficacy
Specific prescriptive treatment plans

Figure 8: A table of the range of responses given to Q16.

The results indicated that most SLTs involved in the study are aware of using motor learning theory and psychological approaches in their treatment. Less than half of the participants reported an awareness of applying exercise physiology to their practice, and 5 reported applying the RTSS to their treatment. Most reported using a mixture of intensive and longer term approaches to achieve the client's goals in therapy. A range of hypotheses were offered for the most effective approach to treatment including encouraging self-efficacy of clients, ensuring patients clearly understood what was expected of them, clear contracting and prescribing of exercise with clear modelling and supporting resources.

Research Question 3 was addressed by Questions 14 and 15. See graphs below:

Figure 9: Question 14

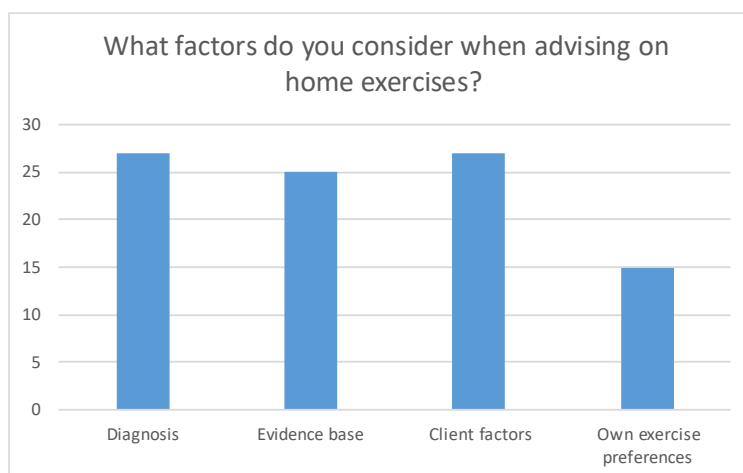


Figure 9: A graph detailing the responses to Question 14.

Figure 10: Question 15.



Figure 10: A graph demonstrating the range of resources used by SLTs to support home practice (Question 15).

When considering the prescription of home practice, the responses to Question 14 suggested that there is perhaps a shift towards SLTs giving client factors higher priority than at the stage of initial treatment decisions. Diagnosis still held a high priority in planning recommendations. The majority of participants use leaflets and written resources to support home practice, along with links to local service videos and YouTube links. Apps, recording systems and reminder systems were less common in practice. In Question 11, therapists referred to time and financial restrictions on developing resources (see Figure 5).

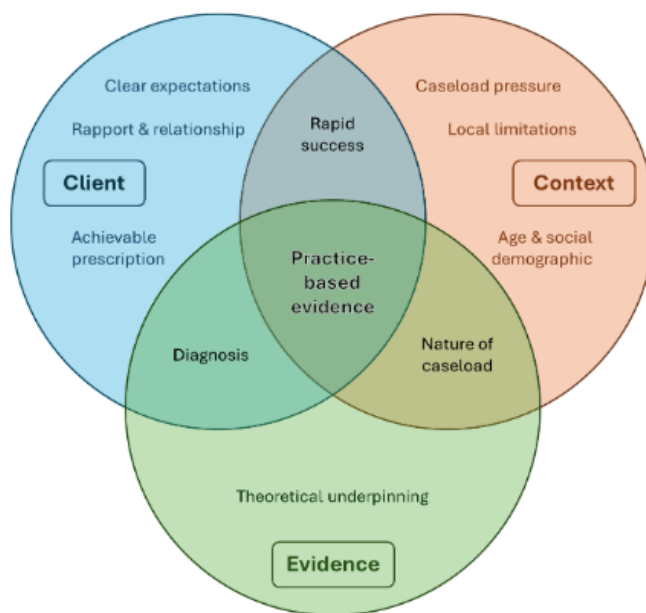
The questionnaire responses appeared to confirm the range of factors involved in treatment decision-making identified in the literature review. The semi-structured interviews were then used to investigate the individual factors identified in greater depth. Reflexive Thematic Analysis (RTA) (Braun and Clarke, 2022) was completed with the following outcome.

Findings

The outcome of the RTA is shown in summary below:

Themes:	
Knowing your client	Building a relationship and understanding your client's individual presentation, lifestyle, motivation and response to treatment help to ensure that clear expectations and motivation for achieving the therapy goals is achieved with the most effective and efficient prescription.
Knowing your theory	Having a clear understanding of the theoretical underpinnings for your treatment prescription is essential, however the weaknesses in research evidence and lack of time to develop the research evidence knowledge mean that practice-based experience combining theory and practical experience is used by experienced clinicians to formulate treatment plans.
Understanding your context	The nature of your caseload, waiting list pressures, local governance and social demographic context in which you are situated can influence the treatment decisions you make.

Thematic representation of findings:



Treatment decisions are complex and multifactorial. No one theme can be considered in isolation as all treatment decisions are impacted by all three of the themes identified in the data collected. Treatment decisions are based around theoretical underpinnings from exercise physiology, motor learning theory and psychological theory. Relating the theoretical approach to the client's individual diagnosis is the most commonly used determining factor in treatment decisions, but no two clients are the same and therefore understanding the individual's lifestyle, motivation, ability to respond to treatment and co-occurring health challenges are also factored into the exercises prescribed by SLTs. The clinical context of individual SLTs also has an impact on treatment frequency and intensity decisions and on the resources provided to support home practice. Challenges and limitations are placed on treatment decisions by local caseload and waiting list pressures and by the nature of the caseload in a specific context, suggesting that there needs to be an individual approach to treatment prescription depending on this multitude of factors.

Knowing Your Client

All the therapists interviewed referred to the importance of knowing your client and building a relationship with them as one of the key factors in implementing an effective treatment plan,

[P1] *"kindness and compassion... ha(s) its place in terms of a starting point... or it might be that the buy-in comes from you really, really listening and reflecting. And they feel heard, so that's also incredibly important in terms of compliance".*

[P5] *"I think your explanation, your case history is important, and your understanding of where they're coming from is crucial. I think success comes from you giving them time to talk"*

This rapport building at the early stage of intervention was felt to be essential in motivating and achieving compliance with the treatment plan to be prescribed. Forming an exercise prescription that the client can follow and achieve involves a thorough understanding of their lifestyle and motivating factors.

[P2] *"Making the patient feel like they can fix their own problem I think is a big factor. I think some people need motivating more than others. Some people are quite self-motivated".*

[P1] *"You have to take into account people's busy lifestyles and where they're going to fit things in".*

This can apply to both the exercises prescribed and the frequency with which they are recommended to complete the treatment programme. Finding an exercise and frequency level that is achievable for the patient in their own individual context was felt to be key to success by all interviewees, rather than following a rigid, research based protocol, or insisting on an exercise that you might think would give the best result.

[P3] *"Doing something like Lax Vox would be a nice quick fix for a patient, but if they've got such a frenetic lifestyle that they need to have a bit of tubing and some water with them. There's absolutely no point giving it to them".*

[P4] *"a patient recently... works and... I gave him lax vox to do. And he said, I just can't because I don't have any time at work. So that would definitely influence, because some patients, if they go for a dog walk or something, they can do some humming, but they can't get their cup out with the straw. So ... yeah, depends what they're doing."*

Clear contracting and expectation management was raised as an important aspect of compliance with exercise prescription. Most participants referred to the need to be clear about the importance of engagement with exercises for progress to be made with therapy. This was felt to be particularly important in home exercise prescription, in order to achieve the most efficient progress through therapy.

[P5] *"I really need them to buy into it at home, because they're only with me once a week for so many weeks. So I explain that what we've done in this session, and how long we've done it for needs to be more at home. And I do say, if you can't practice*

this as many times... because I know everybody's busier, nobody's got time to do anything. I am realistic But I do say, if you don't do this X amount of times, it won't work".

[P2] *"... Sometimes I think...me in particular should be a bit more blunt about that because I don't think... They always... I think they're hoping there's a magic... pill or a magic switch. I try to talk about it more like physiotherapy, in that your leg's not going to get better if you don't do the prescribed exercises, and you should treat your voice the same way."*

A key factor in the engagement and motivation for therapy exercise raised by several of the interviewees was being able to achieve success early on in the treatment process. Several interviewees referred to the benefits of patients seeing progress, and this being an important motivating factor for compliance with exercise prescription.

[P1] *"I think being able to get results in the first session with a patient is very important for buy-in, which means that often my first session is quite long, because I need to try something and they go, Oh!"*

[P3] (patient said) *"I really thought what you were saying was, like, a load of old rubbish, basically. But actually, I thought I'd give it a go, and this has happened...and then you get that buy-in then, so I think you need that quite a quick spark of at least one thing that improves, and then you get the buy-in for the rest of it".*

Clear contracting, expectation management and signs of success are dependent on clear communication, accuracy of technique and ensuring the client is able to have the confidence and resources to carry out their home exercise independently.

[P5] *"It's...not practicing until you get it right, practicing until you can't get it wrong for me".*

[P3] *"But I always feel that if a patient's not doing exercises mindfully It's really difficult to get that generalisation".*

As every patient is motivated in different ways, and benefits from different resources to support their practice, therapists who responded to the questionnaire and interviewees referred to a range of resources (see Figure 10) and motivational strategies to support exercise compliance.

[P1] *"Some people say just having something to tick off or colour in will give me a little bit of dopamine, or it's kind of like something that's going to be visually in my*

face to remind me to do it. So we just need someone to create some beautiful apps That will give people a little bit of that dopamine hit”.

The importance of the relationship between clinician and client is discussed in research literature. The need for understanding your client's individual perspective and forming a therapeutic alliance is based in psychological, counselling and coaching practice, which all form part of an SLTs initial training (Van Leer and Connor, 2010; Kolbrunner and Seifert, 2017; Belhau, 2023). This therapeutic relationship is found to be an essential aspect of understanding the individual patient's perspective and readiness for therapy, and in achieving motivation for adherence to SLT recommendations and exercise prescription (Van Leer *et al.*, 2008). Several frameworks have been suggested for use including the Social Cognitive Behavioural model, (Van Leer and Connor, 2015), the Transtheoretical Model (Van Leer *et al.*, 2008) and general health behaviour change approaches. It has been suggested that voice therapy has an extra level of complexity from other health behaviours due to the range of cognitive, emotional and temporal demands placed on individual clients simultaneously. As a result, no one theoretical framework has yet been found to fully encompass the range of therapeutic elements required of the SLT, and there is a lack of robust evidence in the field of voice therapy (Rubino and Abbott, 2024). This perhaps suggests why SLTs do not directly refer to a specific model or framework as part of their practice, but have an overarching understanding of the importance of their therapeutic relationship with their clients developed through training and experience.

Self- efficacy was referred to by SLTs in the responses to the questionnaire and during interviews as a key factor in achieving motivation and effective treatment prescription, leading to independence on the part of the client to manage their own condition. This is thought to be achieved through co-design and co-creation of therapy goals and treatment plans (Almarcha *et al.*, 2024). Key to the development of self-efficacy for clients is ensuring they fully understand the reasons behind their treatment recommendations and can achieve independent mastery of the exercises and techniques prescribed for them (Colado-Mateo *et al.*, 2021). An understanding of the individual's capacity for self-monitoring and self-regulation is also reflected in the literature (Vinney and Turkstra, 2013). Interviewees discussed the need to understand the demands of an individual's life in order to maximise their opportunities to engage with a therapy programme. Setting achievable targets with appreciable gains early on has been shown to result in effective therapy (Collado-Mateo *et al.*, 2021).

The complexity of formulating a treatment plan is frequently referred to in research literature. With so many factors at play including the relationship between client and clinician, the

clients own psychological state, their lifestyle and motivation to complete any exercise programme all play a role in the decision making process for the managing SLT. Little is understood about these elements individually and how important they are to the success of treatment (Kamhi, 2012). Dosage itself has been considered an active ingredient in the treatment process (Bane *et al.*, 2019) which impacts on the success or failure. Baker (2012), Kamhi (2012) and Roy (2012) all question whether it will ever be possible to determine an optimal exercise intensity on a larger scale given the individuality of each client. It is possible that treatment decisions will remain a recipe with variable key ingredients (McCurtin and Carter, 2015) rather than a prescriptive, rigid protocol in order to ensure that clients receive a therapy plan that has been co-designed to give an appropriate level of challenge, that can be confidently and accurately completed without support and is achievable within the clients own lifestyle and context to ensure motivation. A greater understanding however of the active ingredients within the 'black box' (Desjardins *et al.*, 2017) may help to clarify the ingredients that offer the most effect and efficiency in therapy (Eastwood *et al.*, 2024).

Knowing your Theory

All the SLTs interviewed expressed the importance of understanding the theoretical underpinnings for the treatment they were prescribing. They explained the value of applying theory to practice in terms of ensuring the therapy offered is safe and beneficial, and in encouraging and motivating your patient to trust the theory behind what you are suggesting.

[P5] *"But you know when you're applying something that it's been researched, so that's really important, because. We don't want to just be doing stuff that hasn't been tried and tested, that we're going to cause any harm".*

[P4] *"Because it's good to be able to tell patients, isn't it? This actually does work, there is evidence for it."*

In the questionnaire however, the application of evidence for most people came third behind diagnosis and individual client factors. In the interview stage, participants expressed a number of reasons for this. Several participants mentioned the individuality of clients as a reason for being unable to directly apply research evidence into practice, due to a range of co-morbidities, individual choices around treatment and responses to treatment approaches.

[P3] *"I think voice is very individual, and I'm not sure I believe that it is something that you can improve in a regimented way, because a lot of it does have that kind of psycho-emotional aspect to it".*

[P1] *"She didn't want to come in for intensive exercise"*

[P3] *"So I've had a couple of people where cognitively, they just can't remember to do the exercises".*

[P5] *"I kind of use a blended approach. I use little bits of accent, little bits of Estill, but a lot of semi-occluded stuff".*

Two of the interviewees expressed some feeling of discomfort around this,

[P3] *"I'm not sure evidence base really affects my selection of the exercises. Which you probably shouldn't say out loud...(what I prescribe)... often is different from what's recommended".*

[P4] *"I mean, that is one area where I feel that I... probably like all therapists in the country, I really would love to have more evidence-base, or have access to it, or have more time to have access to it".*

Other reasons discussed for not directly applying research into practice included limitations placed on time for Continuing Professional Development (CPD) and time allowed for intensive interventions in the context of a busy caseload. Questions were also raised about the validity of applying pure research in clinical practice, due to methodological concerns within the research, or lack of detail pertaining to the impact of the active ingredient.

[P1] *"It's a funny old word, isn't it? Evidence-based, because we have a sense that the evidence base is the published written literature, and we know that that's part of it, but not the whole clinical situation. The evidence for that (Laryngeal Manual Therapy) is very fuzzy and I'm not really sure whether I'm just helping with relieving tension or giving the body some suggestions".*

[P3] *"Often that doesn't really help clear up on dosage. (it would help to have) an idea about weaning off protocols because that's something that... I say with lots of authority to my patients what I want them to do because I don't want them to just stop. And to be honest, I'm making it up".*

Therapists therefore refer to using their own practice-based experience and the individual client's goals as well as research evidence in their treatment prescription.

[P3] *"Finding the exercise that gives the best kind of Vocal result is what I'll go with".*

[P5] *"I do kind of use patient case studies from my experience of what works for patients, and I will adapt things".*

One participant did refer to using some protocol driven exercises (Vocal Function Exercises), but was aware that she adapted this in terms of the pitches used by individual clients,

[P3] *"Yeah. I do, yeah. I think that's probably one of the one things that I don't really tweak".* Addendum: P3 reported after the interview that she does tweak the pitch of some of the exercises.

Another reported using protocols, but they were the result of her own clinical experience rather than from research evidence.

[P5] *"so I am prescriptive on the sheets. And I do say how many times, but it's, my protocol".*

Previous research illuminating the challenge of applying evidence directly into practice is yet to result in any more robust evidence to support clinical practice. Kamhi *et al.* (2012) discussed that the idea of a fixed, ideal treatment dosage was incompatible with the individualised clinical process that characterises SLT decision-making. Baker (2012) referred to how the variety of client, condition, clinician and service-related variables could positively or negatively influence the way a therapy programme is applied or the outcome achieved. Roy (2012) highlighted the clinical reality that therapies are rarely offered in isolation, and clinicians are prone to modifying exercises based on what they feel will best suit their client. Little is known about how much alteration to the dosage of an exercise can be tolerated without impacting its effectiveness. Alongside this is the lack of knowledge around what active ingredients have the most impact and how they interact with each other to change the overall effectiveness of an intervention (Desjardins *et al.*, 2017). More recent attempts to at least identify the range of active ingredients in an intervention, such as the RTSS and MLCF are a first step towards increasing this understanding (Van Stan *et al.*, 2017; Madill *et al.*, 2020). Isolating these ingredients, however, is extremely difficult and impractical in clinical practice where the aim is to achieve vocal improvement and recovery as quickly and effectively as possible (Roy, 2012).

All of the participants referred to allowing diagnosis to primarily lead their broad approach to exercise prescription. A distinction was drawn by three therapists in the management of hyper and hypofunctional voice disorders. There was an awareness that the behavioural change required to correct a hyperfunctional muscle tension imbalance would be different to the strengthening approach required for a hypofunctional, weak voice. One also referred to a different approach again for rehabilitation following surgery.

[P1] (if there's) *"weakness that needs to be strengthened then I'm going to have a much more robust programme and sort of aim for more intense activity. More dosage...as opposed to something like a muscle tension dysphonia which is more of a... Motor program retraining, or kind of rebalancing approach".*

[P3] *"I suppose if you've got a palsy, or you've got a presbyphonia you're kind of aware that at some point you need to be doing some underlying strengthening exercises. Even if all you're hearing is strain"*

[P4] *"I think diagnosis, because I think if it's something like muscle tension, you want to release the muscle tension So that would 100% dictate which exercises I give them, and if it's something like presbyphonia, I might give them something where they need to use a bit more force"*

Three participants referred specifically to using a physiotherapy exercise approach or analogy towards planning exercise programmes for muscle strengthening treatment, and two referred to a motor learning approach for behavioural therapy for a muscle tension imbalance, suggesting a possible shift in practice towards a different therapeutic decision process for these two distinct patient pathways.

Few research articles have provided protocols for the implementation of exercises. Those that have often haven't given information on the correct dosage in terms of the number of repetitions or duration of practice (Guzman *et al.*, 2023; Antonetti *et al.*, 2023). The majority of voice research is focused on the immediate outcome or short term input of an exercise and little evidence exists for the long term effectiveness of treatment, or of how long an exercise programme should be continued after a period of direct treatment is completed (Tsai, L *et al.*, 2023; Wu and Chan., 2020; Desjardins *et al.*, 2017). Systematic reviews of voice therapy have highlighted several gaps in current research in terms of dosage recommendations and dose response relationships (Desjardins *et al.*, 2017; Bane *et al.*, 2019). More recently, the need for the further research into the impacts of home practice have been highlighted (Venkatraman *et al.*, 2022; Rubino and Abbott, 2024). While statistical significance is frequently cited in research as evidence of success, the clinical significance and impact on the patient is often overlooked (Desjardins *et al.*, 2017). The selection of participants for clinical research is perhaps not representative of what is seen in diverse clinical practice, making pure research harder to apply. There is currently no option for SLTs therefore but to use their own clinical judgement and experience and be patient-led when prescribing exercises and suggesting ongoing treatment prescription.

The feelings of discomfort expressed by two of the interviewees around the lack of direct use of research evidence in their practice is likely due to the current emphasis around evidence-based practice in both the National Health Service (NHS) and professional guidelines (RCSLT, 2025; HCPC, 2024). In the RCSLT guidelines, however, Evidence Based Practice (EBP) should encompass research evidence, the preferences of the client and the individual clinical expertise of the managing clinician. McCurtin and Carter (2015) suggested that the

scientific practice of experimentation with different techniques, generating a hypothesis and problem solving to create the most efficient management plan were all essential elements in EBP, and were all evidenced in the interviewee's discussions around exercise decisions and recommendations. They were also evident in the survey of SLTs completed by Chan *et al.* (2013). What is currently lacking is perhaps the understanding and evidence to support what aspects of treatment, or active ingredients are having the most impact in order to support the most effective and efficient treatment recommendations (Eastwood *et al.*, 2024; Turkstra, 2016; Van Stan *et al.*, 2017).

Recent interest in the impact of active ingredients in treatment planning are yet to filter into everyday clinical practice (Eastwood, 2024). Research has suggested that it takes 17 years for research to become part of everyday practice (Morris *et al.*, 2011), which would appear to correlate with a resurgence in interest and clinical application of treatment specification after an initial call between 2012-2015 for improved understanding of clinical treatment specification and decision making (Roy, 2012; McCurtin and Carter, 2015). Participants suggested a difference in approach between managing hyper and hypofunctional voice disorders, leaning towards the application of behavioural change theory or motor learning theory for hyperfunctional voices and a more physiological, muscle strengthening approach for hypofunctional voice disorders. It has been suggested that the application of motor learning theory to behavioural interventions would improve the retention of new motor behaviours leading to improved efficiency of treatment, but this is yet to filter into SLT literature and training (Van Stan *et al.*, 2017; Madill *et al.*, 2020). Lack of knowledge and understanding in the field of laryngeal muscle response to strengthening and exercise is also holding back progress in the effectiveness of therapy (Johnson and Sandage, 2021). It is possible that by applying a system such as the RTSS to understand the functions of the individual aspects of treatment, we will be able to increase our specificity and efficiency in exercise recommendations (Saccante-Kennedy *et al.*, 2024).

Understanding your Context

Whilst discussing their clinical decision making, four of the interviewees drew comparisons between different work contexts and the impact this had on what decisions they made, what support and resources they offered to clients and how different caseload pressures influenced what was offered to clients.

[P3] *"I've just gone into a post where I can pretty much give how much therapy I think I want to give. Although they are now saying, actually, we need to make sure patients have no more than so many appointments but then I've been using clinical judgements that means it's okay to do more. In... a previous job that I came from it*

was meant to be capped, so literally It was very much the see, give advice, Patient Initiated Follow Up, if they come back do treatment, so that really then did change my practice and how I delivered my therapy”.

[P5] *“I work in two different trusts and the patients I see at another trust are if I'm honest, I will have more complex surgeries there. Um, so sometimes I might spend a lot longer, maybe I'm adding to this, doing a little bit more counselling around things.”*

[P1] *“Well, in the past, there was... I mean, I was the only person holding the whole caseload...And yes, I was very, very busy and so then, at that time, there was definitely, like, I need to give you as much as I can now, and then I'm going to have to review you when I can, so that would definitely have influenced things. I don't feel so much pressure at the moment, so I'm being much more patient-led with that.”*

Context can also impact the nature of a caseload. A specialist surgical hospital caseload could be quite different to that of a community clinic, thus demanding a different therapeutic approach. Caseload pressure was also cited as an influence on treatment. While most said that caseload pressure did not influence the treatment prescribed, the pressure was felt to make progress more quickly, cram more into sessions, or more patients into a clinic.

[P4] *“We have got a year waiting list at the moment, so I'm feeling really pressurised by that, I do feel like I'm able to offer what I want to, (but) got to get more people seen”.*

Several therapists referred to pressure from different trusts to follow a ‘Patient Initiated Follow Up’ model (NHS England, 2025) where instead of actively reviewing the client’s progress, the onus is on the patient to contact the service if follow-up is required. All therapists who mentioned this model expressed their discomfort with this approach. Others mentioned a sense that limiting sessions may be one of the strategies to be enforced upon them by their employers as a method of caseload management and again expressed their disagreement with this method of caseload management.

[P5] *“I don't like limiting sessions. But I think, again, that's something that is coming, where we're asked by managers who aren't speech therapists who manage us. You can only offer so many sessions. I don't really like that, because sometimes I think that doesn't work for me... I've said no so far”.*

An awareness of the challenges relating to long waiting times was also expressed. Therapists referred not only to the pressure they felt from increasing waiting times, but to the increasing complexities of managing a patient with a long-standing voice problem.

[P3] *"Because the waiting times to get help are so long, so often those patterns are pretty much entrenched in by the time they come".*

Another element of context influencing treatment decisions is the social, cultural and age demographic of the clients you are managing. This was particularly important for P4, who works in an affluent area of the UK.

[P4] *"Because I work [here], which is really quite a privileged area in that, I know some students that I've worked with have said they've worked in voice departments in more socially deprived areas, and a lot of the patients don't turn up for the appointments, and a lot of them have got drug and alcohol problems, which I want to say I just don't see that here".*

This was shown to influence motivation and attendance at therapy sessions, and in the resources that were provided for clients. Because of the higher level of literacy, patients were able to use written information to support home practice.

[P5] *"there's a lot of barriers that I don't have, which I do appreciate that other services will come up against those barriers, won't they?...because I work with a lot of singers, a lot of teachers, a lot of business owners, and I guess that's probably the social demographic, isn't it? ...it's interesting how different it is, isn't it?"*

Another therapist referred to the different resources she used depending on the age of the people she was working with.

[P2] *"A lot of my caseload currently are 70-plus year old men. And when I say... to them YouTube, they look at me blankly, so I think for them, it's knowing that I'm at the end of the phone if they need something".*

Different NHS trusts also have different policies on the resources that can be used to support home practice:

[P5] (patients ask) *"can I just record your voice, but not video me, because we're not allowed to do that. We've had incidents with this, which is why... I used to give them the old cassettes and record the exercises onto it, so I don't mind if they do put it on their phone. Um, recording, but not videoing."*

The NHS as a whole has been under immense, increasing pressure from longer waiting times and waiting lists due to reduced expenditure, growing demand and workforce shortage (Blythe and Ross, 2022). Speech and Language Therapy services reflect the challenges seen across the NHS. Three years ago there was a 24% vacancy rate in adult SLT services (RCSLT Workforce Planning, 2023). As yet, no national assessment has been completed to

assess the demand and unmet need for SLT nationally and while there will be local variation, time pressure and caseload management challenges were cited as important influencing factors in treatment planning for clients in both the questionnaire and interview data. The RCSLT (2025) acknowledges that people are presenting for therapy with greater needs, and when, after waiting, they are able to access therapy it can be arbitrarily time limited. While the pressure to reduce waiting times is evident across NHS policy, it is acknowledged that there is no one approach that will improve the situation nationally, and local differences in demand need to be taken into account if the problem is to be effectively addressed (Blythe and Ross, 2022).

In order to link clinical efficiency to evidence based practice, research needs to take contextual factors into account. These factors are often overlooked by researchers (Rogers *et al.*, 2020). Contextual issues can be complex and multi-faceted and therefore applying research evidence into practice is not straightforward, but in order to have a positive impact on treatment delivery, research needs to be relevant and applicable so that knowledge can be implemented and healthcare improvements are effective (Coles *et al.*, 2017). Squires *et al.* (2019) identified 5 main contextual attributes reflected in current research; Resource access, work structure, financial, cultural and patient characteristics, all of which were mentioned in the participant interviews. The need for efficient and effective therapy based on the local context should therefore be considered in treatment planning.

Addressing health inequality across the United Kingdom is currently a major driver in improving access to healthcare. Blythe and Ross (2022) identified four factors influencing health inequality: Socio-economic factors, geography, ethnicity and disability and socially excluded groups. The RCSLT (2023) states that an SLT must be able to provide personalised and equitable care by understanding the person's experience and social situation. Attention is also drawn to the need for therapists to develop cultural humility and work reflexively, consistently adapting practices to best meet the needs of the community they serve. Ensuring access to appropriate support resources for treatment programmes to help the individual client successfully complete their recommended exercises may be key to achieving therapeutic efficiency. The move towards digital communications and resources, while time and cost efficient, needs to be considered in the context of those who lack the skills and confidence or do not have access to devices and connectivity (NHS, 2025). Exercise prescription is therefore not only individualised to the needs to the client but is subject to the local cultural and socio-economic environment and governance of individual healthcare services.

Limitations and Further Research

The time limitations of the project meant that there was a necessity to limit the window of time for the interview stage of the project, and complete only a small number of interviews in order to allow for the required detailed analysis and interpretation of results. While eleven participants initially agreed to be interviewed, only five were available in the timescale set aside for the project. Four of the five participants were very experienced clinicians with over 10 years experience in voice therapy. The remaining participant had only been working in voice for just over a year. The level of experience of the SLTs may have influenced the outcome in terms of the level of complexity of responses and led to more comparison between different contexts than would have emerged from a less experienced cohort of participants. Further research drawing a comparison between these results and those of a less experienced cohort may be valuable in understanding what the key training and competency needs are to ensure efficient and effective practice from early on in an SLTs career.

The broad scope and complexity of the question was not fully appreciated at the start of the project and resulted in perhaps a wider analysis than was originally intended. This topic would benefit from further research into specific areas, considering the client as well as the therapist perspective around what they feel are the most effective ways to support their exercises prescriptions, including a closer study into what resources they feel best support their home practice. Further research into what psychological strategies support motivation and adherence to exercise programmes would be beneficial. More specific research into the treatment approaches for different disorders would be beneficial, perhaps not in terms of specific exercises but in terms of the theoretical approaches that can be applied, for example the difference between achieving the behavioural change required for a muscle tension imbalance versus the strengthening approach required for a weakened voice. Applying a process such as the RTSS could inform a decision making protocol defining the key elements required for efficient and effective therapy in the different voice disorders.

Conclusion

The learning outcomes defined at the start of this project were as follows:

1. To deepen my knowledge and understanding of how SLTs make decisions around exercise prescription to enhance professional understanding of the complexity of SLT practice.
2. To increase my knowledge of the evidence base for exercise prescription for voice therapy in order to offer the most efficient and effective treatment for clients.

3. To increase my knowledge on what resources and strategies motivate clients to complete exercise programmes to inform SLT practice and planning around resource development.
4. To improve my interviewing skills.
5. To improve my qualitative data analysis skills.

I feel I have developed a deeper understanding and newfound respect for the complexities of the decision-making process of SLTs working in voice and broadened my awareness of how this is influenced by the local social and cultural demographics and pressures placed by the employing organisation. I am more aware of the current limitations of evidence base for exercise prescription and have increased my knowledge on the range of factors involved in achieving an effective treatment which will motivate clients to carry out the recommendations made for them. I am more aware of the need for individuality in providing supporting resources depending on the client's level of literacy, language and digital access. I feel I have further developed my interviewing skills and gained a deeper understanding and confidence in my ability to analyse qualitative data.

The research questions formed from the literature review for this project were:

1. What do SLTs consider when deciding on treatment prescription and what influences those decisions?
2. What treatment approaches do SLTs find to be the most effective?
3. How do SLTs arrive at their decisions around home exercise prescription?

Results from the questionnaire and interviews showed that SLTs consider a complex range of factors when deciding on exercise prescription, led firstly by diagnosis, but then by a range of factors including the evidence base, practice-based experience of the clinician and the client's individual situation, motivation and capacity to learn and adhere to the therapy prescription. These factors are then influenced by the clinical situation and caseload pressure at the time which may impact what the SLT is able to offer. SLTs focused on the importance of gaining rapport and a clear understanding of the client, using a range of psychological approaches alongside motor learning theory for behavioural change. Less SLT reported using an exercise physiology approach to exercise, though the distinction between vocal strengthening targets and behavioural change for rebalancing of muscle tension were discussed frequently at the interview stage.

Perhaps the least well-addressed of the three research questions was that of home exercise prescription. The questionnaire results suggested more of an emphasis on the individual client impacting decision-making, possibly due to the relative lack of evidence to support any prescriptive protocol-driven exercise programmes. This may also be influenced by the

diversity of client lifestyles and preferences around paper or digital resources to support and motivate home practice, and lack of time to develop the resources to be given to clients in support of their therapy programmes. Therapists did, however, appreciate the importance of home practice in terms of therapy efficiency and effectiveness, especially in achieving carry-over of techniques into every day vocal demands, and reducing demand on therapy time. The complexities of the subject may have led to a lack of focus on differentiating between treatment decisions within the clinical setting and to support home practice.

I feel I have gained confidence in my professional decision making as a result of this project. I have an increased conscious understanding of the complexities of treatment decision making, which are largely subconscious in the moment due to the focus on maintaining rapport with the client. I am more aware that in a clinical teaching situation, the elements of this decision process need to be brought to the attention of students so that they are aware of the complex decision making occurring in the background. As a lecturer, I will also build more of this awareness into my undergraduate teaching. I hope that through having a greater understanding of the different factors involved in treatment prescription I can begin to consider which elements of my practice have the most effect and further develop these to be as efficient as possible. As a clinical leader, I hope to be able to develop the skills within my team to ensure a similar level of awareness and motivation towards effective and efficient practice, especially during this time of service pressure and increasing waiting lists.

There are many areas for further research following on from this project. A comparison between the views of clients and clinicians on what motivates and support clients would be beneficial to support further development of home exercise resources. While it is likely that treatment prescription will always need to be individualised, narrowing the topic area to consider whether developing decision making tools and a range of resources may be useful to support planning for specific diagnoses or treatment targets, as well as developing our understanding of which active ingredients in treatment are providing the most benefit. In terms of the SLT profession, it could be beneficial to understand the highlighted clinical, social and demographic variation in caseloads in more detail, and the impact of longer waiting times on the clinical presentation. This would enable a more nuanced understanding of the demand and clinical skill required in different contexts and would support more accurate treatment and caseload planning, thus informing steps towards ensuring an approach that is efficient and effective. Understanding the impact of caseload pressure on SLTs and their response to caseload restrictions imposed on them may also be valuable in ensuring clinicians remain motivated to continue their careers in the profession and are able to offer treatment that they can see is effective.

This study highlights the hidden complexities in SLT decision-making when planning treatment for voice disorders, and the need for future researchers to develop a greater understanding of which, or what combination of active ingredients hold the key to achieving the most effective and efficient exercise prescription. While the study of voice disorders is a very small part of SLT undergraduate training, understanding the ingredients in a therapeutic relationship is key to the practice of all SLTs and should be considered in the national training programmes. Post graduate voice training would also benefit from acknowledging this complexity, and this knowledge could be beneficial in the development of competencies for practicing voice clinicians which as yet are not standardised nationally. The impact of health inequality and variation in access to voice services would benefit from further study to enable local service commissioners to plan and provide a service that is timely, flexible and adequately resourced to meet the needs of our diverse population.

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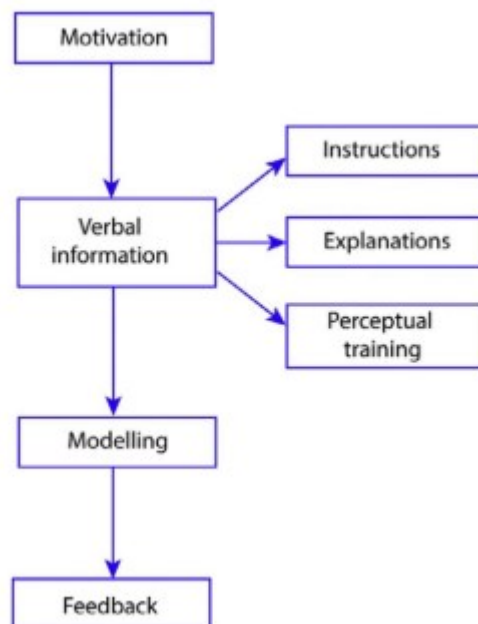
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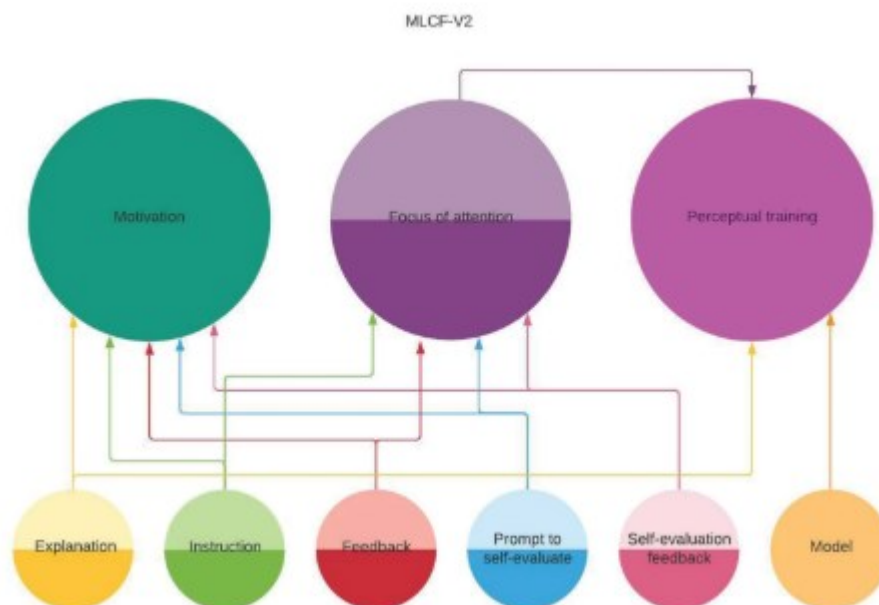
Appendix 1:

Motor Learning Classification Framework (MLCF)



Madill *et al.*, (2020)

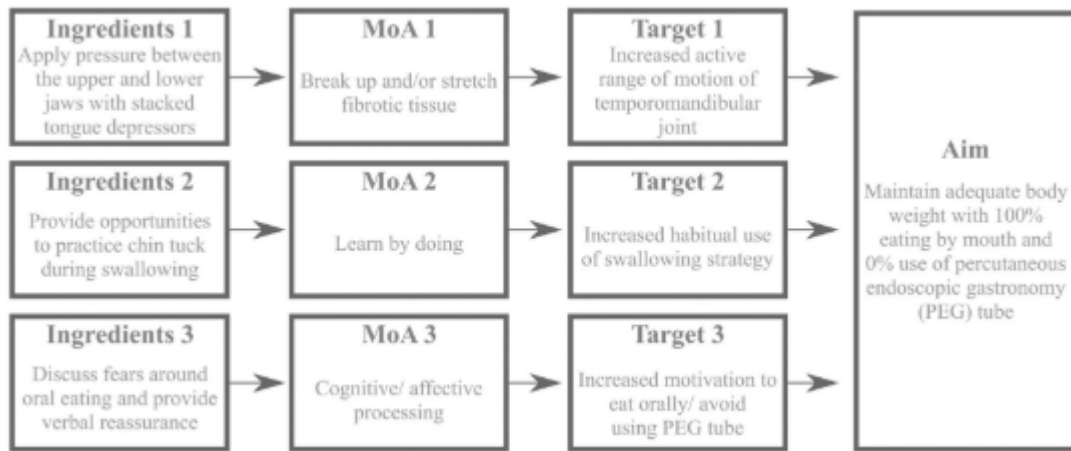
MCLF -Version 2



Eastwood *et al.*, (2024)

Appendix 2

Rehabilitation Treatment Specification System applied to Voice



Van Stan *et al.*, (2021)

Appendix 3: Ethical approval form

APPLICATION FOR ETHICAL APPROVAL

RESEARCH STUDENTS

This form is to be completed by the student within **SIX** months for full-time students and **TWELVE** months for part time students, after the commencement of the research degree or following progression to Part Two of your course.

Once complete, submit this form via the **MyTSD Doctoral College Portal** at (<https://mytsd.uwtsd.ac.uk>).

This document is also available in Welsh.

RESEARCH STAFF ONLY

All communications relating to this application during its processing must be in writing and emailed to pgresearch@uwtsd.ac.uk , with the title 'Ethical Approval' followed by your name.

STUDENTS ON UNDERGRADUATE OR TAUGHT MASTERS PROGRAMMES should submit this form (and receive the outcome) via systems explained to you by the supervisor/module leader.

In order for research to result in benefit and minimise risk of harm, it must be conducted ethically. A researcher may not be covered by the University's insurance if ethical approval has not been obtained prior to commencement.

The University follows the OECD Frascati manual definition of **research activity**: "creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications". As such this covers activities undertaken by members of staff, postgraduate research students, and both taught postgraduate and undergraduate students working on dissertations/projects.

The individual undertaking the research activity is known as the "principal researcher".

Ethical approval is not required for routine audits, performance reviews, quality assurance studies, testing within normal educational requirements, and literary or artistic criticism.

Please read the notes for guidance before completing ALL sections of the form.

This form must be completed and approved prior to undertaking any research activity.

Please see Checklist for details of process for different categories of application.

SECTION A: About You (Principal Researcher)

1	Full Name:	Helen Fracchia			
2	Tick all boxes that apply:	Member of staff:	☐	Honorary research fellow:	☐
	Undergraduate Student	☐	Taught Postgraduate Student	☒	Postgraduate Research Student
					☐

3	Institute/Academic Discipline/Centre:	University of Wales Trinity St Davids
4	Campus:	Carmarthen
5	E-mail address:	2246291@student.uwtsd.ac.uk/ hmotson@hotmail.com
6	Contact Telephone Number:	07717378831
For students:		
7	Student Number:	2246291
8	Programme of Study:	MA in Professional Practice (Voice Pedagogy)
9	Director of Studies/Supervisor:	Louise Emanuel/ Julie Crossman/ Debbie Winter

SECTION B: Approval for Research Activity

1	Has the research activity received approval in principle? (please check the Guidance Notes as to the appropriate approval process for different levels of research by different categories of individual)		YES	☒	NO	☐
			Date			
2	If Yes, please indicate source of approval (and date where known): Approval in principle must be obtained from the relevant source prior to seeking ethical approval	Research Degrees Committee	☐			
Institute Research Committee		☐				
Other (write in)		☒	WAPPAR ethics board representative			

SECTION C: Internal and External Ethical Guidance Materials

	Please list the core ethical guidance documents that have been referred to during the completion of this form (including any discipline-specific codes of research ethics, location-specific codes of research ethics, and also any specific ethical guidance relating to the proposed methodology). Please tick to confirm that your research proposal adheres to these codes and guidelines. You may add rows to this table if needed.	
1	UWTSD Research Ethics & Integrity Code of Practice	☒
2	UWTSD Research Data Management Policy	☒
3	<i>[List any other relevant documents here]</i>	☐

SECTION D: External Collaborative Research Activity

If there are external collaborators then you should gain consent from the contact persons to share their personal data with the university. If there are no external collaborators then leave this section blank and continue to section E.

1	Institution	
2	Contact person name	
3	Contact person e-mail address	
4	Is your research externally funded?	YES ☐ NO ☐
5	Are you in receipt of a KESS scholarship?	YES ☐ NO ☐
6	Are you specifically employed to undertake this research in either a paid or voluntary capacity?	Voluntary YES ☐ NO ☐
7		Employed YES ☐ NO ☐
8	Is the research being undertaken within an existing UWTSD Athrofa	If YES then the permission question YES ☐ NO ☐
	Professional Learning Partnership (APLP)?	below does not need to be answered.
9	Has permission to undertake the research has been provided by the partner organisation?	(If YES attach copy) If NO the application cannot continue YES ☐ NO ☐

Where research activity is carried out in collaboration with an external organisation

10	Does this organisation have its own ethics approval system?	YES ☐ NO ☐
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	If Yes, please attach a copy of any final approval (or interim approval) from the organisation (this may be a copy of an email if appropriate).
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SECTION E: Details of Research Activity

1	Indicative title:	Exercise prescription: Speech and Language Therapists (SLT) perceptions and practice		
2	Proposed start date:	14.7.25	Proposed end date:	02.03.26
	Introduction to the Research (maximum 300 words per section) Ensure that you write for a <u>Non-Specialist Audience</u> when outlining your response to the points below: <i>Purpose of Research Activity</i> <i>Proposed Research Question</i> <i>Aims of Research Activity</i> <i>Objectives of Research Activity</i> Demonstrate, briefly, how <u>Existing Research</u> has informed the proposed activity and explain <i>What the research activity will add to the body of knowledge How it addresses an area of importance.</i>			
3	Purpose of Research Activity To investigate SLT perspectives on the decisions made when advising on the amount of exercise prescribed for patients with a range of voice disorders, and what motivational strategies and support resources are offered to patients. Little research currently exists on the amount of exercise voice patients should complete to achieve their therapy goals, or on the factors that influence the decision made by therapists when prescribing therapy dosage. While some prescriptive protocols exist e.g. Lee Silverman Voice Treatment for Parkinson's disease, there are few to support other forms of voice therapy. Little research currently exists on what motivates voice patients to complete exercises and what support/ resources they find most useful to support their adherence to exercise. An understanding of this would positively impact the advice given to patients when setting treatment programmes. (this box should expand as you type)			
4	Research Question What influences SLT decision making when prescribing treatment dosage for voice patients? What motivational strategies and resources support patients to adhere to therapy programmes? What evidence currently exists to support different exercise protocols? (this box should expand as you type)			

5	Aims of Research Activity To further my knowledge on decision making around treatment dosage for voice patients. To investigate current research around exercise prescription for voice patients. To further my knowledge of what resources best support therapy adherence. (this box should expand as you type)
6	Objectives of Research Activity To understand the current evidence base for therapy dosage for voice patients To consult with other SLTs to understand SLT perspectives around current practice when recommending treatment dosage To investigate if a consensus exists on what an appropriate exercise protocol might be for different voice patients and what this may include To develop my understanding of what resources best support client motivation for completing their voice exercise programmes. (this box should expand as you type)
	Proposed methods (maximum 600 words) Provide a brief summary of all the methods that may be used in the research activity, making it clear what specific techniques may be used. If methods other than those listed in this section are deemed appropriate later, additional ethical approval for those methods will be needed. You do not need to justify the methods here, but should instead describe how you intend to collect the data necessary for you to complete your project.
7	This project will use a phenomenological approach and will collect qualitative data. Triangulation will be achieved through: 1) Literature review to ensure that the researcher has a thorough understanding of the current research relating to the topic, in order to ensure the questions for interviews reflect the current evidence base, from which SLT opinions can be sought. This knowledge will also be used to compare to interviews and the reflective views of the researcher. 2) Questionnaire sent out to SLTs via clinical excellence networks. 3) Individual semi-structured interviews of 5-6 participants who must be SLTs regularly working in benign voice disorders with an active voice caseload. Individual interviews have been chosen to allow participants to express their individual perspectives in depth, without their responses being impacted by the presence of other participants as in a focus group. A semi structured approach will allow the researcher to seek clarity or ask for more information to ensure data accuracy. Interviews will be conducted via zoom and will be audio-recorded and transcribed. 4) Reflective diary completed throughout the project to compare my knowledge and reflections on the research process and with the data collected. 5) Member checking may also be used to ensure the accuracy of data collected. (this box should expand as you type)
	Location of research activity Identify all locations where research activity will take place.
8	online (this box should expand as you type)

	Research activity outside of the UK If research activity will take place overseas, you are responsible for ensuring that local ethical considerations are complied with and that the relevant permissions are sought. Specify any local guidelines (e.g. from local professional associations/learned societies/universities) that exist and whether these involve any ethical stipulations beyond those usual in the UK (provide details of any licenses or permissions required). Also specify whether there are any specific ethical issues raised by the local context in which the research activity is taking place, for example, particular cultural
	and/or legal sensitivities or vulnerabilities of participants. If you live in the country where you will do the research then please state this.
9	(this box should expand as you type)

10	Use of documentation not in the public domain: Are any documents NOT publicly available?	NO	☒
		YES	☐
11	If Yes, please provide details here of how you will gain access to specific documentation that is not in the public domain and that this is in accordance with the current data protection law of the country in question and that of England and Wales. (this box should expand as you type)		

	Does your research relate to one or more of the seven aims of the Well-being of Future Generations (Wales) Act 2015?	YES	NO
12	A prosperous Wales	☐	☒
13	A resilient Wales	☐	☒
14	A healthier Wales	☐	☒
15	A more equal Wales	☐	☒
16	A Wales of cohesive communities	☐	☒
17	A Wales of vibrant culture and thriving Welsh language	☐	☒
18	A globally responsible Wales	☐	☐
19	If YES to any of the above, please give details:		
	(this box should expand as you type)		

SECTION F: Scope of Research Activity

	Will the research activity include:	YES	NO
1	Use of a questionnaire or similar research instrument?	☒	☐
2	Use of interviews?	☒	☐
3	Use of focus groups?	☐	☒
4	Use of participant diaries?	☐	☒
5	Use of video or audio recording?	☒	☐
6	Use of computer-generated log files?	☒	☐
7	Participant observation with their knowledge?	☐	☒
8	Participant observation without their knowledge?	☐	☒
9	Access to personal or confidential information without the participants' specific consent?	☐	☒
10	Administration of any questions, test stimuli, presentation that may be experienced as physically, mentally or emotionally harmful / offensive?	☐	☒
11	Performance of any acts which may cause embarrassment or affect self-esteem?	☐	☒
12	Investigation of participants involved in illegal activities?	☐	☒
13	Use of procedures that involve deception?	☐	☒
14	Administration of any substance, agent or placebo?	☐	☒
15	Working with live vertebrate animals?	☐	☒
16	Procedures that may have a negative impact on the environment?	☐	☒
17	Other primary data collection methods. Please indicate the type of data collection method(s) below.		
	Details of any other primary data collection method: (this box should expand as you type)	☐	☒

If NO to every question, then the research activity is (ethically) low risk and **may** be exempt from **some** of the following sections (please refer to Guidance Notes).

If YES to any question, then no research activity should be undertaken until full ethical approval has been obtained.

SECTION G: Intended Participants

If there are no participants then do not complete this section, but go directly to section H.

Who are the intended participants:		YES	NO
1	Students or staff at the University?	☐	☒
2	Adults (over the age of 18 and competent to give consent)?	☒	☐
3	Vulnerable adults?	☐	☒
4	Children and Young People under the age of 18? (Consent from Parent, Carer or Guardian will be required)	☐	☒
5	Prisoners?	☐	☒
6	Young offenders?	☐	☒
7	Those who could be considered to have a particularly dependent relationship with the investigator or a gatekeeper?	☐	☒
8	People engaged in illegal activities?	☐	☒
9	Others. Please indicate the participants below, and specifically any group who may be unable to give consent.	☐	☒
	Details of any other participant groups: (this box should expand as you type)		

Participant numbers and source	
	Provide an estimate of the expected number of participants. How will you identify participants and how will they be recruited?
10	How many participants are expected? 20 questionnaires, 5-6 interviews (this box should expand as you type)
11	Who will the participants be? Qualified speech and language therapists working with clients with benign voice disorders (this box should expand as you type)

12	How will you identify the participants?	Participants will be identified from Voice Clinical Excellence Networks (CENs) within the Speech and Language Therapy profession. Invitations to participate will be sent to all current members of the CENs. Participants will therefore self-select from within the occupational group. Direct colleagues will be excluded from taking part in the interview stage in order to reduce any potential for biased responses from participants who may be aware of the researcher's perspective and seek to align their responses accordingly. <i>(this box should expand as you type)</i>
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	Information for participants:	YES	NO	N/A
13	Will you describe the main research procedures to participants in advance, so that they are informed about what to expect?	☒	☐	☐
14	Will you tell participants that their participation is voluntary?	☒	☐	☐
15	Will you obtain written consent for participation?	☒	☐	☐
16	Will you explain to participants that refusal to participate in the research will not affect their treatment or education (if relevant)?	☒	☐	☒
17	If the research is observational, will you ask participants for their consent to being observed?	☐	☐	☒
18	Will you tell participants that they may withdraw from the research at any time and for any reason?	☒	☐	☐
19	With questionnaires, will you give participants the option of omitting questions they do not want to answer?	☒	☐	☐
20	Will you tell participants that their data will be treated with full confidentiality and that, if published, it will not be identifiable as theirs?	☒	☐	☐
21	Will you debrief participants at the end of their participation, in a way appropriate to the type of research undertaken?	☒	☐	☐
22	If NO to any of above questions, please give an explanation			
	<i>(this box should expand as you type)</i>			

	Information for participants:	YES	NO	N/A
24	Will participants be paid?	☐	☒	☐

25	Is specialist electrical or other equipment to be used with participants?	☒	☐	☐
26	Are there any financial or other interests to the investigator or University arising from this study?	☐	☒	☐
27	Will the research activity involve deliberately misleading participants in any way, or the partial or full concealment of the specific study aims?	☐	☒	☐
28	If YES to any question, please provide full details			
	A laptop computer will be used for zoom interviews and to securely store data during the project. <i>(this box should expand as you type)</i>			

SECTION H: Anticipated Risks

	Outline any anticipated risks that may adversely affect any of the participants, the researchers and/or the University, and the steps that will be taken to address them. If you have completed a full risk assessment (for example as required by a laboratory, or external research collaborator) you may append that to this form.		
1	Full risk assessment completed and appended?	Yes	☐
		No	☒
2	Risks to participants For example: sector-specific health & safety, emotional distress, financial disclosure, physical harm, transfer of personal data, sensitive organisational information		
	Risk to participants: - I will be recording individual interviews and therefore there is a risk of personal data being disclosed. - There is a risk of mild emotional distress if therapists choose to discuss any particularly challenging cases which have impacted them. <i>(this box should expand as you type)</i>	How you will mitigate the risk to participants: - I will ensure participants names are not recorded and use a code for saving each recording. Recordings and transcriptions will be stored on my password protected computer. - Participants will be aware that they can stop the interview at any time and do not have to disclose any information they do not wish to discuss. - I will allow time for debriefing after interviews for participants to ask any questions regarding the research. <i>(this box should expand as you type)</i>	

3	If research activity may include sensitive, embarrassing or upsetting topics (e.g. sexual activity, drug use) or issues likely to disclose information requiring further action (e.g. criminal activity), give details of the procedures to deal with these issues, including any support/advice (e.g. helpline numbers) to be offered to participants. Note that where applicable, consent procedures should make it clear that if something potentially or actually illegal is discovered in the course of a project, it may need to be disclosed to the proper authorities	
	Participants will be encouraged to access clinical supervision or seek advice from the Royal College of Speech and Language Therapists Clinical Advisors if they need further support for difficult cases. <i>(this box should expand as you type)</i>	
4	Risks to the investigator For example: personal health & safety, physical harm, emotional distress, risk of accusation of harm/impropriety, conflict of interest	
	Risk to the investigator:	<i>How you will mitigate the risk to the investigator:</i> I will mitigate this risk by maintaining regular reflection, seeking support as
	- There may be a risk of emotional distress if participants disclose any particularly difficult cases. - Potential conflict of interest if participants disclose any potential malpractice. <i>(this box should expand as you type)</i>	required from my tutor and allowing time between interviews to recover emotionally. Access supervision from the RCSLT or Health and Care Professions Council <i>(this box should expand as you type)</i>
5	University/institutional risks For example: adverse publicity, financial loss, data protection	
	Risk to the University: Possible data protection breach. Reputational risk <i>(this box should expand as you type)</i>	<i>How you will mitigate the risk to the University:</i> I will mitigate this risk by ensuring all data is anonymised and consent forms are redacted, following UWTSD data management guidelines. I will mitigate this risk by complying with my professional (Royal College of Speech and Language Therapists) and UWTSD ethical guidelines. <i>(this box should expand as you type)</i>
6	Environmental risks For example: accidental spillage of pollutants, damage to local ecosystems	
	Risk to the environment: n/a <i>(this box should expand as you type)</i>	<i>How you will mitigate the risk to environment:</i> <i>(this box should expand as you type)</i>

Disclosure and Barring Service				
	If the research activity involves children or vulnerable adults, a Disclosure and Barring Service (DBS) certificate must be obtained before any contact with such participants.	YES	NO	N/A
7	Does your research require you to hold a current DBS Certificate?	☐	☒	☐
8	If YES, please give the certificate number. If the certificate number is not available please write "Pending"; in this case any ethical approval will be subject to providing the appropriate certificate number.			

SECTION I: Feedback, Consent and Confidentiality

1	Feedback What de-briefing and feedback will be provided to participants, how will this be done and when?
	Participants will be given the opportunity to seek feedback at the end of the project through applying to an email address provided following the conclusion of the interview. <i>(this box should expand as you type)</i>
2	Informed consent Describe the arrangements to inform potential participants, before providing consent, of what is involved in participating. Describe the arrangements for participants to provide full consent before
	data collection begins. If gaining consent in this way is inappropriate, explain how consent will be obtained and recorded in accordance with prevailing data protection legislation.
	Participants will be given written information by email about the subject area and purpose of the research, including information on the time commitment required for the research. Participants will be informed of how data will be recorded and stored for the duration of the project. Consent will be recorded by signature on an electronic document. It will be redacted and coded. <i>(this box should expand as you type)</i>
3	Confidentiality / Anonymity Set out how anonymity of participants and confidentiality will be ensured in any outputs. If anonymity is not being offered, explain why this is the case.
	No names or places of work will be recorded during the interviews. Signed consent forms will be redacted and identified by code. <i>(this box should expand as you type)</i>

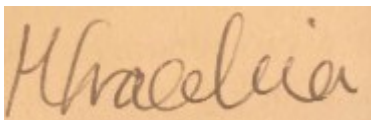
SECTION J: Data Protection and Storage

	Does the research activity involve personal data (as defined by the General Data Protection Regulation 2016 “GDPR” and the Data Protection Act 2018 “DPA”)?	YES	NO
1	“Personal data” means any information relating to an identified or identifiable natural person (‘data subject’). An identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person. Any video or audio recordings of participants is considered to be personal data.	☒	☐
	If YES, provide a description of the data and explain why this data needs to be collected:		
2	Personal data will include the audio recording and transcription of interviews, email address used to transfer data and signed consent forms. <i>(this box should expand as you type)</i>		
	Does it involve special category data (as defined by the GDPR)?	YES	NO
3	“Special category data” means sensitive personal data consisting of information as to the data subjects’ – (a) racial or ethnic origin, (b) political opinions, (c) religious beliefs or other beliefs of a similar nature, (d) membership of a trade union (within the meaning of the Trade Union and Labour Relations (Consolidation) Act 1992), (e) physical or mental health or condition, (f) sexual life, (g) genetics, (h) biometric data (as used for ID purposes),	☐	☒
	If YES, provide a description of the special category data and explain why this data needs to be collected:		
4	<i>(this box should expand as you type)</i>		
	Will data from the research activity (collected data, drafts of the thesis, or materials for publication) be stored in any of the following ways?	YES	NO
5	Manual files (i.e. in paper form)?	☐	☒
6	University computers?	☐	☒
7	Private company computers?	☐	☒
8	Home or other personal computers?	☐	☒
9	Laptop computers/ CDs/ Portable disk-drives/ memory sticks?	☒	☐
10	“Cloud” storage or websites?	☐	☒

11	Other – specify:	☐	☒
12	For all stored data, explain the measures in place to ensure the security of the data collected, data confidentiality, including details of backup procedures, password protection, encryption, anonymisation and pseudonymisation:		
	All electronically stored data will be anonymised and coded. Consent forms will be redacted. Data will be stored on a password protected computer kept in a private home. The data will be stored until the completion of the project and then deleted. In accordance with the DPA2018, participants will have the right to ask to see the data that is held relating to them. They will be made aware that data will be deleted immediately if the participant requests this, in which case the data will not be used in the project. <i>(this box should expand as you type)</i>		
	Data Protection		
	Will the research activity involve any of the following activities:	YES	NO
13	Electronic transfer of data in any form?	☒	☐
14	Sharing of data with others at the University outside of the immediate research team?	☒	☐
15	Sharing of data with other organisations?	☐	☒
16	Export of data outside the UK or importing of data from outside the UK?	☐	☒
17	Use of personal addresses, postcodes, faxes, emails or telephone numbers?	☒	☐
18	Publication of data that might allow identification of individuals?	☐	☒
19	Use of data management system?	☐	☒
20	Data archiving?	☐	☒
21	If YES to any question, please provide full details, explaining how this will be conducted in accordance with the GDPR and Data Protection Act (2018) (and any international equivalents, where appropriate):		
	All electronically stored data will be anonymised and coded. Consent forms will be redacted. Data will be stored on a password protected computer kept in a private home. The data will be stored until the completion of the project and then deleted. In accordance with the DPA2018, participants will have the right to ask to see the data that is held relating to them. They will be made aware that data will be deleted immediately if the participant requests this, in which case the data will not be used in the project. <i>(this box should expand as you type)</i>		
22	List all who will have access to the data generated by the research activity:		
	Myself as principle researcher and university tutor (Joshua Lee-Cummins)		

	<i>(this box should expand as you type)</i>		
23	List who will have control of, and act as custodian(s) for, data generated by the research activity:		
	myself <i>(this box should expand as you type)</i>		
24	Give details of data storage arrangements, including security measures in place to protect the data, where data will be stored, how long for, and in what form. Will data be archived – if so how and if not why not.		
	All stored data will be anonymised and coded. Consent forms will be redacted. Data will be stored on a password protected computer kept in a private home. The data will be stored until the completion of the project and then deleted. Archiving will not be required <i>(this box should expand as you type)</i>		
25	Please indicate if your data will be stored in the UWTSD Research Data Repository (see https://researchdata.uwtsd.ac.uk/). If so please explain. <i>(Most relevant to academic staff)</i>		
	n/a <i>(this box should expand as you type)</i>		
26	Confirm that you have read the UWTSD guidance on data management (see https://www.uwtsd.ac.uk/library/research-data-management/)	YES	☒
27	Confirm that you are aware that you need to keep all data until after your research has completed or the end of your funding	YES	☒

SECTION K: Declaration

	The information which I have provided is correct and complete to the best of my knowledge. I have attempted to identify any risks and issues related to the research activity and acknowledge my obligations and the rights of the participants. In submitting this application I hereby confirm that I undertake to ensure that the above named research activity will meet the University's Research Ethics and Integrity Code of Practice which is published on the website: https://www.uwtsd.ac.uk/research/research-ethics/		
1	Signature of applicant:		Date: 07.06.2025

For STUDENT Submissions:

RESEARCH STUDENTS ONLY

Once complete, submit this form via the **MyTSD Doctoral College Portal** at (<https://mytsd.uwtsd.ac.uk>).

RESEARCH STAFF ONLY

All communications relating to this application during its processing must be in writing and emailed to pgresearch@uwtsd.ac.uk , with the title 'Ethical Approval' followed by your name.

STUDENTS ON UNDERGRADUATE OR TAUGHT MASTERS PROGRAMMES should submit this form (and receive the outcome) via systems explained to you by the supervisor/module leader.

2	Director of Studies/Supervisor:	Laura James	Date: 11-7-25
3	Signature:	Laura James	

For STAFF Submissions:

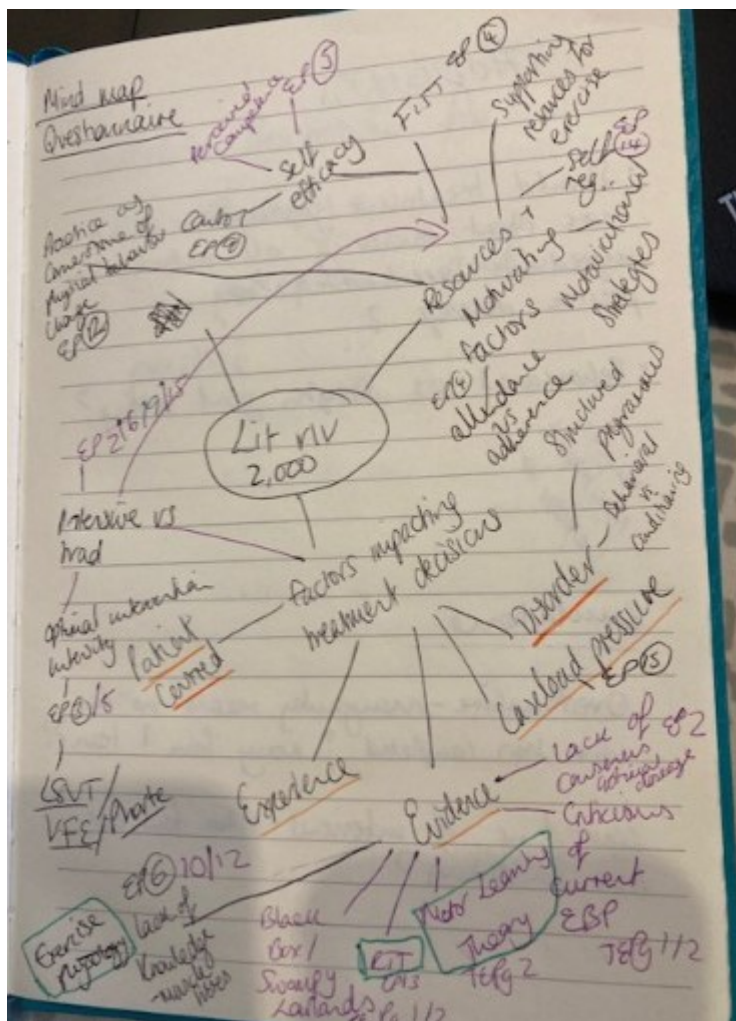
4	Academic Director/ Assistant Dean:		Date:
5	Signature:		

Checklist: Please complete the checklist below to ensure that you have completed the form according to the guidelines and attached any required documentation:

☒	I have read the guidance notes supplied before completing the form.
☒	I have completed ALL RELEVANT sections of the form in full.
☒	I confirm that the research activity has received approval in principle
☐	I have attached a copy of final/interim approval from external organisation (where appropriate)
☐	I have attached a full risk assessment (where appropriate) ONLY TICK IF YOU HAVE ATTACHED A FULL RISK ASSESSMENT
☒	I understand that it is my responsibility to ensure that the above named research activity will meet the University's Research Ethics and Integrity Code of Practice.
☒	I understand that before commencing data collection all documents aimed at respondents (including information sheets, consent forms, questionnaires, interview schedules etc.) must be confirmed by the DoS/Supervisor, module tutor or Academic Director.

Appendix 4: Questionnaire Development

Excerpt from reflexive journal:



Appendix 4: Questionnaire Development

Questionnaire 1st Draft:

Exercise Prescription for Voice Therapy: Speech and Language Therapists (SLT) perceptions and practice.

Primary Researcher: Helen Fracchia (fracchiahelen@gmail.com)

Thank you for your interest in this research. I am exploring how we make our clinical decisions around what exercises and dosage we prescribe for our voice patients.

I am looking to recruit SLTs who work regularly with a benign voice disorder caseload. You will have a minimum of 1 years' experience of working with benign voice disorders.

Participation will involve completing a short questionnaire which will take around 10 minutes. You can complete the questionnaire anonymously. At the end of the questionnaire you will be offered the opportunity to take part in an individual semi-structured interview with me via Zoom (approx. 40 minutes) which will be arranged at a convenient time for you, ideally during November/early December 2025. For this you will need to share your email address with me.

All data from the questionnaire and any follow-up interview will be anonymised for reporting and discussion with my research supervisor. This study has received ethical approval from the University of Wales Trinity St David (UWTSD) and the Voice Study Centre Ltd.

By completing this questionnaire you agree to:

- Your answers being used as part of my final research report and any follow- up presentations. All data will be anonymised and any identifying information will be removed prior to analysis and reporting.
- There are no direct benefits to taking part, however you will be helping to further our understanding of SLT therapeutic practice and can record this as part of your continuing professional development. You can request a copy of the final report from the email address above after 2.3.26.
- You can withdraw from the questionnaire at any time and do not have to offer to take part in the follow-up interview if you choose not to.
- If you feel you need any support or supervision after the questionnaire, please contact your clinical supervisor or the RCSLT (www.rcslt.org). You can contact the Voice Study Centre or UWTSD with any concerns regarding the research.

Consent Form:

By ticking the box below you confirm and consent to the following:

- You have read the attached information regarding the study
- You understand that your data will be anonymised and stored for the duration of the project and then deleted.
- You can withdraw at any time from completing the questionnaire or follow- up interview and will be given the opportunity to review your interview for accuracy. You can withdraw your data up until you have verified its accuracy.
- If you choose to share your email address you agree to potentially be contacted by email to arrange a follow- up interview. You still have the option to decline an interview at any stage.

1. How long have you been working as an SLT in voice?

- a. 1-5
- b. 6-10
- c. 11-15
- d. 16+

2. In what area do you work?

- a. NHS
- b. Independent practice
- c. Both NHS and Independent Practice
- d. Other

3. What factors do you consider when choosing a treatment plan for your clients? Please list in order of importance.

- a. Diagnosis
- b. Evidence base
- c. Client factors
- d. Your own exercise preferences
- e. Time/ caseload pressures
- f. Other...please state

4. Are there any theoretical approaches you are aware of using when prescribing your treatment?

- a. Motor Learning Theory
- b. Rehabilitation Treatment Specification System
- c. Exercise physiology
- d. Psychological approaches
- e. Other...

5. How confident do you feel when choosing your treatment plan?
 - a. Very confident
 - b. Confident
 - c. Neither confident nor unsure
 - d. Unsure
 - e. Very unsure
6. Do you use any recognised treatment protocols? Please select those you are using in practice
 - a. PhortE
 - b. Vocal Function Exercise Programme
 - c. Lee Silverman Voice Treatment
 - d. Other... please state
7. When using a treatment protocol, do you follow the recommended programme or adapt for your individual clients?
 - a. Use as recommended
 - b. Adapt for individual clients
 - c. Both
8. Ideally, how often would you see your clients who require voice therapy?
 - a. Short term, intensive input
 - b. Longer term, regular review (monthly)
 - c. A mixture of approaches
 - i. More intensive
 - ii. More longer term regular
9. What factors influence your decision around frequency of appointments?
 - a. Caseload management
 - b. Client choice/ individual circumstances
 - c. Evidence base
 - d. Diagnosis
 - e. Other (please state)
10. Do you feel there are any barriers to you offering optimum treatment to your clients?
 - a. No
 - b. Yes
 - i. If so, please state
11. What factors do you consider when advising on home exercise?
 - a. Diagnosis
 - b. Evidence base

- c. Client factors
- d. Your own exercise preferences
- e. Other...please state

12. What resources do you provide to support your client's independent practice?

- a. Leaflets
- b. Video links/ you tube
- c. Audio recordings
- d. Practice record sheets
- e. Reminder systems
- f. Apps
- g. Other... please state

13. What do you feel is the most effective way to support client's independent practice?

- a. Free text

14. Would you be willing to take part in a short, individual semi-structured interview to explore this topic in more detail?

- a. If so, please add your contact email address below.

Final Questionnaire:

Exercise Prescription for Voice Therapy: SLTs perceptions and practice

By completing this questionnaire you agree to: Your answers being used as part of my final research report and any follow- up presentations. All data will be anonymised and any identifying information will be removed prior to analysis and reporting. There are no direct benefits to taking part, however you will be helping to further our understanding of SLT therapeutic practice and can record this as part of your continuing professional development. You can request a copy of the final report from the email address on the information sheet after 2.3.26. You can withdraw from the questionnaire at any time and do not have to offer to take part in the follow-up interview if you choose not to. If you feel you need any support or supervision as a result of completing the questionnaire, please contact your clinical supervisor or the RCSLT (www.rcslt.org). You can contact the Voice Study Centre (www.voicestudycentre.com) or UWTSd (www.uwtsd.ac.uk) with any concerns regarding the research.

* Required

1. Please confirm and consent to the following: 1. You have read the attached information regarding the study 2. You understand that your data will be anonymised and stored for the duration of the project and then deleted. 3. You can withdraw at any time from completing the questionnaire or follow- up interview and will be given the opportunity to review your interview for accuracy. You can withdraw your data up until you have verified its accuracy. 4. If you choose to share your email address you agree to potentially be contacted by email to arrange a follow- up interview. You still have the option to decline an interview at any stage.

☐ I agree

2. How long have you been working as an SLT in voice? *

☐ 1-5 years

☐ 6-10 years

☐ 11-15 years

☐ 16+ years

3. Where do you work *

☐ NHS

☐ Independent Practice

☐ Both NHS and independent practice

☐ Other

4. How confident do you feel when choosing your treatment plan? *

- ☐ Very confident
- ☐ Confident
- ☐ Neutral
- ☐ Unconfident
- ☐ Extremely not confident

5. What factors do you consider when choosing a treatment plan for your clients? Please rank in order of importance, the most important first. *

diagnosis
evidence base
client factors
your own exercise preferences
time/ caseload pressures
other (please describe below)

6. Please describe 'other' from question 5

--

7. Are there any theoretical approaches you are aware of using in your practice when deciding on treatment? *

- ☐ Motor Learning Theory
- ☐ Rehabilitation Treatment Specification System
- ☐ Exercise Physiology
- ☐ Psychological approaches
- ☐ Other

8. Do you use any recognised treatment protocols? *

- ☐ PhoRTE
- ☐ Vocal Function Exercise Programme
- ☐ Lee Silverman Voice Treatment
- ☐ Other

9. If using a treatment protocol, do you normally follow the recommended programme or adapt for your individual clients? *

- ☐ mostly use as recommended
- ☐ mostly adapt for individual clients
- ☐ I don't use any

10. Ideally, would you normally prefer to: *

- ☐ offer short term, intensive input
- ☐ offer longer term input with regular appointments
- ☐ a mixture of approaches

11. Do you feel there are any barriers to you offering optimum treatment to your clients? If so, please briefly state below:

12. What factors influence your decision around frequency of appointments? please rank in order of importance, most influential first *

caseload management
client choice
evidence base
diagnosis
other

13. Please describe 'other' from question 11

14. What factors do you consider when advising on home exercises? *

- ☐ Diagnosis
- ☐ Evidence base
- ☐ Client factors
- ☐ Your exercise preferences
- ☐ Other

15. What resources do you provide to support your client's independent practice? *

- ☐ leaflets/ written information
- ☐ video links/ You Tube
- ☐ audio recordings
- ☐ practice record sheets
- ☐ reminder systems
- ☐ apps
- ☐ Other

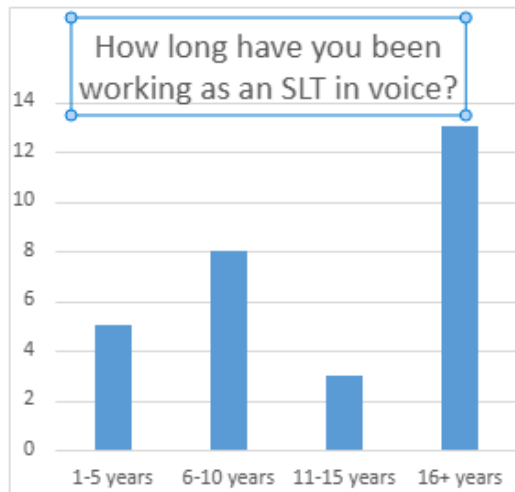
16. What do you feel is the most effective way to support client's independent practice? *

17. Thank you for taking the time to complete this questionnaire. If you would be willing to take part in a short, semi-structured interview to explore this topic in more detail, please add your email address below.

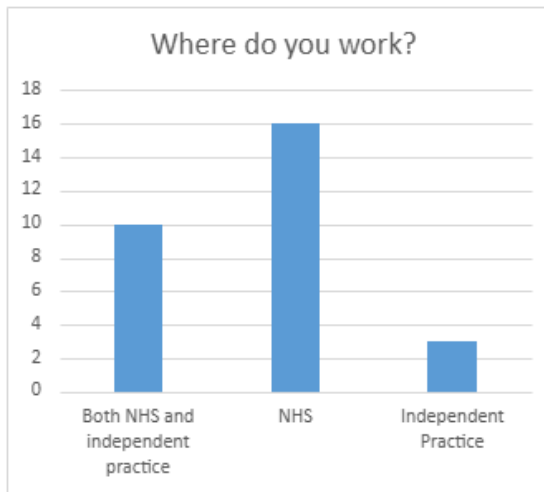
This content is neither created nor endorsed by Microsoft. The data you submit will be sent to the form owner.

Appendix 5: Questionnaire Results/ Analysis

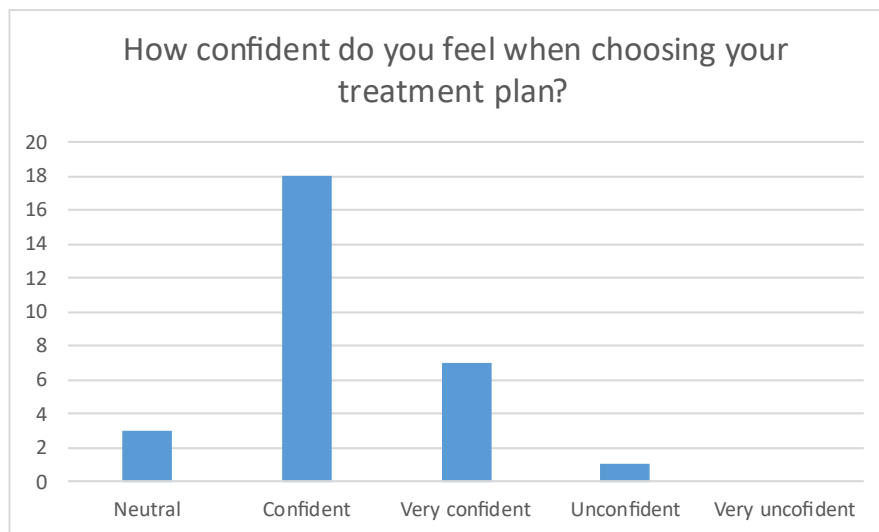
Q2.



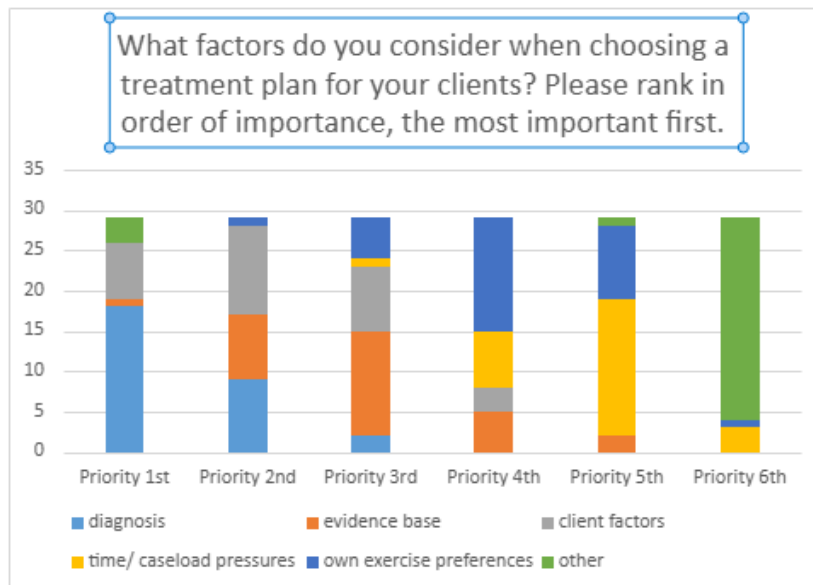
Q3.



Q4.



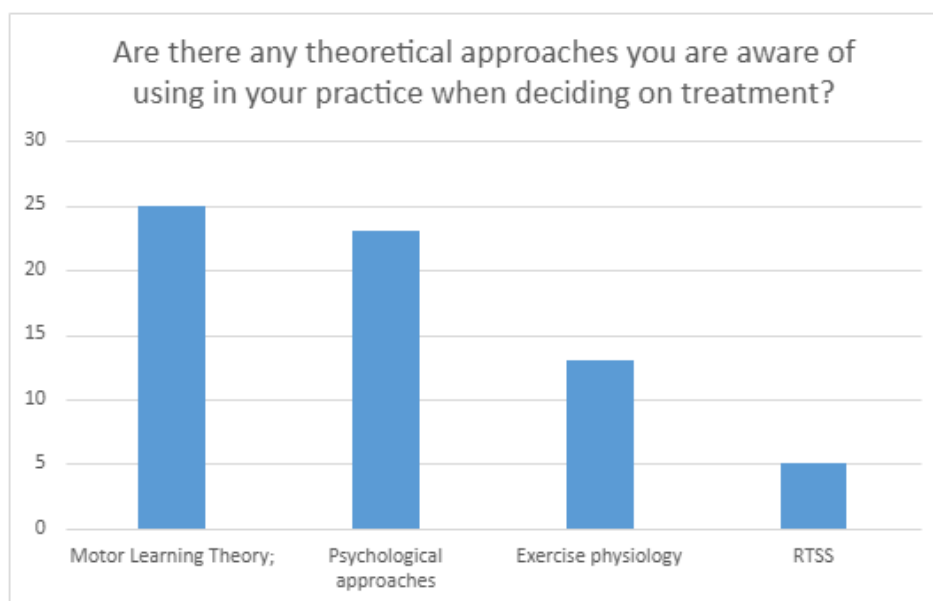
Q5.



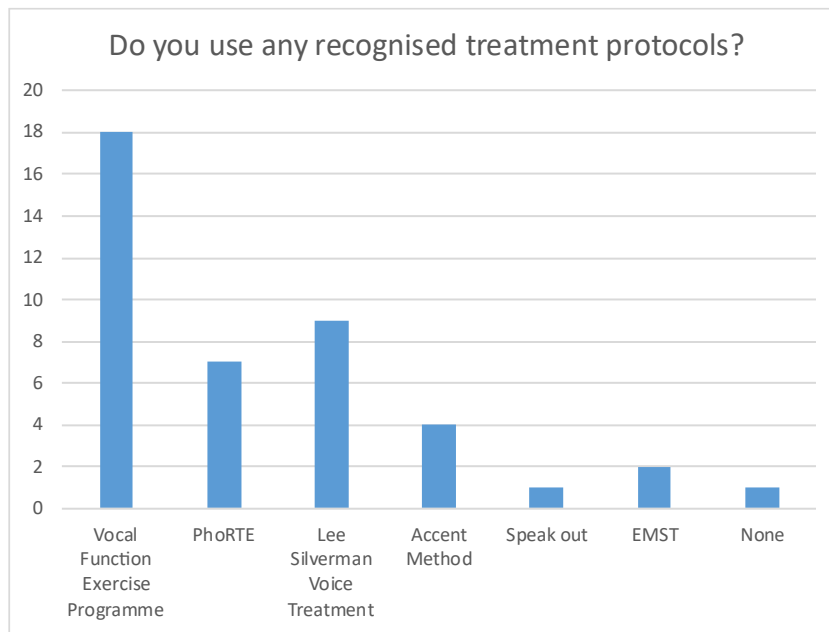
Q6. 'Other' answers to Q5:

Priority 1	Patient response to therapy trials
	What patient is stimuable for
	What am I seeing/hearing
Priority 5	Mode of therapy impacted by face to face/ online appointment
Priority 6	Pt's level of commitment and any other medical factors impacting progress
	Cognitive ability
	Onward referral to other services

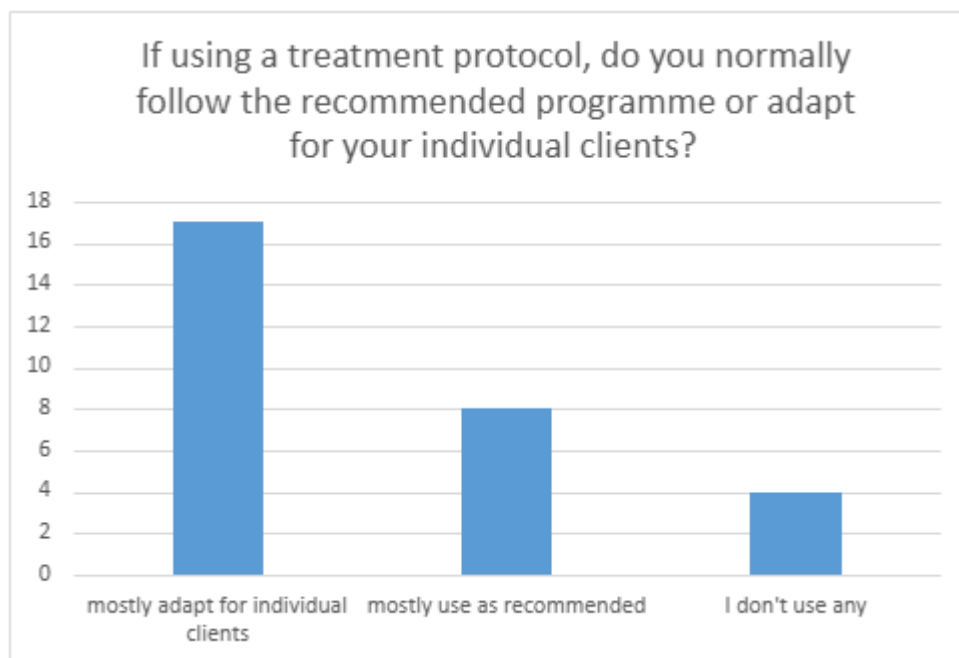
Q7.



Q8.



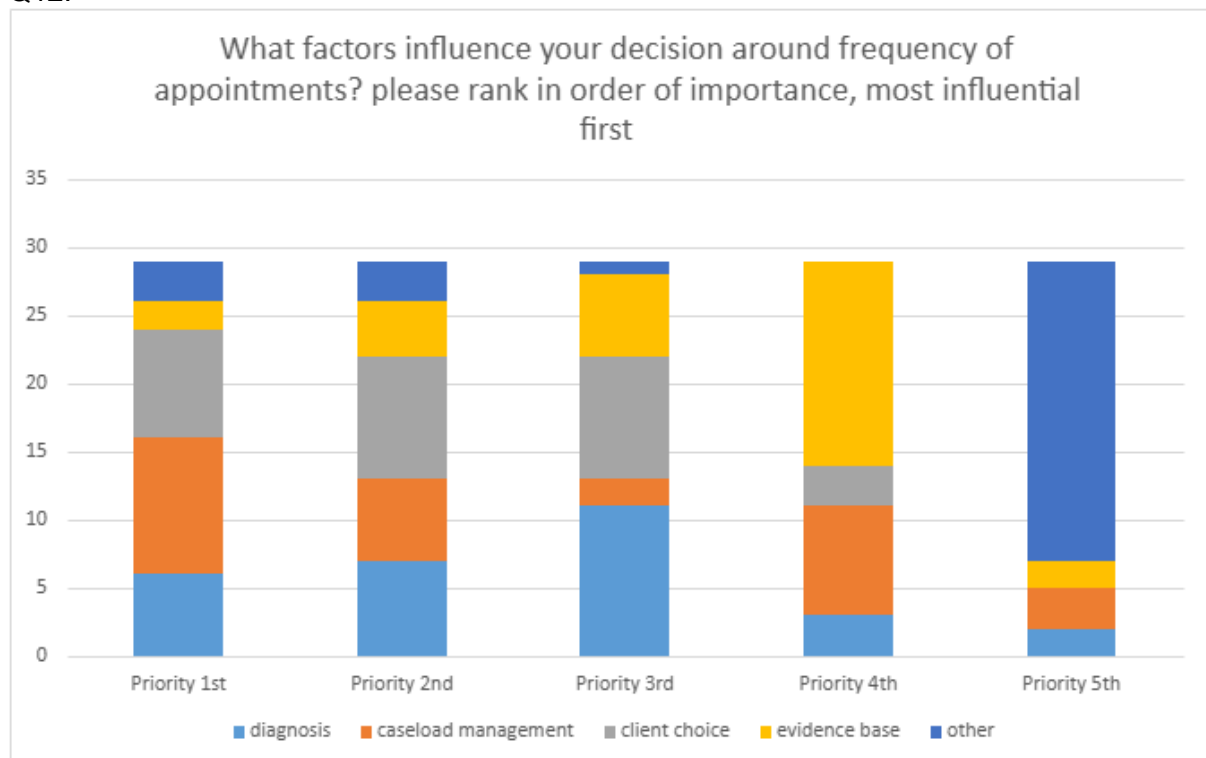
Q9.



Q11. Do you feel there are any barriers to you offering optimum treatment?

Response	Theme
Pushback from employer on cost of equipment Limited funding/ time for ongoing training Funding	NHS budget restrictions
Delayed referral pre/post surgery	Poor referral timing
Capacity reduces due to waiting list pressure Unable to offer more than monthly appointments Caseload constraints Frequency of appointments Caseload size and capacity Caseload pressure x 4 Waiting list pressure x2	Caseload/ waiting list pressure
Access to laryngoscopy clinics/ MDT working Lack of time to develop resources Trust restrictions on number of offered appointments Variable admin support reducing efficiency	NHS local/specialist service restrictions
Geographical area/ patients being able to attend face to face appointments	Logistical challenges
Client engagement/ compliance In private sector, the number of sessions patients can afford	Client challenges
Technology limitations- connectivity and software sound alteration	Technology limitations
Own knowledge and experience	Therapist skill level

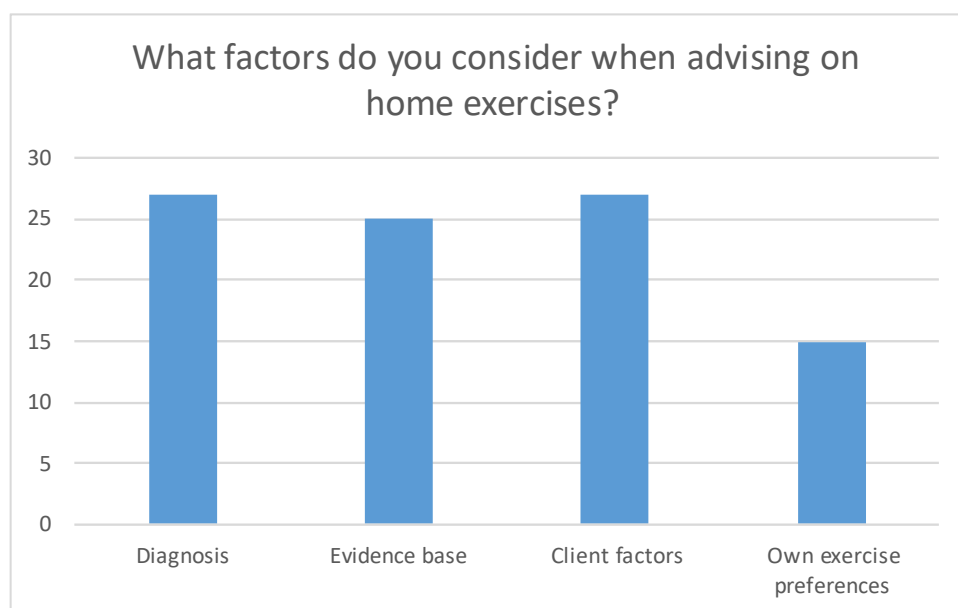
Q12.



Q13. 'Other' answers:

Priority 1	What will be the most beneficial to patient progress
	Where there is space in the diary
	Dependent upon client awareness and ability to perform programme effectively. Step up/down activities
Priority 2	Dependent on client abilities- variable progress rates Size of current caseload. Has a maximum caseload limit to ensure the right frequency of appointments can be offered.
Priority 3	Impact on participation and wellbeing
Priority 5	Other clinical/ non-clinical requirements in the working day Venue- multiple sites with different patient preferences and therapist availability

Q14.



Q15.



Q16. What do you feel is the most effective way to support client's independent practice?

Collated Responses
Encouraging self efficacy
Multiple resources to support exercises e.g. written/video
Clear contracting with patient
Coaching approach to encourage self- efficacy
Clear communication of rationale and prognosis for recommendations
Accurate modelling and feedback
Client-centred practice plan to match clients capacity and capability
Habit stacking
Summarising advice
Regular in-person check in to review progress
Intrinsic reward
Patient choice to improve self- efficacy
Specific prescriptive treatment plans

Appendix 6: Consent Forms

Interview consent form- Participant 1

Exercise Prescription for Voice Therapy: Speech and Language Therapists (SLT) perceptions and practice.

Primary Researcher: Helen Fracchia

Please read the information below before you decide if you want to participate:

Study Information

This research project will look at how Speech and Language Therapists (SLTs) decide on the exercises they prescribe for home practice. This research will be completed using a semi-structured interview exploring what you do in your practice. Interviews will be approximately 40 minutes long and will be conducted via Zoom. Interviews will be stored securely for the duration of the project and will only be viewed by myself. The data will be transcribed in full and you will have the opportunity to check your transcript for reliability and also to remove any data you do not want to be included in the analysis. All data will be anonymised for reporting and discussion with the research supervisor.

To participate you must be a qualified SLT regularly working with a caseload of clients with benign voice disorders.

This study has received ethical approval from the University of Wales Trinity St David (UWTSD) and the Voice Study Centre Ltd.

If you are willing to take part in the research, please sign below to agree to the following:

- Completing one interview of approximately 40 mins via Zoom.
 - You can terminate the interview at any time.
 - You do not need to discuss anything which you do not feel comfortable to disclose during the interview.
 - You will be given the opportunity to check your transcript for reliability and remove any data you do not wish to be included in analysis.
- Your data being stored securely and anonymised in line with Data Protection and UWTSD guidelines and destroyed at the end of the project (3rd March 2026).
 - Your raw data will only be viewed by the primary researcher.
 - Only anonymised data will be shared with the research supervisor.
- De-briefing will be available to you after the interview if you wish to understand more about the purpose of the research.
- You may request a copy of the final research project after the 3rd March 2026.

If you feel you need further support with any clinical issues raised by the interview you can contact the Royal College of Speech and Language Therapists (www.rcslt.org) or your clinical supervisor.

Participant Signature :

Printed Name:

Researcher Signature: *HFracchia*

Printed Name : Helen Fracchia

Contact Information:

If you have any questions or concerns regarding this study, please contact:

Helen Fracchia (Primary Researcher)

fracchiahelen@gmail.com

Joshua Lee-Cummings (Research Supervisor)

joshua@voicestudycentre.com



Interview consent form- Participant 2

Exercise Prescription for Voice Therapy: Speech and Language Therapists (SLT) perceptions and practice.

Primary Researcher: Helen Fracchia

Please read the information below before you decide if you want to participate:

Study Information

This research project will look at how Speech and Language Therapists (SLTs) decide on the exercises they prescribe for home practice. This research will be completed using a semi-structured interview exploring what you do in your practice. Interviews will be approximately 40 minutes long and will be conducted via Zoom. Interviews will be stored securely for the duration of the project and will only be viewed by myself. The data will be transcribed in full and you will have the opportunity to check your transcript for reliability and also to remove any data you do not want to be included in the analysis. All data will be anonymised for reporting and discussion with the research supervisor.

To participate you must be a qualified SLT regularly working with a caseload of clients with benign voice disorders.

This study has received ethical approval from the University of Wales Trinity St David (UWTSD) and the Voice Study Centre Ltd.

If you are willing to take part in the research, please sign below to agree to the following:

- Completing one interview of approximately 40 mins via Zoom.
 - You can terminate the interview at any time.
 - You do not need to discuss anything which you do not feel comfortable to disclose during the interview.
 - You will be given the opportunity to check your transcript for reliability and remove any data you do not wish to be included in analysis.
- Your data being stored securely and anonymised in line with Data Protection and UWTSD guidelines and destroyed at the end of the project (3rd March 2026).
 - Your raw data will only be viewed by the primary researcher.
 - Only anonymised data will be shared with the research supervisor.
- De-briefing will be available to you after the interview if you wish to understand more about the purpose of the research.
- You may request a copy of the final research project after the 3rd March 2026.

If you feel you need further support with any clinical issues raised by the interview you can contact the Royal College of Speech and Language Therapists (www.rcslt.org) or your clinical supervisor.

Participant Signature:



Printed Name:



Researcher Signature: *H Fracchia*

Printed Name: Helen Fracchia

Contact Information:

If you have any questions or concerns regarding this study, please contact:

Helen Fracchia (Primary Researcher)

fracchiahelen@gmail.com

Joshua Lee-Cummings (Research Supervisor)

joshua@voicestudycentre.com



Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David



Participant 3

Mon, Dec 1,
2025, 11:05 PM

to me

Dear Helen,

I can't edit your consent form as my software is not compatible and I have no printer. I have attached an edited screen shot. I hope that is OK.

If not, can you accept this email as my giving consent to the interview and your storage and analysis of this data.

Kind regards

This account does not allow editing on yo...

... of the project and will only be viewed by myself. The data will be transcribed in full and you will have the opportunity to check your transcript for reliability and also to remove any data you do not want to be included in the analysis. All data will be anonymised for reporting and discussion with the research supervisor.

To participate you must be a qualified SLT regularly working with a caseload of clients with benign voice disorders.

This study has received ethical approval from the University of Wales Trinity St David (UWTSD) and the Voice Study Centre Ltd.

If you are willing to take part in the research, please sign below to agree to the following:

- Completing one interview of approximately 40 mins via Zoom.
 - You can terminate the interview at any time.
 - You do not need to discuss anything which you do not feel comfortable to disclose during the interview.
 - You will be given the opportunity to check your transcript for reliability and remove any data you do not wish to be included in analysis.
- Your data being stored securely and anonymised in line with Data Protection and UWTSD guidelines and destroyed at the end of the project (3rd March 2026).
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 - Only anonymised data will be shared with the research supervisor.
- De-briefing will be available to you after the interview if you wish to understand more about the purpose of the research.
- You may request a copy of the final research project after the 3rd March 2026.

If you feel you need further support with any clinical issues raised by the interview you can contact the Royal College of Speech and Language Therapists (www.rcslt.org) or your clinical supervisor.

Participant Signature: _____ Date: _____

Researcher Signature: _____ Printed Name: _____

Contact Information:

If you have any questions or concerns regarding this study, please contact Helen Fracchia (Primary Researcher)

fracchiahelen@gmail.com

Interview consent form- Participant 4

Exercise Prescription for Voice Therapy: Speech and Language Therapists (SLT) perceptions and practice.

Primary Researcher: Helen Fracchia

Please read the information below before you decide if you want to participate:

Study Information

This research project will look at how Speech and Language Therapists (SLTs) decide on the exercises they prescribe for home practice. This research will be completed using a semi-structured interview exploring what you do in your practice. Interviews will be approximately 40 minutes long and will be conducted via Zoom. Interviews will be stored securely for the duration of the project and will only be viewed by myself. The data will be transcribed in full and you will have the opportunity to check your transcript for reliability and also to remove any data you do not want to be included in the analysis. All data will be anonymised for reporting and discussion with the research supervisor.

To participate you must be a qualified SLT regularly working with a caseload of clients with benign voice disorders.

This study has received ethical approval from the University of Wales Trinity St David (UWTSD) and the Voice Study Centre Ltd.

If you are willing to take part in the research, please sign below to agree to the following:

- Completing one interview of approximately 40 mins via Zoom.
 - You can terminate the interview at any time.
 - You do not need to discuss anything which you do not feel comfortable to disclose during the interview.
 - You will be given the opportunity to check your transcript for reliability and remove any data you do not wish to be included in analysis.
- Your data being stored securely and anonymised in line with Data Protection and UWTSD guidelines and destroyed at the end of the project (3rd March 2026).
 - Your raw data will only be viewed by the primary researcher.
 - Only anonymised data will be shared with the research supervisor.
- De-briefing will be available to you after the interview if you wish to understand more about the purpose of the research.
- You may request a copy of the final research project after the 3rd March 2026.

If you feel you need further support with any clinical issues raised by the interview you can contact the Royal College of Speech and Language Therapists (www.rcslt.org) or your clinical supervisor.

Participant Signature:

Printed Name:

Researcher Signature: *HFracchia*

Printed Name: Helen Fracchia

Contact Information:

If you have any questions or concerns regarding this study, please contact:

Helen Fracchia (Primary Researcher)

fracchiahelen@gmail.com

Joshua Lee-Cummings (Research Supervisor)

joshua@voicestudycentre.com



Interview consent form- Participant 5

Exercise Prescription for Voice Therapy: Speech and Language Therapists (SLT) perceptions and practice.

Primary Researcher: Helen Fracchia

Please read the information below before you decide if you want to participate:

Study Information

This research project will look at how Speech and Language Therapists (SLTs) decide on the exercises they prescribe for home practice. This research will be completed using a semi-structured interview exploring what you do in your practice. Interviews will be approximately 40 minutes long and will be conducted via Zoom. Interviews will be stored securely for the duration of the project and will only be viewed by myself. The data will be transcribed in full and you will have the opportunity to check your transcript for reliability and also to remove any data you do not want to be included in the analysis. All data will be anonymised for reporting and discussion with the research supervisor.

To participate you must be a qualified SLT regularly working with a caseload of clients with benign voice disorders.

This study has received ethical approval from the University of Wales Trinity St David (UWTSD) and the Voice Study Centre Ltd.

If you are willing to take part in the research, please sign below to agree to the following:

- Completing one interview of approximately 40 mins via Zoom.
 - You can terminate the interview at any time.
 - You do not need to discuss anything which you do not feel comfortable to disclose during the interview.
 - You will be given the opportunity to check your transcript for reliability and remove any data you do not wish to be included in analysis.
- Your data being stored securely and anonymised in line with Data Protection and UWTSD guidelines and destroyed at the end of the project (3rd March 2026).
 - Your raw data will only be viewed by the primary researcher.
 - Only anonymised data will be shared with the research supervisor.
- De-briefing will be available to you after the interview if you wish to understand more about the purpose of the research.
- You may request a copy of the final research project after the 3rd March 2026.

If you feel you need further support with any clinical issues raised by the interview you can contact the Royal College of Speech and Language Therapists (www.rcslt.org) or your clinical supervisor.

Participant Signature:

Printed Name:

Researcher Signature: *HFracchia*

Printed Name: Helen Fracchia

Contact Information:

If you have any questions or concerns regarding this study, please contact:

Helen Fracchia (Primary Researcher)

fracchiahelen@gmail.com

Joshua Lee-Cummings (Research Supervisor)

joshua@voicestudycentre.com



Appendix 7

Interview Guide

Tell me a bit about your job and the context you are working in.

In your questionnaire you mentioned... being the most important factor in your treatment decision. Can you tell me more about this?

Can you tell me about the other factors that influence your decisions?

What treatment approaches do you find the most effective? Why do you think that is?

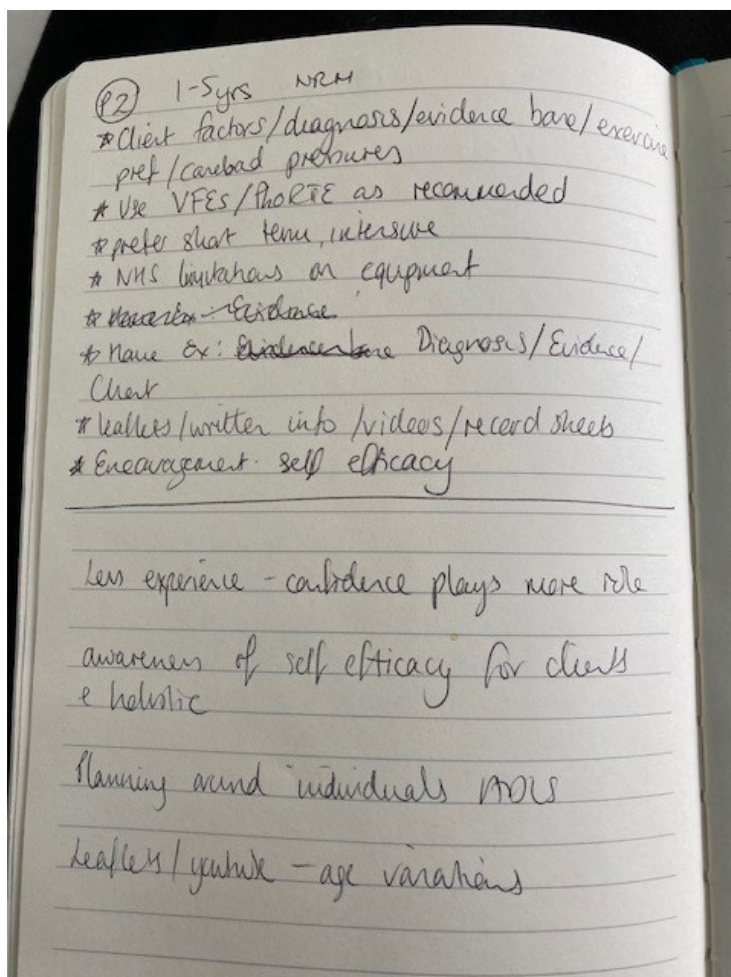
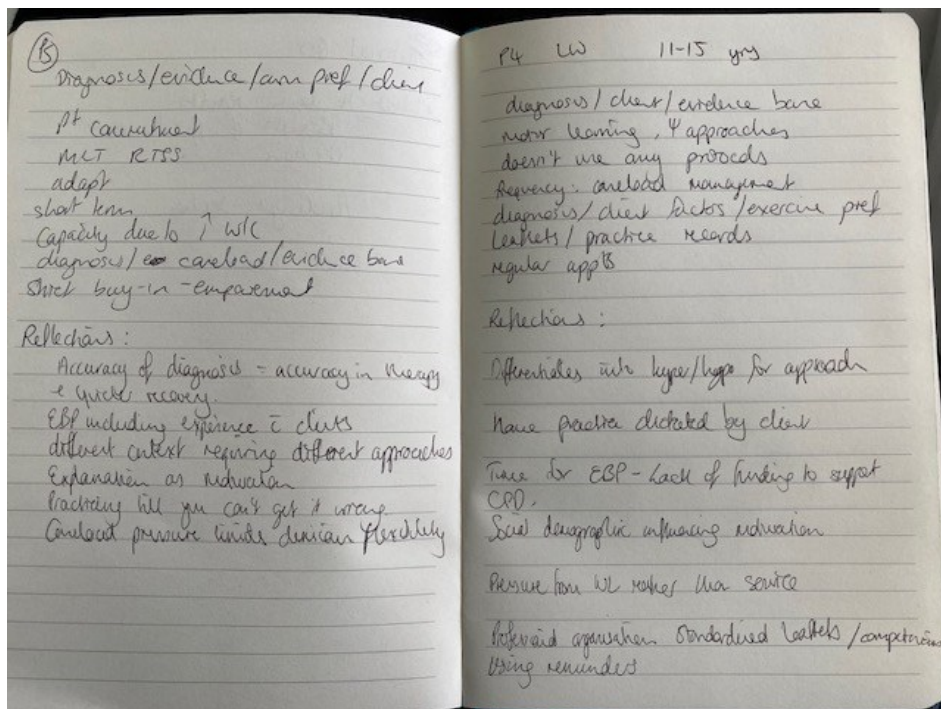
Can you think of a time when you have had to make a particularly complex clinical decision around treatment recommendations for a patient? What did you have to think about?

What do you consider when prescribing home exercise? What do you feel is most effective?

Are there any limitations to you offering best practice?

Is there anything we could do as a profession to improve our practice around exercise prescription?

Appendix 8: Excerpts from reflexive journal post interview



Appendix 9:

[Helen Fracchia] 09:06:51 Thank you so much for filling in the questionnaire. Do you want to tell me a bit to start with about your job and the context you're in, and what you're doing at the moment? [P1] 09:07:07 My job is mainly in the voice team. I see a combination of ENT voice disorders, Upper airway disorders. Trans voice and a bit of paediatric voice as well, and before that, I was working in head and neck cancer. So there was quite a lot of Dosage in that job. [Helen Fracchia] 09:07:40 Excellent, okay. So, on your questionnaire, you mentioned diagnosis being the most important factor in making decisions around exercise prescription. Can you tell me a bit more about that? What goes through your head when you're thinking about Diagnosis. [P1] 09:08:00 With voice disorders, so, it's, thinking about.. there are exercises that are applicable to many things. So it's not like this exercise is for this, and this exercise is for that. But the approach is probably different for different patients. So, for example, if you've got someone with presbyphonia who's got a weakness that needs to be strengthened Then I'm going to have a much more robust programme And sort of aim for more intense activity. More dosage, more...thinking about it as a strengthening exercise as opposed to something like a muscle tension dysphonia Which is more of a... Motor program retraining, or kind of rebalancing approach. or if you've got someone who has got lots of inflammation, or they're recovering... they've got nodules or polyps that we need to recover from, or a granuloma. Or they're recovering from benign vocal cord surgery, then obviously that's going... you're going to be looking at relative levels of voice. Less and rehabilitation with a much more gentle approach. [Helen Fracchia] 09:09:40 Yeah, brilliant, you talked about client factors influencing your decision as well. what kind of things do you think about around that? [P1] 09:09:50 I suppose not overloading... people with too much. I think if you give people too many things, they're less likely to do anything, so give them 1 or 2 simple things to follow. you have to take into account people's Busy lifestyles and where they're	The same Exercises can target multiple treatment goals. Application of exercise may be different for different treatment goals. More robust and intense programme for strengthening Rebalancing approach for MTD Gentle approach for rehab Tailoring exercise programme to achievable level
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going to fit things in. also maybe their memory level. Um, how easy... how much they're able to do things independently, and how much support that they might need with that... How the patient is engaging And How much it feels like they're able to cope with.
I'm terrible for moving too fast. I want to move everything really quickly But actually, sometimes it's a discipline to just be, let's take things a little bit more slowly with some people.

[Helen Fracchia] 09:11:07

Yeah. Is there a factor that influences that need to get people through quickly, do you think?

[P1] 09:11:14

Well, in the past, there was... I mean, I was the only person holding the whole caseload.

And in fact, at one point, I was doing half head and neck and all of the voice.

And yes, I was very, very busy and so then, at that time, there was definitely, like.

I need to give you as much as I can now, and then I'm going to have to review you when I can, so that would definitely have influenced things. I don't feel so much pressure at the moment, so I'm Being much more patient-led with that. Um, uh, but I think it's more because I'm very solution-focused. I just want to get... get there.

[Helen Fracchia] 09:12:08

Definitely, I feel that. You put evidence base in the middle Of the list, how do you think That influences your decisions?

[P1] 09:12:20

Um... well, it's a funny old word, isn't it? Evidence-based, because we have a sense that the evidence base is the published written literature, and we know that that's part of it, but not the whole clinical situation. I suppose because in terms of the evidence base, often, you know, a big part of that is the Client patient factors in front of you. And that's, really, with voice, particularly, um. You have a toolkit, and you adapt that toolkit according to what is happening with that patient and how they are Doing things and then how you have to adapt. So, obviously It's very, very helpful to kind of know what you're doing, why you're doing it. And that there is, you know, some sort of evidence for what you're doing, but the patient is a big part of that evidence.

[Helen Fracchia] 09:13:27

Yeah, yeah, brilliant. So, what treatment approaches do you find the most effective?

Overwhelm
demotivates

Motivation and
independence with
exercises

Pressure for quick
progress from busy
caseload.

Easier to be patient
led when less
pressured.

Evidence base
includes the clinical
situation, patient.

Adaptation of
exercise is always
required- alter your
toolkit according to
the patient.

Evidence base is
knowing why you're
doing something

[P1] 09:13:36 Um... well, I think sometimes I worry that I end up, kind of, um, defaulting to too few things. Yeah, um... So, I suppose, generally speaking, you know, you've got your vocal tract deconstrictions. And, you know, you have your phase for that, but then sometimes, again, you'll look at the patient in front of you and maybe think what might be easier for that person to take on, but yeah, so I've got the deconstriction tools, semi-occluded vocal tract is very, you know, is great, and Lax Vox, to be fair, I know it's awful, but It's such a shortcut. Um, and sometimes That is all a patient needs. So that's a really, really good exercise to try that, and if it doesn't work, okay, fine, we'll try something else, but actually, if that works really well for you then let's... let's... let's go with that. So semi included vocal tract exercises and I often use, um, like, on-sets-type exercises, um, glottal onsets exercises, and often what I think I'm doing with a little bit of, vocal posturing work and the onsets is that I think that I am helping people to get a, uh, more Efficient mid-larynx position. a more efficient closure because through experience. often that is a very helpful thing for lots of people. So I do tend to have my faves, and then I think, God, I'm so repetitive, I need something new but, you know, those are, you know, you can pick Some pretty useful things for most patients out of those 3. [Helen Fracchia] 09:15:57 Brilliant, yeah. I know, I go through phases where I'm like, Lax vox, again? But it works, doesn't it? So why would you not do it? [P1] 09:16:07 It's the magic straw! [Helen Fracchia] 09:16:12 Um, do you think there's any difference in what you consider when you're thinking about home practice to what you're doing in the clinic. So if you're prescribing a practice schedule for somebody. Is there any difference in the considerations there? I think you put clients first, rather than diagnosis on the questionnaire for home practice. [P1] 09:16:55 Yeah, yeah, so, again, you have to kind of consider what is realistic for people, and that they might need to... pair it to a daily activity, like doing the washing up, or... in the shower or putting their straw or their exercise sheets by their armchair and just doing it, you know, or at their desk I'm trying to think	Default to a few favourite exercises Vocal tract deconstriction SOVT Whatever works for the patient Driven by clinician experience of success- practice based experience
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about how that might practically work in their daily life, and it might be that all they can do is a little bit in the car on the way to work and on the way home So you have to kind of fit in what... what's realistic, but also balance that with what's... what's needed.

[Helen Fracchia] 09:17:42

Yeah, yeah. Um, are there any resources that you... You really like, that you find patients really respond well to, to facilitate that home practice.

[P1] 09:17:53

Um... I don't know that I really do have any great resources, No, I mean, certainly with trans patients, they might use a little bit of feedback apps and things like that, but

Generally speaking, uh, I could probably do with a little bit more, um, a few more tools to help with that. So, particularly with my trans voice, caseload, they're very interesting, because you've got so much more neurodiversity. So you're often dealing... you're dealing with the autistic brain, and you're often dealing with the ADHD brain. it's much more apparent than it is in the kind of ENT population that I see. You get a lot of people coming back saying, I don't even think about it outside of my sessions with you, even though I'm saying it's really important And that, you know, lots of things might even depend on that But I can't remember or motivate myself to do it. So, I would, you know, need to get a little bit better at that. I mean, some people say just having something to tick off or colour in will give me a little bit of dopamine, so it's kind of like something that's going to be visually in my face to remind me to do it, and then something that might give me, a little bit of Dopamine. So we just need someone to create some beautiful apps That will, um, will give people a little bit of, you know, that dopamine hit, like doing their Duolingo. my manager's doing a master's in, some kind of technology. She's got to try and create apps, so... But yeah, yeah, that's a whole thing that my brain needs to get better at. Um, in terms of resources for people and how to just help people to do it, and I know I'm as bad, because I go to the physio, got a problem I'm in pain and I can't walk properly or I can't sit properly. They give me the exercise, oh, lovely, I've got the exercises now, And then I might just, you know, forget. do that a couple of days, then forget about it, then I've got a review coming up, so I'd Better do the exercises, so I can say that I've done some exercises, and I think, I don't know, there's a lot of people like that at different degrees, isn't there?

[Helen Fracchia] 09:20:46

Build exercises into individual patients routine- be realistic

Need for development of tools to support home practice Individuals are motivated in different ways- neurodiversity.

Reward system- dopamine

Hmm. Yeah, definitely. Yeah.

Do you think there's any limitations to being able to offer best practice to your patients at the moment?

[P1] 09:20:57

Um, I think sometimes, I feel like there are some people that could do with intensive input that tends to be maybe. Um, the older population who need regular Drilling and regular practice. And find it difficult to do or remember exactly how to do the exercise on their own. But then, having said that, I have offered that to somebody that really wasn't getting anywhere. I thought, well, This is our last resort for speech therapy, is to try something more intensive and Then when I offered that to her. She didn't want to come in for intensive Exercise. So that's the only other thing, and that was something very much in head and neck cancer that I did the McNeil dysphagia therapy. Um, and there were lots of barriers to doing that, actually, partly in terms of clinical time Because you have to try and fit in. Uh, 5 days a week for 3 weeks with a patient. So you've got to book that in well in advance and make sure they're up for it, and you're up for it, or that you're sharing it with somebody that can do it with you. with all of that, you've got the access to the foodstuffs and the. Food hygiene, the heating, the storage, if the patient... some patients were trying to bring in hot food, but one lady, she worked in a supermarket. I think she was on the meat counter, and she knew all about food hygiene, and she was bringing in her hot food in her little canteen thing that was supposed to Keep it hot. She was saying, this isn't the right temperature, it doesn't so doing something like that, kind of very specific dosed dysphagia therapy was actually quite difficult to do If you want to do everything. Properly. Um, and so sometimes that meant that You were doing a kind of a watered-down version of it. So, I think those kind of therapy programs can be quite tricky Particularly within NHS. Service. Yeah.

[Helen Fracchia] 09:23:18

Mm. Yeah, definitely. Are there any voice protocols that you use, that you follow, prescriptively?

[P1] 09:23:27

No, no, and in fact, you know, lax vox, I don't do the prescriptive one of that. I haven't done the PhortE course. I've dabbled in LSVT, but I haven't done the full course So, again, you know, what I offer is probably watered down versions of those things. Um... And... I think that the only issue with some of those things, they are... it is great. Sometimes there's a

Can't offer intensive input- but do patients want it??

Caseload limitations on intensive input

specific type of patient and patient group or disorder that would definitely benefit from something like that. But I think most of the time we need to adapt, you know. We like... well, I like to adapt things So... I'm not a huge fan of that, although it does give you something that's very, sort of, tangible, you know, and the patient can buy into it, is this really evidence-based and You know, So, I don't use anything really prescriptive.

[Helen Fracchia] 09:24:38

Yeah. No, that's fine. And there isn't actually that much out there in the world of voice that is very prescriptive, is there. can you think of a particular complex voice client, where you've had to make A difficult clinical decision about what you might prescribe or what you might recommend for a patient.

[P1] 09:25:06

Um... Um... yeah, I have lots of tricky patients,

[Helen Fracchia] 09:25:22

Um, so what kind of went through your head when you were... Thinking about what to offer that patient.

[P1] 09:25:29

Hmm... Yeah, I think I am... because I have started seeing, or just... I'm being... I'm more aware of the kind of breathing pattern disorder. aspect. because of the upper airway patients coming in, and because of joint working with physio And understanding from their perspective, treating some similar things from a breathing perspective. I'm noticing that there are... so, with my muscle tension dysphonia patients.

[P1] 09:26:10

I was always very focused. Here (pointed at larynx). Here (face), maybe, here (upper chest) maybe, but mostly here (larynx). But there are some patients that do not respond to that, and if you look at them And you know that they're trying to stifle cough And you can just see that their breathing is all over the place, and actually sometimes it is, if you Address the nasal breathing And the breathing generally than everything else settles, and I had never really. Um, bought into that before, because when I first started with speech therapy, and I'd see a few voice patients You know, you'd go to the traditional books and say, well, you start with the breathing, you know, start with the body, start with the breathing, and start with the voicing, and I felt like I was spending a lot of time going through things without actually getting any results. Um,

Doesn't use protocols- always adapts for individual

then I did a sort of, um, a clinical practice group Whereby they were very focused on the... vocal fold level, and if you sort out the vocal fold level. Usually, it's an inefficiency at that level, so that's how I have often then approached voice. Um, and... but then there's this subgroup. Where I'm kind of getting better at recognizing where I have to try a bit of deconstriction, but often with those patients That doesn't work, it makes it worse. So, were those, yeah, breathing patterns disorders with a bit of ILO, a bit of cough, Bit of dysphagia, bit of dysphonia. That's... I'm approaching that in quite a different way. [Helen Fracchia] 09:27:51 Hmm, yeah, no, that's interesting. [P1] 09:28:16 Yeah, so I will do the simple bits of the breathing, and if I think this patient's too complicated, I mean, I've got a lady now that she's got ILO. I'm gonna keep her on, because we still need to do a bit more ENT reviews and just double check, because she has got a lot of the ENT stuff going on, and a lot of speech therapy stuff going on. But she's also got an underlying COPD. But this overlay of this chronic cough, ILO breathing pattern disorder. So I just see how far I go, and if I can't... if I'm struggling, I'll go to my physio colleague. [Helen Fracchia] 09:28:55 That's really nice that you've got the access to, joint working. That's really good, isn't it? Okay. is there anything else you think of that... influences your decision around Exercise prescription. Where do you think we could go as a profession to get better at it. [P1] 09:29:20 Yeah, um, I mean, you know, I follow, I just... Follow what physio do, so if I've got someone that needs strengthening exercises or reconditioning exercises. I'll follow the sort of guidelines that I would get from physio. They seem to do 10 reps of everything. two to three times a day so that would be what I would kind of encourage somebody for that. But with, um, muscle tension dysphonia, because you're. You're building... you're either... well, you're kind of trying to remind the body of what it's always done. with TransVoice, you're building program. Um, that there's often that little and often. There's that resetting, little and often. approach that I might, uh, be more likely to recommend. Um, but, um, yeah, in terms of, um. dosage, you know, with dysphagia exercises, we still don't seem to have got that. There we fall. With treating dysphagia, ... when I've listened to podcasts, or particularly maybe people working in the States, they might be doing loads and loads of reps of different things, and working quite intensively with people, all of that's a little	Approach can differ depending on co-morbidities-breathing Using physio guidance for reconditioning exercise Little and often approach for MTD to remind the body Little known evidence in voice practice for exercise prescription.
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bit the way exercise physiology might translate to therapy with the larynx.

[Helen Fracchia] 09:31:03.

Yeah, there's a lot we don't know isn't there, about... The muscles of the larynx, so it'll be interesting to see how that develops over time.

[P1] 09:31:32

Yeah... Yeah, and there's also the interaction with the whole musculoskeletal system. You know, some courses where you've got people, you know, in London where they've got access to, physio, they've got access to maybe chiropractors, all sorts of... all sorts of colleagues. Uh, and certain cases whereby maybe someone's got a problem with their hips And then that is translating up to the vocal tract, or the pelvic floor, where that's translated to the breathing and it's connecting all those body systems up. so sometimes you just wish you had this amazing multidisciplinary team at your disposal that you can go, oh, okay, yeah, we need to go and see, you know, I'm very fortunate with the upper airways that we've got one physio who's super, super keen in that area. So it's finding those key colleagues that want to work with you.

Uh, and also, um, I suppose, um, with the kind of palpatory approach. I've done lots of little courses. And just as I was really sort of starting to get into it, I think that, you know, then it was COVID, and I couldn't see anyone face-to-face, and so it's trying to get my competence up with that, but again, you know, the evidence for that is very fuzzy. and I'm not really sure whether I'm just Helping with relieving tension or giving the body some suggestions So, again, that's a very fuzzy area for me, I think, so...

[Helen Fracchia] 09:33:33

Hmm. Mm, yeah. Fab. That's brilliant, thank you. Um... Yeah, I think that's covered. The only other thing you mentioned was intrinsic reward In your questionnaire. But we've kind of touched on that with the dopamine hit.

[P1] 09:33:47

Yeah, that's what I try to encourage people to do. I try to, You know, those people come and they just think, oh god, uh, I've got to try and fit this thing in, particularly with trans voice. I try and encourage them about that journey, but knowing that... even your inner critic is an extrinsic motivator. and psychologists will say that that critical, starting with that sort of critical voice has its limits in terms of motivation. And we think that, you know, the kindness and compassion can also, um, have its place in terms of a starting point. And so, you

Critical application of evidence- 'fuzzy'

know, just encourage people to experiment, you know, particularly with trans voice, you know. You know, enjoy it, don't try not to be too perfectionist about it, know that you could get to this level. And that's good enough, and then maybe you can tweak that and get to that level and think of it as an exploration and a joy. So when you go into the shower, enjoy doing some, some pitch glides and some sirens and some of the sounds that we've explored. So I think intrinsic reward. is important. I think being able to get results in the first session with a patient is very important for buy-in, which means that often my first session is quite long, because I need to try something and they go, Oh!, or it might be that the buy-in comes from you really, really listening and reflecting. And they feel heard, so that's also incredibly important in terms of buy in, compliance. People are on board with you, and sometimes that can be quite a difficult journey, especially when it's something That they feel. They still haven't got answers for, and you're saying, well, it could be, you know, the body overreacting, it could be a sort of hyper-functional, hypersensitive Reaction in the body. Um, so I think your explanations are really, really important. And your listening skills. are really important for that buy-in, but also getting a look... seeing if you can get something that will give them a little bit of a result.	Kindness and compassion start point in motivation Practice as vocal play to reduce performance pressure Intrinsic reward First session buy-in important- rapport impacts compliance Explanations really important. Evidence of progress.
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Participant 2:

[Helen Fracchia] 08:55:45 It's really nice to meet you. Um, can you tell me a bit about your job and the context you're working in at the moment. [P2] 08:55:54 I work in adult community, um, my role involves dysphagia, voice, and some communication. [Helen Fracchia] 08:56:02 And it's benign voice, isn't it? Yeah, lovely. Um, okay, so in your questionnaire, you put client factors as being the most important factor in your treatment decisions. Can you tell me a bit more about that? [P2] 08:56:19 We, as speech therapists, we're taught to be holistic And what the patient wants, ultimately, is the most important factor in selecting a treatment that drives it, just because I think something specific is best for them, doesn't mean that that's what they want. Um, so they're very much... the key player in the decision-making of how that leads my recommendations for therapy. [Helen Fracchia] 08:56:51 you put diagnosis next. How does diagnosis impact your... decision-making. [P2] 08:57:01 diagnosis, it comes secondary to patient choice, um. there are different therapies that are suitable for different conditions, and so I need to take that into account when I'm selecting. A therapy, because. There's no point me suggesting a therapy that is not going to help or going to make things worse. Um, for their particular diagnosis. [Helen Fracchia] 08:57:31 Yeah. Is there any particular approach that you think you employ for those different diagnoses. [P2] 08:57:39 Depends what the diagnosis is. Um, so I have my go-to's for a lot of the caseload, so... Laxvox is quite a good. All-rounder. Um, but then, depending on whether my patient has presbyphonia or a vocal cord palsy. The route that I take would then be... Different Based on what their diagnosis is. [Helen Fracchia] 08:58:09 Yeah, ground. Excellent. Are there any other factors that you think influence your decisions? [P2] 08:58:26	Holistic approach- patient key player in decision-making for therapy Some therapies suit some diagnoses better than others Exercise Choice based on what is suitable- practice-based evidence Same exercise applied a different way for different diagnosis
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I wouldn't say this doesn't lead my choice of treatment. I think my confidence with A therapy definitely helps, um with things where I'm quite confident, I'm quite forthcoming in suggesting it, where I feel like I've got less experience or a bit more nervous about a particular therapy I will never shy away from mentioning it, but I just don't feel as confident. Um, doing it, and I don't know if that is obvious to the patient. or if I hide it well. [Helen Fracchia] 08:59:12 What treatment approaches do you find to be the most effective and Why do you think that is? [P2] 08:59:25 I think it's not a specific therapy. But just... Making the patient feel like they can fix their own problem I think is a big... a big factor. I think... Not everybody openly says, I want my voice to be what it was previously. But from the number of people that do say that, I think a lot of people come to voice therapy thinking, I just want my old voice back. And I think. trying to instill in them that they can do it. They just need to put the effort in. Um, and do the exercises and take on board the recommendations that are being made. I think that's a big part of it. If they can believe that. they can improve. then whatever therapy you're recommending to go with it, I think that just takes you a really long way. [Helen Fracchia] 09:00:28 Yeah, brilliant. Can you think of a time when you've had a particularly complex clinical decision around your treatment recommendations? what did you think about in that situation? [P2] 09:00:49 I've had a couple recently. I try to read the referral really well, um That we received from ENT. just so I can understand everything that they think they've seen, or that they're recommending. And then taking a really detailed case history from Patients trying to pick up on. any kind of little snippet of information that they give you that they might think is not important, but is going to help you. a little bit more in deciding on Approaches for them. Um... if... once we've kind of... we've done the initial information gathering, and then we've tried a few different things. If it's really not working. I always refer back to Voice Clinic just to have that additional information. Has something changed? Has anything we've done worked? for example, recently, I	Confidence with a therapy approach- inexperienced clinician Empowerment and self efficacy improves motivation Need to put the effort in Therapy trials aid treatment planning
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had a patient that had been referred to me for one thing. We'd done some therapy, they went back to voice clinic, and actually they presented with a different problem to what they'd initially been referred for, so I think just having as much information as possible. Um, can help Guide your therapy choices.

[Helen Fracchia] 09:02:22

Cool. Yep. Is there any difference in what you consider when you're prescribing home Exercise. Is there any difference in the priority that you put on those different factors, like the client, the diagnosis. the evidence.

[P2] 09:02:53

I take into account the person. Who do they live with? What are their social activities? because I think if you can incorporate their therapy into their day, rather than it being a task for them to complete. I think they're more likely to do it. Um... And it's kind of using it in the environment where they need to be. So, for example, I have someone on my caseload at the moment who's in his 70s, lives alone, doesn't really have a social Life, so, we've been working together to work out how we can incorporate the therapy into his day, because he doesn't want to just sit there practicing the different. Sounds that we've been working on so... yeah, it's very much led by. The patient there, their centre of their treatment

[Helen Fracchia] 09:04:02

Yeah. If you're using a specific protocol? Do you insist on that protocol, or do you vary it?

[P2] 09:04:11

vary it. Um... Depending on... how well they've managed, and when we've been doing it in... in clinic, if there's things that are. really hard for them. I quite often say, okay Don't focus on that for now. Do X, Y, and Z. and then perhaps next time when you come, we'll look to see if we can then add that on, just to sort of... I don't want to knock their confidence early, because I think Knocking confidence probably means they're not going to do it. They're not going to believe that They can work on their voice and improve it. so just making them feel like, yeah, I can do this and then... add the harder stuff in later or not, if they don't need it.

[Helen Fracchia] 09:05:10

are there any strategies that you use to support that home exercise that you think are the most useful. say, resources that you might give

Reliable info from assessment can guide therapy choices

Incorporate tasks into everyday life for individuals

Ensuring patient confidence improves motivation/ compliance

[P2] 09:05:23 We have, um... We have lots of, patient information leaflets that I can give. So once we've... in clinic, if I've demonstrated something To a patient, I'll then go through the leaflet and highlight the bits that we've done Which they can then take away To help prompt them when they're doing the exercises at home. There's also, there's lots of things on YouTube now, so we do have some links embedded into the leaflets that they can access, but if it's... If it's a therapy that I don't have that for, I will go away and have a look to see if I can find a YouTube video link to share with them. Be open and say it's not from our trust, but if it's... if I've watched the video and it's accurate then I'll still recommend that for them. I also always end every consultation with saying. If you're not sure, call. Don't just struggle or not do it. Um, call and I'll talk you through it on the phone. [Helen Fracchia] 09:06:37 What do you think patients respond best to, in terms of those? Is there anything that you think they particularly come back and go, oh, I've used this, or that was helpful?	Information leaflets You tube links
[P2] 09:06:51 I think it depends on the person. I think it very much varies. Um, a lot of my caseload currently are 70-plus year old men. And when I say... when I say to them YouTube, they look at me blankly, so I think for them, it's knowing that I'm at the end of the phone if they need something, like, I think. in speech therapy, I think we're a little bit different to other. areas of... Um, healthcare, in that we can be a bit more accessible. Um, there is a phone number you can ring, and I will call you back. so I think that... for that kind of group, that's the most beneficial thing. But then for the... younger patients that I see the YouTube. Links are invaluable, because they can go back and watch it, they can access it on their smartphone. [Helen Fracchia] 09:07:48 Yeah. Are there any limitations to you offering best practice at the moment, do you think?	No one fits all resource- age may determine access to online resources Younger people like videos on smartphone
[P2] 09:07:56 I think my... Knowledge base. I think I like to feel confident in what I'm Recommending and trying. Um, but for me to have that. confidence I need to know that. I've done the background reading and the research into it. Which, just because of my. Caseload currently is a bit challenging. [Helen Fracchia] 09:08:37 in terms of time.	Knowledge base limitation Confidence Large caseload

[P2] 09:08:39

time. Yeah. Time is the biggest factor.

[Helen Fracchia] 09:08:45

Take time to learn new stuff, and. Confidence, then.

[P2] 09:08:51

Yeah.

[Helen Fracchia] 09:08:53

Yeah. Okay. Is there anything you think we could do as a profession to improve our practice around exercise prescription.

[P2] 09:09:21

I think it's ultimately up to the patient, it's like taking a medication- they need to do that. Regularly, and they should take the recommended therapy, like, use the same approach to it. I think... Sometimes I think we need... we... me in particular should be a bit more blunt about that because I don't think... They always... I think they're hoping there's a magic... pill or a magic switch. I try to talk about it more like physiotherapy, in that your leg's not going to get better if you don't do the prescribed exercises, and you should treat your voice the same way. it would be good to be able to offer a more. rehabilitative approach like that, I think, like physiotherapy, where you go somewhere and you can regularly see your therapist, and you can do the exercises together. But Well, it's quite niche voice, there aren't that many voice therapists that I've encountered. And so having more therapists would probably enable that, I think.

[Helen Fracchia] 09:10:51

Yeah. So you talked a bit about, sort of, using an exercise physiology approach there. Are there any other approaches that you might use, and would you use them with the same patients or different patients?

[P2] 09:11:13

I think it... taking it back to us saying about centering the patient, it depends on them. Because I think some people need motivating more than others. Some people are quite self-motivated. Particularly. patients that I see that are from a musical or theatrical background. their voices are their work. And so they're quite motivated to put in the effort. Um... whereas sometimes, I think. with some of my older patients. they're attending because They've been recommended. They should attend, and they're less...

More frequent appointments limited by caseload constraints

Comparison to physio exercises

Exercise physiology approach

Different people, different goals, different levels of motivation

Motivated? I don't know if I've really answered your question there.

[Helen Fracchia] 09:12:02

Yeah, no, it's fine. That's good. Anything else on the topic of exercise prescription that you think If you were teaching somebody else, you would... tell them to do.

[P2] 09:12:27

build it into their day-to-day as much as you can. make it something that's just... something that automatically happens in their day, I think.

[Helen Fracchia] 09:12:43

Yeah.

[P2] 09:12:47

Yeah. Don't think I have anything else.

Participant 3:

[Helen Fracchia] 17:15:17 thank you so much for filling in the questionnaire, that was really helpful. On your questionnaire you said patient stimulability was the most important factor when you're deciding on exercise prescription. Do you want to tell me a bit more about that, and about, you know, what goes through your head when you're making that. [P3] 17:16:33 Patients are all quite different, so obviously when you get the referral through, you might think, okay. so if I'm in an assessment with a patient you might think you got an idea in your mind of what kind of exercises you're possibly going to do with that patient out of a range of maybe 2 or 3. But then when they're in front of you, whatever you ask them to do you know, maybe they can't do that, so it's more about finding the exercise that gives the best kind of Vocal result is what I'll go with. what I feel I'm getting the best kind of sound quality or voice quality back from them with, or what they're feeling. Because I will tend to go more with what they're feeling over what I'm Hearing to a certain degree. Not necessarily, because obviously some patients have absolutely no insights, so. Um, they're producing something and they're saying, no, I can't feel anything, that feels low effort, say if it's a muscle tension dysphonia, and you're just hearing severe strain. But in general, you know. I will... I'll do stimulability testing and try out a variety of exercises. And I might go back to the first one I've tried, but I might have tried, like, 2 or 3 things at the end of the assessment to see which I think's got the best results and what they're most comfortable with And also, what will fit in with their lifestyle. Just thinking often there's things where you think, like, doing something like Lax Vox would be a nice quick fix for a patient, but if they've got such a frenetic lifestyle. That they need to have a bit of tubing and some water with them. There's absolutely no point giving it to them, because they're not going to do it. So I do take those kind of factors into account as well. so, actually, I was asked to give a second opinion on a patient today. And... We went through a few exercises but she was reporting vocal effort. on a couple of the things that we tried And she was reporting no effort on a third thing. But the third thing that I tried, I didn't really feel. I didn't really feel that the sound quality and the resonance was as good as with the first thing. So actually, I've sent her away to. do all three on subsequent days for a couple of weeks. And come back and	Individual differences between patients Finding the exercise that gives the best result Guided by patient Sensory feedback Depends on patient insight Stimulability testing What fits into their lifestyle Patient choice in exercises prescription
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report what she's sensing and having another listen, and then we'll probably hone it down to one of those kind of treatment options and use those in exercises. Is this the sort of information you want?

[Helen Fracchia] 17:18:57

Yeah, brilliant, thank you. I think you put diagnosis next. So how does diagnosis impact your decision making?

[P3] 17:19:20

Well, I suppose, for example. Say I've got a referral from ENT, and it talks about, lateral constriction or ventricular fold constriction then in my head, I'm already thinking. Okay, so with this patient I will possibly try some, like, inspiration phonation, or I'll try some, maybe, accent method. They would be my... probably my two go-to ideas of how I'm going to treat that patient.

[P3] 17:19:50

But obviously, then it depends how they present, because sometimes they present completely differently, and you don't even try those two things, but I suppose the referral's important to whittle down. what I'm thinking, so I've got to focus before I've seen them. And then other things, I suppose, like, um... like, I suppose if you've got a palsy, or you've got a presbyphonia you're kind of aware that at some point you need to be doing some underlying strengthening exercises. Even if all you're hearing is strain. So, we've kind of got that idea that the diagnosis is important because that's giving you an idea of why you're hearing that strain, just because in my experience, the majority of patients, if I had to have a guess, I'd probably say maybe about 80% of patients Would have a muscle tension dysphonia as part of their voice disorder regardless of what is going on as the voice disorder, but I think it's. The diagnosis is important to keep in mind. So that you know what you're working with, even if all you're hearing is strain. And same might be vocal tremor. Because I think sometimes... you can't hear that tremor, because there's so much strain, they're keeping everything locked still. But I think that... that makes me aware. not only in selecting the exercise, but preparing the patient to say. You know... when we... when we do these exercises, if you do them. Successfully, at first. your voice is potentially going to sound like it's got quite a marked tremor, like it's getting worse. Or if it's a palsy, there's a good chance that your voice is now going to become softer and quieter, and that's not what you're going to want, because you're not going to get heard so well, but we need to go with this, and we need to make your voice kind of worse before we can make it better.

Pt self-monitoring of success

Some treatments suit some diagnoses better than others

Use of strengthening exercises for hypophonia

Diagnosis useful for prognosis, and managing expectations of treatment

[Helen Fracchia] 17:21:46

Yeah. Yeah, brilliant. Is there anything else that you think routinely goes through your head when you're Deciding on what you're gonna do.

[P3] 17:21:58

I think the main thing is...I suppose evidence-based is more. Potentially, I'm using that more in a way of Looking at repetitions and. Exercise frequency if I'm doing certain exercises. Um, and this is probably a really bad thing to admit, but I'm not sure evidence base really affects my selection of the exercises. Which you probably shouldn't say out loud. Because I think it's more to do with shaping that voice within my session. And how the patient's feeling it.

[Helen Fracchia] 17:22:44

No, no, you should, that's fine.

[P3] 17:22:58

And what normally goes to my head as well is... do I think this patient is actually in a place where I can help them with therapy? And I think there's always those patients where you think I can't help you, but I can't just say this isn't going to work, I can't help you. I'm going to give it a try, and obviously that's good, because occasionally the patient really surprises you, and they do, but I think often you get that inkling. You're not going to be able to help somebody because they're not ready, and you actually can't help them. I think those kind of things would maybe affect my decision in exercises. Because often with those kind of patients, I'm thinking it must be the psychological factor. It might not be because they've, like, say have a psychogenic component that they're not ready to address, it might more be that They've just got such a frenetic lifestyle. And there's always a reason for why you can tell already there's going to be a reason for why they can't do things. That you think, I'm not going to be able to help you, because you're not going to be compliant, and so that... then I will choose the quickest, easiest exercises I think they can do. And preferably ones that they don't necessarily need to do that mindfully. But I always feel that if a patient's not doing exercises mindfully It's really difficult to get that generalisation.

[P3] 17:24:24

Um... yeah, so I've quite recently started... well, not recently, a few months ago into a new job, and everyone's left, so I'm just picking up patients that have already been started by somebody else. then there's quite a few patients there where

Using evidence base for exercise frequency

Evidence base doesn't impact exercise decisions
Some discomfort at admitting not consciously following evidence base

Psychological readiness of patient for therapy

Exercises chosen on patient motivation level

Mindfulness contributes to exercise success

there's a whole list of excuses on why they can't do things, so I've changed the approach completely, so we're doing things like, okay you're only going to do trills, but you're only going to trills as you walk up and down stairs. Just because it's like... I'm gonna try and give you a fair chance to actually do something, to achieve something But there is no way you're going to sit down and do any exercises or remember things, so we just need something really quick to get into the routine. And with one lady that is working. quite well. Um... Yeah, so I think they're the kind of things that go through my head. And support, so I've had a couple of people where cognitively, they just can't remember to do the exercises. So that's another kind of factor. So I've only given her. She's a vocal cord palsy. I've only literally given her 4 exercises to do. And we've got this little tick sheet that's laminated that she can wipe clean each day. So that's kind of helping for her. Um... and I've got another lady who... Um, I did try and get the care agency involved, so they'd set her up with equipment after their visits, but unfortunately that didn't really work, so she's someone who I can't really help with therapy because We can't seem to get anything in place for her to do any practice. So, I suppose they have all the kind of factors that are kind of going through my head when I'm thinking about. Therapy and selecting exercises. [Helen Fracchia] 17:26:12 so I think you said you use the Vocal Function Programme do you use those quite prescriptively, like... the twice-a-day protocol. [P3] Yeah. I do, yeah. I think that's probably one of the one things that I don't really tweak. Addendum: P3 reported after the interview that she does tweak the pitch of some of the exercises. Um... Yeah, do it quite precisely, especially since I... did an actual online recorded course, which was by Stemple. And realized that actually I was doing it slightly wrong before then. So, that was quite useful. Um... [Helen Fracchia] 17:28:15 Is there anything else you use prescriptively? [P3] 17:28:20 Um... I can't say I use this prescriptively, because I can't say I've really used this yet, but I have 2 ladies on my caseload with essential tremor Which I haven't come across before in my career at all. And I have, um... I bought a course online by K	Making exercise achievable for the patient Cognitive limitations Laminated exercise record sheet to tick Accurate training resulted in following a protocol.
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Obert. And I am currently following her protocol. Very prescriptively. And that's partially because I don't know what I'm doing to be able to tweak that or adapt that to a patient anyway, or know how it would work or pan out.

[Helen Fracchia] 17:28:56
Ah yes. That's interesting.

[P3] 17:29:10

In a previous job I used LSVT with prog neuro. Well, actually saying that, I wouldn't necessarily do that prescriptively, because I suppose I would when we had the capacity in my previous job to do it. But then I suppose we just use the principles. I suppose, that is kind of... tweaked, but... I think they're the more, kind of, prescriptive things, but other things are kind of... mix and weave together.

[Helen Fracchia] 17:29:31

Yeah. There aren't that many protocols out there, actually, are there? So... And if you try and find one, it's not very accurate in terms of telling you how many times you should do it, or How many times a day, or for what period of time they... yeah, I've spent quite a lot of time looking into it, and there's just not a lot out there, so... Excuse me, we do just end up winging it a lot of the time, don't we?

[P3] 17:29:56

Yeah, and I think the reason... often is different from what's recommendable, but then I don't know, because I'm obviously. Yeah, often that doesn't really help clear up on dosage. I won't often stick to things, you know, I'll have people doing lax vox while their tongue's protruded. Or I'll have... People... sort of... well, doing all sorts of weird things, like Sighing into a hum with their tongue protruded, or with their jaw in a certain position, or something just to whatever gets that best voice.

[Helen Fracchia] 17:30:32

Okay, guess the... Yeah. Great. is there anything that. constrains what you recommend at the minute, or... limits what you can prescribe, do you think?

[P3] 17:30:48

Um, yeah, I suppose, caseload management pressures. And time management pressures. Um, I'm really lucky. I've just gone into a post where I can pretty much give how much therapy I think I want to give. Although they are now saying, actually, we need to make sure patients have no more than so

Follows new treatment prescriptively

Capacity can impact offering prescribed protocols

Mixing exercises to achieve target sound

many appointments but then I've been using clinical judgements that means it's okay to do more.

[P3] 17:31:23

Whereas in... a previous job that I came from it was meant to be capped, so literally It was very much the see, give advice, Patient Initiated Follow Up, if they come back do treatment, so that really then did change my practice and how I delivered my therapy. So that kind of meant that I would try to give as much of a technique as I possibly thought this... person could potentially manage All in one session. It's not really time for them, really, to consolidate it, and not much practice at each stage and I don't really know how successful that is, I don't know how many patients just can't be bothered to come back or think there's no point, and how many definitely improve, because. in that post, as soon as you felt somebody had enough that they should be able to fix themselves you PIFU'd, but... This job's made much more old-fashioned attitude, and I can kind of check in on people and take it more slowly with them, which is really nice. Sure, with, um, pressures that... won't last, because I think it will go more the way that most services are going but yeah, I'm really lucky.

[Helen Fracchia] 17:34:07

Are your decisions any... different when you're thinking about home practice, to when you're thinking about what you do in the session. So you said it was patient stimulability that kind of chose the therapy? How do you then decide what you recommend for home practice?

[P3] 17:34:33

Well, I don't think it's based on any evidence, I have to say, which is awful, which is why I thought it would be nice to get involved with this research to find out what i should be doing when you publish your results. As a rule of thumb, I probably pretty much ask people to try to practice 2 to 3 times a day for about 5 minutes. then I might, if they've got other things where I feel they need, like jaw deconstriction, or... tongue relaxation or head and neck exercises or if I want them to work on diaphragmatic breathing, I'd probably add that in on top. With breathing I normally suggest they kind of work on that kind of twice a day, again, for about 5 minutes or so. if a patient has got really entrenched patterns, though, and they're really, really strained. I will ask them to do something for, say, 30 seconds to a minute, and aim for hourly. And I say to them, you're not going to do it hourly. But I want you to aim for hourly, so you get as many sessions into a day as possible. Um... I'm just trying to think about different client groups and what I

Limits to number of appointments for caseload management

Treatment plan is altered by caseload pressures- more info in less sessions ? effective

Doesn't feel home exercise prescriptions are based in research evidence

2-3 x day, 5 minutes

would say. If I've got patients who find it really difficult to actually do exercises. like to fit them into their day then, I will micromanage them and ask them to actually pre-plan where they're going to put them into their day, and I'm a bit like. Okay. Feels a bit like being a mum. Like, okay, well, let's work it out, where can you do it? And I try and get them to write that down so they've got an idea. We'll get them to plan if their life's too frenetic plan the night before, what they're going to do, and how they're going to fit them in. But with those patients, I would. More likely recommend. They practice a little bit more often, more like doing something like four times a day, but literally for, like, a couple of minutes, because I think it's with those kind of people. You're asking them to find 5... Or if you're... well, maybe 10 minutes, because you might be working on breathing, and then some sort of voicing technique. Like, that's too much time for them to find, so it's those little short blasts. I think that's kind of... my kind of rule of thumb. Although... all the worksheets at here are currently devised that people exercise once a day. And do quite a big chunk of exercise. Um... I... that's probably what I would do if I'm setting up techniques to teach skills. That's probably what I would recommend. But then... then if we're looking more at that generalization phase. I would try to get them to practice. More frequently, but in short bits, I would probably ask them if they could select like, 4 times a day, they set an alarm on their phone or have a set activity where they're listening to their voice in whatever kind of. thing they're doing, if that makes sense. kind of introspecting and self-correcting during that activity. So it might be, like. [P3] 17:38:02 Well, I suppose things commonly choose is. every time you're doing the school run and you speak to your child, or every time that you're at the dinner table. [P3] 17:38:11 So it's... it's linked to tasks, or... Can you have something that goes off? Like, a vibration that goes off in your pocket when you're working to remind you What's my breathing doing, or what's my. you know, what's my voice like at the moment? but then I suppose there's other things I recommend. So if somebody. If it's really hard for them to rest their voice, and there's a lot of vocal use, and they're doing a lot of, like, working from home or something, or lots of Zoom calls, that they're getting a lot of strain then actually, with some of those patients. I will ask them to do a quick routine after every Zoom call And it's like a 30 second or a 1-minute release. So they use	Hourly for changing muscle patterns micromanage Asking clients to plan their practice schedule-intentional sentences?? Little and often for exercise compliance and generalisation Different exercise approaches for different stages of treatment. Phone alarms Times for heightened awareness of voice. regular reminders Linked to routine
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the exercises there. Um, and some patients, I just try to encourage them to use a reset technique whenever they're talking, if it's not too... Embarrassing or intrusive for them. Um... and then other bits with my presbyphonics. I asked them to practice their exercises in anticipation Of what they're doing, so I'm like, if you know you're about to make a phone call whilst you're going to find where the phone is, do these exercises. If the doorbell goes, I want you to do this on the way to the door. I suppose that's not really exercising, is it? That's more using strategies to warm up the voice, but it kind of covers the exercises at the same time. I'm not really talking about the kind of things that I should be talking about.

[Helen Fracchia] 17:39:40

No, yeah, you definitely are. Because I think what... What I hear from most people, and what you read is that A lot of what we do is very client-centred. And there aren't exercise protocols out there, actually Apart from the vocal Function Programme. that are prescriptive. So we're all kind of muddling our way through, really, with the bits of evidence base that we... No, and then we put the patient in as well, and then we put what our time pressures are in, and... somewhere out of that comes this muddle of what we actually then prescribe to the patient.

[P3] 17:40:25

I was doing... because I'd gone on a course, this is years ago with Cristella, and she was recommending 1 minute 10 times a day And that... because I think because that was drummed into my head, I do tend to recommend that to transgender patients, but I wouldn't say. I wouldn't say many of them were compliant with it, to be fair. it's good to know that I'm not much different to everyone else.

[Helen Fracchia] 17:40:56

Yeah, definitely. No, you're not. I think we all live in this world of imposter syndrome, don't we? Where we think everybody else must be doing things better than us. And to try and get it is really hard.

[P3] 17:41:15

I didn't... But if it was lax vox for vocal cord palsy, I do say that the 10 to 15 repetitions. sort of 10 times a day when we're doing that initial stage. But I also find that often doesn't really help me with the vocal cord palsy, so I end up after once the strain's gone, just going straight into, like, adduction exercises anyway. I don't really get many, that haven't got that secondary muscle tension dysphonia by the time they come to me, because the waiting times to get help are so long, so often

Fitting exercise into everyday life.

Clients often non-compliant with intensive exercise

More prescriptive for strengthening exercise

those patterns are pretty much entrenched in by the time they come.

[Helen Fracchia] 17:42:12

Yeah. Brilliant. Have you got any go-to, Resources that you use for motivating patients, or is there anything that you find that's particularly helpful for motivating that home Practice.

[P3] 17:42:25

Um, I suppose if we're getting Bits of normal voice, or if we're hearing bits of normal voice or better voice in the session. I suppose I do make a good point of, look, that's there, And if we can just get you to retrain your subconscious brain by doing this like, on repeat. then we're going to get that, and that... and, you know, this voice we're hearing here, that is going to be the worst your voice will be. So, I suppose it's picking up on those kind of things. I don't really know. I don't really know how I motivate people, really. I think, weirdly, I'm quite. Um... I'm quite an accepting person of You know, we have good intentions in life, and it doesn't work out kind of thing. And I think that attitude of. Now, never mind that you haven't done it, let's work out how you're going to get to do it. I think that in itself might help get more compliance, but I will if someone's coming back and it's like you know, we've had that reach out on Session 2. And they're coming back on session 3, and they've still not anything, then that chat does get more serious, and then it does get, well, look, if you're not going to commit to this. We need to leave this completely, and then sometimes it's that, where they're like, oh, I don't want to leave this. That motivates them to continue. Or sometimes it motivates them to stop And then come back in touch. because we can obviously... sometimes that does mean people then negotiate and go, okay, well, how long have I got it so I can get stuff in order, and then people will get back and go, do you know what, I think I've got things a bit more sorted and kind of have another kind of go at it, and... sometimes that commitment's there then. Yeah, I don't know. be good to hear when you publish your research, what people do to motivate them.

[Helen Fracchia] 17:44:30

That's the... yeah, that's the golden nugget, isn't it? How do you do it?

[P3] 17:44:57

Yeah. And I think it's when they finally get a change. I've had quite a lot of patients over the years where they go... where they come back and they go. Oh, I really thought what you were saying was, like, a load of old rubbish, basically. But actually, I thought I'd give it a go, and this has happened. Um,

Impact of long waiting times on severity of voice symptoms

Success leads to motivation.

Rapport with patient helps with compliance

Contracting conversations

and then you get that buy-in then, so I think you need that quite a quick spark of at least one thing That improves, and then you get the buy-in for the rest of it. [Helen Fracchia] 17:45:29 Is there anything you think we can do as a profession to improve our practice around prescribing exercise. [P3] 17:45:42 I don't know, because... I'm not sure I'm necessarily convinced that there is specific exercises that you should give for specific conditions with specific frequency. I think voice is very individual, and I think. I'm not sure I believe That it is something that you can improve in a regimented way, and I think, because a lot of it does have that kind of psycho-emotional aspect to it. Yeah, I don't know. Because I suppose it's a bit like if you go to a singing teacher, or you go to an acting coach. They will try different techniques to all the one, kind of you'd be doing your scales or your whatever practice, but they might tweak how you're doing those scales to fit what you can do. So I think before it's very much more playful than something like physiotherapy, where you're having to do something a set number of repetitions to build up mass. Oh, what would be really useful for the profession, I think, actually is... kind of having an idea about weaning off protocols Um, because that's something that... I say with lots of authority to my patients what I want them to do Because I don't want them to just stop. Or whether I want them to continue or not. And to be honest, I'm making it up. And I think I based it on the fact that, you know, in some physiotherapy papers that I've read years ago. It talks about maintenance being 3 times a week. So, in my head, I tell them, if I think it's something that potentially could get worse if they stop, I tell them to do it 3 times a week for life, pretty much And if they can do it more, even better. And also, kind of, maybe researching to vocal cord palsy, but you might tell me this is already out there. [P3] 17:47:49 So some patients will often ask me. do I need to do these exercises for life, once this has improved To stop it deteriorating later in life. And I know ages ago, I did have a bit of a literature search and didn't really come up with anything, but that was quite a few years ago And I normally tell them I think it's a good idea for them to continue a minimum of 3 times a week, but daily maybe, but it's based on nothing Some vague opinion I've decided I've got in my head. Yeah, I think this would be really good, that whole if there are set principles about those kind of things, that would be really useful.	Success improves compliance Voice is individual Not same exercise for same condition Vocal play Need weaning off protocols- long term exercise advice Long term practice for maintenance? Evidence base
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[Helen Fracchia] 17:48:50

Yeah, there isn't anything, because there are no longitudinal studies.

[P3] 17:49:13

Then there's the whole compliance thing in any way, and most of us... Things naturally anyway. That's what I don't know. The PIFU discharge model. Because you give people all this info. But you're not really checking up on them to know what they're doing. And I suppose, because I was taught that way, that. you do exercises. Obviously, I don't do this now, but when I first qualified, you give exercises, you get the patient back the next week, regardless of what those exercises were. And then you would check on them again. probably 2 or 3 weeks later. And then you might leave it for a slightly longer period of time. And I think... with, like, where I am now. I can't do that because... because all my colleagues left within weeks of me starting, so the caseload is just a little bit large. But I'm more able to do that, so I can... kind of get people back within two or... well, about three weeks. Or I can give them a phone call and ask them to do the exercises on the phone To have a little bit of a hearing check that I think, yeah, that's fine, I think I'm okay to leave you to get on with those at home. Um... yeah, but I think when I was working at the other place where I couldn't really do that because I couldn't really justify it with what we were doing. I'd always be like, oh How do I have any idea if they're actually doing what they've done in the session in front of me?

[Helen Fracchia] 17:51:05

Yeah, really hard, isn't it? Yeah.

[P3] 17:51:25

Most of our patients don't have. Well, I suppose no one in life has a straightforward life, but I think a lot of our patients have less straightforward lives than maybe other client groups.

[Helen Fracchia] 17:51:56

Brilliant, thank you. Is there anything else that... You can think of that you would want to say about Exercise prescription.

[P3] 17:52:10

No, I don't think so. I think you might want more often is often the best way, because you're looking at resetting habits.

[Helen Fracchia] 17:52:21

Yeah, yeah, absolutely.

Unease at PIFU

Caseload constraints on checking in with clients

Patients don't have straightforward lives

Participant 4:

[Helen Fracchia] 14:03:42 Yeah. Lovely. On the questionnaire, you said that diagnosis was probably the most important factor in when you're making decisions around Exercise prescription. Can you Tell me a bit more about how that influences your decision-making. [P4] 14:04:02 Yeah, so I guess if it's something like, um, vocal cord palsy, for example. Yeah, gosh, you got me thinking now, actually Would it be? Hmm... Is that the most important? Gosh, I really... I wish I could see all the answers as to why I put that. [Helen Fracchia] 14:04:22 Oh, okay. So they were diagnosis/ Client factors/Evidence base/caseload pressures and own preferences. [P4] 14:04:49 Hmm... Yeah, I think diagnosis, because I think if it's something like muscle tension, you want to release the muscle tension So that would 100% dictate which exercises I give them. and if it's something like presbyphonia, I might give them something where they need to use a bit more force. And, um, build up the muscles. Um, so yeah, I think diagnosis is probably. Yeah, I'd probably stick that up there at the top. [Helen Fracchia] 14:05:28 Yeah. Sorted into those main categories, like the hypophonics and the hyperphonics, is that? [P4] 14:05:40 Hmm... yeah, yeah, so hypo and hyper, yeah. Yeah, I think so, yeah. [Helen Fracchia] 14:05:46 Yeah. Excellent. You put client factors next. What kind of client factors influence your Decisions, do you think? [P4] 14:05:56 Ooh, so, like, for example, if somebody was a busy, um... I was thinking about someone who I saw today, busy mum who's working, so somebody else who I saw today, she's an opera singer But she also is a singing teacher in a school. She also is a yoga teacher, and she's got two young children. So, if it's somebody like that who's got, I think,	Diagnosis guiding treatment decisions. Deconstriction vs strengthening. Client lifestyle influencing treatment decisions.
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from what she's telling me, not much time at all, then I'll certainly think about that when I'm giving her exercises.

[Helen Fracchia] 14:06:24

Okay.

[P4] 14:06:28

Would it impact on the actual exercise? It might not impact on the actual exercise, but it might impact on how frequently I ask her to do them, or when I think she should do them. So, for example doing the exercises in the car while she's, waiting for the children to finish a club. So, I saw a swimming teacher recently who has a very similar, really busy life. She's got a dog, lots going on, 2 young children. And it was when her children were in clubs, she'd sit out in the car and do her water resistant exercises, or if she was waiting for her job, um, in the pool, she's waiting for her slot And she would go in and she would sit in the car and do them. So I think, Yeah, if the client is a busy person, then I would definitely take that into account, and help them find Ways around when to do the exercises.

[Helen Fracchia] 14:07:31

Yeah, brilliant, thank you. Um, you put evidence base next on the list. Does that impact your decision making?

[P4] 14:08:00

Yeah, it does. I mean, that is one area where I feel that I... probably like all therapists in the country, in the world, I really would love to have more evidence-base, or have access to it, or have more time to have access to it. but if I've been on a course, then I will certainly refer to the evidence and try and fit that into it. Sometimes, however, I find that I go on a course, it tells me to do X, Y, and Z. Um, and... but then sometimes it just... it's just about the patient, isn't it? So... Does it work with the patient? So, I might have this little box of stuff that I do, but actually. Sometimes just try everything and just see what sticks Because it just depends on the patient themselves, doesn't it? But yeah, I think. If I'm completely honest, evidence base is the bit where I'm just like, oh, I need more, I need more. I think that the water resistant Voice therapy... has probably got the most evidence base for... and that is... the one that I often come back to. that's probably why I put that answer for that, yeah. Because it's good to be able to tell patients, isn't it? This actually does work, there is evidence for it, rather than just, oh, I've tried this before with another patient, and that worked. But one of the things that, um, a previous student that I had, I asked her to go through all the journal articles that I'd been gathering over the last year And

Lifestyle influencing decisions around frequency of exercise rather than exercise choice.

Access to evidence base limited by time.

Application of exercise adjusted for individual patients

Evidence base useful for patient information/ motivation

just see if, um, she could help me kind of slim it down a bit, just so that it's easier to find. But I haven't had a chance to go through them, I must go through them. It's just time, isn't it?

[Helen Fracchia] 14:10:01

It is. Yeah. There was a really nice systematic review recently, that's a good one to find. Any other factors that you think influence your decision making?

[P4] 14:10:45

Hmm. I mean... It probably does... yeah, if there's any sort of comorbid... comorbidities. So, yeah, if somebody's got a respiratory problem, then the water-resistant Voice therapy might not be the best for them. So, I'm always very aware of making sure that. Yeah, if they've got other things going on. If they're sort of contraindicated. Yeah, I can't think of anything else right now.

[Helen Fracchia] 14:11:14

That's fine. What do you find is the most effective treatment?

[P4] 14:11:21

I think... I think the water resistant- Honestly, it's just amazing, and I... I try other therapies and I always come back to that always. Like I said, it doesn't always work if someone has respiratory problems, that doesn't always work, but it is just such a great technique, I don't know what people used before, before that came along. Yeah, so that's my top favourite.

[Helen Fracchia] 14:11:47

Very good. Yeah. why do you think it works so well?

[P4] 14:11:56

I think it looks at all sorts of different aspects of, um, of treatment, so it looks at breath support. And it helps, because I always start off with breath support, working on that, and then it's a really good kind of foundation to then work up to the water-resistant or lax vox. Um, so, yeah, breath support, muscle tension. Reducing muscle tension, bringing the vocal cords together gently, and you can adapt it, so you can add more resistance.... it's the therapy technique where I have seen the best results, so I love it when a patient comes in with a really rough voice quality. And I give them that exercise, and. They start to speak to me straight after, and the voice is just normal. I love that so

Comorbidities
influencing treatment
decisions

WRTE most effective

Um, what do you think's the most important when You're trying to motivate your patient. What has the most influence there, do you think?

[P4] 14:16:11

So, motivation, um... I think we're really lucky in voice, because I feel like the patients themselves are motivated because they've come to see you, and I think if they turn up, They're motivated. That's my experience anyway. I think I'm really lucky where I live, actually, where I work, because I work [here], which is a really quite a privileged area in that, I know some some students that I've worked with have said they've worked in voice departments in more socially deprived areas, and a lot of the patients don't turn up for the appointments, and a lot of them have got drug and alcohol problems, which I want to say I just don't see that here. So I think the motivation is there. Um, so I guess it's... it's helping them see how that's going to impact on their life. So, if they're working. Um, helping them to see that having a voice, to be honest, I don't ever have to do this because they're all, they always just want to do it anyway. I know, it's lucky, isn't it? I am lucky. It's helping them to see how that can positively impact on their life.

[Helen Fracchia] 14:17:39

Yeah. Do you use any particular resources, or do you recommend anything to... support patients with home practice.

[P4] 14:17:48

Um, so I think there's probably some more things that I could do. I could probably... There are... there are things out there, aren't there? I sometimes do show them videos, um, so if I do video calls with patients, sometimes I'll direct them to videos that have already been done by other services. With Lax vox and breath support and things like that. Sometimes patients will come in and they will video me doing the exercise, or I'll video them doing it. But I have to say, mostly, I just give them leaflets, information leaflets... And it works, to be honest with you, so... sort of feel like, do I need to change that? Probably not, if it works.

[Helen Fracchia] 14:18:32

Yeah. Um, yeah, and I guess that's to do with the social demographic of where you live as well, probably, isn't it? The literacy is Good.

[P4] 14:18:43

Motivation influenced by social demographic

Encouragement to see positive impact of therapy

Videos- you tube

Video patients or therapist demo
Leaflets? Impacted by demographic

Yes, yeah. I agree, yeah, and also the fact that they are sort of motivated to start off with, so... Yeah, there's a lot of barriers that I don't have, which I do appreciate that other services will come up against those barriers, won't they? Yeah.... Because I work with a lot of singers, a lot of teachers, a lot of business owners, and I guess that's probably the social demographic, isn't it? Um, which is just really... it's interesting how different it is, isn't it?

[Helen Fracchia] 14:21:04

Yeah? And it's interesting that, yeah, your management actually is probably different Because of that. Yeah, interesting.

[P4] 14:21:10

I think it probably is. Yeah, I think, like we were saying about motivation, that's just not really an issue for me. I could see if somebody didn't really know why they were there, and sort of the language... bit of language barrier, that's tricky, isn't it?

[Helen Fracchia] 14:22:25

Is there... Anything that limits what you would consider to be best practice at the minute? Are there any barriers to what you can offer?

[P4] 14:22:39

So, definitely the, um, evidence-based practice. So, they're very frustrating. So, we've been told that we can go on courses, but we have to fund them ourselves. So, for example, a really amazing course down in London for singers, like I said, I do see a lot of singers. Fortunately, my, um, colleague went to London, so she can feedback to me, but I just thought, um, I just did a calculation and thought, actually, getting down there and... Um, finding a hotel... it's going to cost me, like, 300 probably more pounds to go to that. Um, so I think, yeah, accessing courses... Me having time, or it's probably about me carving out time, isn't it, to look at all these journal articles the students really kindly put together for me, I just need to do it, yeah. So they're the barriers, I guess. Time.

[Helen Fracchia] 14:23:54

Where's that time pressure coming from?

[P4] 14:24:02

That's a good question. Yeah, so we've got somebody on maternity at the moment, and so we've only got half her time, so there's only me and this locum- we've only got half her time, so we have got a year waiting list at the moment, so I'm feeling really pressurized by that. But that's me

Lack of funding for courses to develop learning

Struggling to carve out time for cpd due to caseload pressure- self applied

pressurising myself. That's not my manager pressurising me, so it's me... probably coming from me, actually, but it's coming from me via the waiting list. I just feel like I just need to get as many people in as possible, but Yeah. It's good to reflect on, actually.

[Helen Fracchia] 14:24:39

Yeah. Yeah, because, you know, a lot of people I've spoken to are limited in terms of what they're allowed to offer.

[P4] 14:25:12

Yeah, I do feel like I'm able to offer what I want to, which is really good, and I feel like I get the results from the amount that I offer. So I always say, like, I had a student recently who asked me how many times I see patients I'd say it's usually about 6, give or take 2, sometimes it's less, sometimes more. over the years, I've realized that's about the standard. Um, but no, but there's nobody... No managers saying to me, you've got to do this, you've got to do that, I'm pretty much left my own devices, really. So it's probably about me with my own, um, worry about thinking, oh, I've got to get more people seen.

[Helen Fracchia] 14:25:58

Yeah, I think, yeah, I think that comes with the personality type as well, doesn't it? We want to help people, so... We want to see them as soon as we can.

[P4] 14:26:05

Yes, yeah, which is why we do the job, yeah.

[Helen Fracchia] 14:26:29

Yeah. Okay. Is there anything you think we could do as a profession to improve our practice around exercise prescription?

[P4] 14:26:40

Um, I think that it would be helpful, I think something... I know we've got RCSLT, haven't we? But a body, which was maybe a bit more supportive of... what I've always thought was crazy since starting this job is that we all do the same things, pretty much. We all have all these leaflets that are all different. But they're all essentially the same thing. Why is it not standardized? I just don't... I've never understood that. And it just feels like if you go to a course, and you happen to just pick up that leaflet... it's chance, isn't it, basically, but why is it not standardized, and why is... Something like the RCSLT not providing that when they've

No change to client offer, but pressure to see more

Central leaflet collection- rcslt

got all of these amazing therapists out there, why can't we do that? Why can't we join forces? I've always thought that.

[Helen Fracchia] 14:27:33
Mm-hmm. Yeah, interesting.

[P4] 14:27:39
Um, so I'm a member of the local voice network And we do try and do that to a degree. But, but I think it would be great if it was nationalised, wouldn't it?

[Helen Fracchia] 14:27:51
Yeah, that's a really good point.

[P4] 14:28:47
I don't know how you'd ever get around doing that.
That's probably why it's not... that's probably why it's not being done, to be fair, isn't it? Yeah.

[Helen Fracchia] 14:28:52
I think, yeah, perhaps run the risk a little bit of people going, oh, I'll do this technique, and not really understanding what they're doing, and then teaching it.

[P4] 14:29:03
Yeah... yeah, fair point, yeah. Yeah.

[P4] 14:29:16
Yeah, you end up doing something. Yeah, yeah, so maybe... yeah, so maybe you do need that training to start off with, so therefore you do need.

[Helen Fracchia] 14:29:29
Then you're linking into competencies, aren't you? And we don't have standardised competencies for voice,

[P4] 14:29:38
But that's... That's another thing... I was a So I'm a band 7 now, but I was a band 6. And to get to the band 7, um, the previous Band 7 was saying, oh You know, it'd be great, let's... let's look at the competencies, and I was like, there are no competencies, but that would be another thing, wouldn't it to standardize those. Yeah.

[Helen Fracchia] 14:29:57
Yeah. Yeah, I think... I think there is talk of that coming.

[P4] 14:30:02
So... Is there... Yeah, that'd be great.

Lack of competencies
for career progression

[Helen Fracchia] 14:31:48

Brilliant. Is there anything else that you think. Any burning Golden nuggets about exercise that you can think of, Or prescribing exercises.

[P4] 14:32:10

Just, uh, probably something that I haven't mentioned is that Um, sometimes I get patients to sometimes put alarms on their phones to do it, or... Um, reminders, like, visual... so people often say the actual cup and the straw are visual reminders themselves, so sometimes I'll give them more so they can see them through the house. Um, post-it notes, alarms on the phones, that kind of thing. I don't think I mentioned that. Um, but yeah, I think that's probably everything, actually.

[Helen Fracchia] 14:32:39

Okay. Yeah, brilliant.

Phone alarm reminders

Participant 5:

[Helen Fracchia] 14:51:47

Thank you very much for agreeing to do be interviewed.
So, in your questionnaire, you said diagnosis is the most important factor in your decision-making around Exercises.
Can you tell me a bit more about that?

[P5] 14:52:11

Yeah, If somebody has, say, a weak, breathy voice, for example, and they haven't been diagnosed accurately, as in they haven't had the right instrumental assessment, and I've got some query, so I might want the strobe, a camera that looks a little bit closely. You can sometimes look at more information in terms of vocal cord movement, so. I might do that myself in therapeutic endoscopy if I'm not feeling I'm getting the patient right after a few session. Um, I might... I might need more accurate diagnoses because I know the cameras that we use upstairs don't have a strobe, so I always have a strobe in voice clinic, and I've got a strobe in the therapeutic endoscopy clinic. Sometimes I might get the wrong diagnosis, like the patient might be told they've got nodules, and it'll say that on the referral document, and it doesn't sound like it when they come through the door, and I don't have the kind of characteristics in production of voice that you would imagine with nodules. And then when you scope them out, they haven't. And there's a whole world of stress that this creates, which causes extra tension when you don't, for example, if they're a singer And they've been told they've got nodules they might go through the roof And you have to do a lot of unpicking and reassurance about that. Um, so diagnosis is really important because you tailor the therapy to that, to get it better, But it's like that, first time, right time, every time, the therapy. Accuracy in diagnosis allows accuracy in therapy and quicker recovery. Better patient satisfaction outcomes all round.

[Helen Fracchia] 14:54:00

Yeah. Yeah. You put evidence base next. How does that influence your... Decision-making around... Exercise.

[P5] 14:54:09

Okay well, all the exercises that we do are based in evidence, but some can be, kind of, I still... Obviously, they have to be. Um, I do kind of use patient case studies for my experience of what works for patients, and I will adapt things. But you know when you're applying something that it's been researched, so

Accurate diagnosis impacts effective treatment and satisfaction.

Therapy tailored to diagnosis

Practice- based knowledge as well as evidence base.

that's really important, because. We don't want to just be doing stuff that hasn't been tried and tested, that we're going to cause any harm. Um, and, you know, keeping up-to-date with CPD, etc, is really important. I might go back a bit to exercises I haven't done before, or I might go to exercises that people have looked at a slightly different way. And you can tweak things. Um, and that's what learning is, isn't it? But, obviously. Robust evidence. For what you're doing is important. It also helps your outcomes, and again, patient Um, satisfaction and recovery.

[Helen Fracchia] 14:55:11

Yeah, brilliant. Yeah, yeah. You put your own exercise preferences next on the list.

[P5] 14:55:25

Oh, okay. Um... So the things that I do based on diagnosis, again, I work in two different trusts And the patients I see at another trust are if I'm honest, I will have more complex surgeries there. Um, so sometimes I might spend a lot longer, maybe I'm adding to this. Doing a little bit more counselling around things. If things haven't gone to plan and they weren't expecting it. And they've had surgery and ended up with vocal palsy, so I will draw on that kind of thing. Um... In terms of exercises, if I. I do find this year that I've gone on more CPD, and I've refreshed a lot of exercises. And I do feel like I'm thinking, I haven't used that for ages, and actually, I think that'll work with the singers more than I've used it before. Um, so I've kind of made myself a little bit more aware Of other exercises I haven't used for ages. I may be dipping into a bit more. than I had in the past, and I think I haven't in the past, mainly because I'm on my own, I've got a massive caseload, so I kind of... I don't stick to it the same exercise for every patient, because that doesn't always work But I might add a bit on, or kind of maybe explore, or just give them a little bit longer to adapt and incorporate. I think we're always learning, and I do... I do kind of try and make more time to read research to see if there's anything else I can add to my therapeutic tools, if I'm honest.

[Helen Fracchia] 14:57:09

Yeah. Brilliant. Um, what treatment approaches do you find the most successful with patients, and why do you think that is?

[P5] 14:57:19

Um... I think the most successful if I'm honest, I think your explanation, your case history is important, and your

Using exercises in different ways

Evidence for what you're doing is important

Differences between caseloads in different contexts

Different therapeutic demands

Caseloads impact time for training/ research

explanation and understanding of where they're coming from is crucial. I think success comes from you giving them time to talk. And then explaining what you're going to do, but really getting them to understand. Because if they don't understand, and you've got to get them right from the off. If they don't understand what you're explaining your exercises, I think you've got no chance. And I think you've got to be really direct with what they expect, what you expect, and how many sessions they're likely to be needing. which can vary plus and minus, but I think that's... that's the thing. Um... So, I do really like lax vox. I like the whole range of semi-occluded. I find that's really helpful. It's not with everyone But I do find you can get results really quick with it Because you can feel it so much, and it's really effective. I do find, though, sometimes if people have had different therapists, they're not always shown accurately enough for it to make a difference. And if somebody's coming from somewhere else, and I'll say, show me how you've been doing it, and they say it doesn't help, I'll watch them, and I adapt it. So I do think it's how you, as a therapist Show them what you understand and how to get there. Mighty muscle movement... movement memory, not. Not muscle memory, muscle movement memory, that I learned, yeah, yeah. So I think, I think I really do like that. I think... I don't tend to work much on breath. A lot of deconstriction stuff. I might do a little bit more on breathing with singers than other And a lot of resonance-type work. I kind of use a blended approach. I use little bits of accent, little bits of a still, but a lot of semi-occluded stuff. [Helen Fracchia] 14:59:22 Um, does... Does your thinking change when you're prescribing what they're going to do at home, their home exercises, or do you go through the same decision-making process, do you think? [P5] 14:59:35 No, I... I... I kind of... I really need them to buy into it at home, because they're only with me once a week for so many weeks. So I explain that what we've done in this session, and how long we've done it for needs to be more at home. And I do say, if you can't practice this As many times as I... I mean, I'm realistic, because I know everybody's, like, busier, nobody's got time to do anything. I am realistic But I do say, if you don't do this X amount of times, it won't work. So, and you know, if you go on holiday, you're leaving your voice at home? Because it's kind of thinking about how you incorporate this to get that change. And I use maybe analogies to get them to really implement it at home. Like, I will say things like, you know, if you're going to run the London Marathon, you don't run around the block and say,	Patient relationship/ understanding key to success Clear management of expectations, contracting with patients Get results quick Accuracy of technique is key Motor learning Blended approach-whole system Buy in from patient essential for home exercise realistic Prescriptive on number of times of
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where's London? you've got to do it, haven't you? You've got to kind of change to If nothing happens, nothing happens. So it's always kind of, like, not practicing until you get it right, practicing until you can't get it wrong for me.

So, to get them to understand, not like in a horrible, I'm the teacher way, but in a partnership. This is why you've waited this amount of weeks. So, um... No, and I do expect change when they come the next time. I do obviously understand if there's things when there haven't been able to, and there might be blips where they go backwards, and we look at that, and we refresh everything, and we move things around. But it's a two-way street, and. It's the same. And most patients they respond really well, because they wanted to get better. Obviously, if you have those that don't, they don't And you can kind of work on that area

[Helen Fracchia] 15:01:16

Do you think there's any limitations at the moment to you offering best practice to your patients?

[P5] 15:01:24

Yeah, I think that I have... a huge caseload now. I've always had a high caseload, but. Um, ENT will be doing extra clinics, but there's no extra capacity for me. And loads of them will come to me that are picked up quicker. Obviously, you've got some red flags, but they haven't got anything wrong, so they come to me. I have a lot from that clinic. There's no increased capacity for me, because it wasn't put into the business case for us. Um, my sessions have never increased. the sessions for voice aren't full-time, and they've never ever increased, despite the referrals going up over the years. So the data that's collected, nothing happens because business cases aren't looked at. So I've kind of taken on more sessions, but it was from sessions that already existed. So, kind of all the cutting of posts Stop you doing anything but seeing patients. And the crucial parts of learning, kind of, you have to grab them every now and then. Um, but the waiting list and the amount of referrals is just... I think since COVID as well, people have still got long COVID symptoms and needed longer for psychological support. That had implications on the other patients who hadn't got that priority. Um, but really, its capacity and demand. There's more demand, and... The capacity hasn't changed ever since I've been here. I started here in 2003. And it's been the same number of sessions, and the referrals have gone through the roof, and nobody's ever done anything about it. I think the care of the patients is the same regardless, but it's the It's almost the damage that can happen if you've got people waiting. i use

practice- own decision

Use of analogy

Practice till you can't get it wrong

Move exercise around to suit patient

Caseload pressure- increased demand without increased capacity

Limitations on learning due to caseload pressure

Increased psychological support since covid

prioritization system, but. I would get to nodules quicker before than I do now. You know what I mean? Nodules, polyps, yes, all that. but yeah, I think those are the... it's just NHS, it's no money. vacant posts, because they've taken the posts. And freezing posts And no change in service delivery since day dot for me.	Damage from increased waiting
[Helen Fracchia] 15:04:55 Yeah. Tricky, isn't it? So what could we do as a profession, do you think, to improve our practice around exercise prescription?	
[P5] 15:05:11 Um... In terms of prescribing exercises, I think you've got to You've got to be realistic of what patients' expectations are. If their expectations align with. What you give them. I don't think there should be any problem. I think we need to be aware of getting change and getting change quick. Be realistic not to give too much, but be realistic not to give too little. And... I would maybe... I still do a very thorough case history. And at the end of the case history, if I've got time to start therapy, I do, but if I haven't, I still concentrate a lot on vocal changes, like hygiene. Um, lifestyle changes, if there's a lot of, kind of, acid reflux involved, and kind of things that are detrimental like that. I might spend a lot of time on that, because very often, they bring a lot in the first session. And then the other sessions might be 40 to 45 minutes, or even half an hour, depending on what I need. I will try and do more. in one session than I used to before. But again, I might go back if they don't get it quick enough. I think we just have to be really honest. I don't like limiting sessions. But I think, again, that's something that is coming, where we're asked by managers who aren't speech therapists who manage us. You can only offer so many sessions. I don't really like that, because sometimes I think that doesn't work for me, and I haven't... I've said no so far. I do think if people are aware. If you... with your therapy exercises, that... If they cancel, or they don't turn up, that limits their progress. And that limits how much they can have. Um, and I also try and talk about their day with them to try and figure out when they can do the exercises. I do that with all the patients. Because sometimes they'll think, oh yeah, I could do it then, like, warm-ups on the way to work, warm-ups on the way from work steaming in between lunchtime if you're a teacher or you work somewhere in Mark's and spencer and you're in a cupboard getting the orders and it's dusty going and doing a little steam, so I'll try and talk about the patient's day and incorporate it. But I've got to be honest, I think you've got to do	Realistic expectations Getting change quick increases motivation. Expectation management Doing more in one session due to caseload pressure Conscious of potential pressure to limit sessions Fitting exercise into routine

the exercises, and this is why you're here, and if they're kind of like a bit of a repeat offender with not practicing. That will limit what I'll do then. I will just say maybe speech therapy isn't for you at this time. And we look at whether you need to be discharged. I don't do PIFU because I don't like that. but then they get re-referred. Because there's so many patients that are desperately needing to see us with no voice and off work. That... you've just got to be kind of really brutal and really honest and say, you can give them, this is how many, this is what we think it might be, and this is how many times they expect you to do it. ... when you sit down, watch the adverts, every time the advert comes on, do the exercise. trying to kind of get them to understand, and them to come up with ways that they can employ the exercises, and just be realistic, sometimes you can't give them too much, because if you give them too much, they won't do anything at all. So just know your patient, engage them.

[Helen Fracchia] 15:08:43

So you're more, individually basing your exercise prescription. Do you use any pre-planned protocols. prescriptive things like vocal function program or anything like that?

[P5] 15:08:57

I might do the exercises, actually, but I don't really, kind of... do it like that Because I do find that people are so, so busy. Everybody's down... I mean, if you think about all your teachers, there's no staff, there's no staff in anything. I've never known a population so stressed as this one they can't park, they come in with the voices lost because they haven't been able to park, it's all of this stuff So, I do kind of use those exercises, but I don't use a protocol as such. No, I don't.

[Helen Fracchia] 15:09:56

Anything else you think You want to say about exercise prescription? Any golden nuggets that we haven't covered?

[P5] 15:10:03

Um. Um... The only thing... well, it's a massive thing. I... when the patients come in, I've taught them to do something, I will get them straight away, you know, as we're talking, how have you got on this week, how have you managed? Um, how's your week been with implementing everything? I'll get them to show me, so I know that they have done it. Um, and I will just check that they're accurate, because accuracy is key to all of this. So when you're prescribing, as I say, before, you've got to get them to buy in, but you've got to get them to do it. Like, I've made

Intention planning for exercise

Doesn't like PIFU

Know your patient, engage them

Busy life impacts amount of demand placed for exercise

Doesn't use protocol

adaptions if they've had speech therapy before, or if I've demonstrated, so I use the mirror, I've got the model, and I get them to do it. before they leave the room, I say, you know, you need to do exactly as I've showed you, and it's written down to the letter, so I am prescriptive on the sheets. And I do say how many times, but it's, my protocol. Yeah, so, um, and I checked that when they come back, so I know that they're accurate. Just in case they've gone off-piste and done something else. Um, you know, sometimes they might have been doing some lax vox, and they pushed too hard, and then they're coughing, and they're saying, oh, it's hurting my ears, and I go, well, I haven't showed you to do it like that, it would hurt my ears. Do you know what I mean? Um, so I just check accuracy and make sure that they do... and as you're building on those layers, and again, you might not do as much as you planned, because they haven't done the exercises. Yeah. So it's checking accuracy, being really honest. Been prescriptive, but not Like, sticking to it if it needs to bend.

[Helen Fracchia] 15:11:47

Yeah. Any resources that you... particularly like to motivate patients.

[P5] 15:11:55

Um... I've got Cabinet full of... all my resources... well, two cabinets full. If I go on a course and I listen to something and hear it, I will make a handout. I'm a handout person. so the resources that I use are blended, so again, semi-occluded tract stuff going back from, I don't know, when I did the course in 2009. Um, stuff from Accent... exercises from... I don't work much on posture, but I think it was Alexander Technique when I'm talking about posture resource books I use loads of. It's not an exercise sheet, so it's just a general basic vocal hygiene sheet, um, reflux sheets, stuff on Aging voice that we've done from over courses that we've been on, like Presbyphonia courses. I have that anyway, medication and impacts on voice. Bit of stuff that we've picked up from clinical supervision that might give you information or Like, rescue breathing is the Vertigan book and stuff that I use, so when I did that course, I kind of got her book. And she gives you resources, so I'll use resources in there. Some of the deeper relaxation stuff and progressive relaxation was from Christina Shewell voice Skills Framework book. that... going back years, I've used bits of that.

[Helen Fracchia] 15:13:36

Own protocols- not research based.
Accuracy of technique

Leaflets

So you give patients leaflets, do you? Do you do anything but leaflets? Do you do links or videos, or... Anything like that?

[P5] 15:13:45

No, I don't give them links or leaflets, if I'm honest. I just... I'd get them to look at me. I have looked at some of the stuff that's, you know, like, vocal... so, if it's a vocal coach. Um, there's only a couple that I would tell them to look at, because I don't know in action what the anatomy of the others and knowledge is like. So I don't. Um, but no, I don't. Because I don't think... I do think slightly differently, and I'll play it by ear, how they respond in the session. I don't get bad results with people, really?

[Helen Fracchia] 15:14:21

Do you have a video yourself, or get them to video themselves doing it on their phones, or anything like that?

[P5] 15:14:27

No, I will record their voice initially on their phone, because we don't have any way of recording it anymore, so we'll get a speech sample out the Rainbow Passage if they've got a phone. We do that from the off. Um, and they can record my voice, but we've got all, like, safeguarding and governance issues around all that stuff. So sometimes the patient will say, can I just let you... can I just record your voice, but not video me, because we're not allowed to do that. We've had incidents with this, which is why. But there's nothing, um... I used to give them the old cassettes and record the exercises onto it, so I don't mind if they do put it on their phone. Um, recording, but not videoing. And I don't have any... because I do find sometimes they'll have gone off and found videos, and then I'll just think that's not helped you at all, because. You know, there will be patients who also say Um, oh, I've been doing my friend's voice exercises, because she's had a speech therapist, and I'm like. No. And I find that videos are a bit like that. And they're not copying it exact. So I think sometimes you might end up doing a little bit of injury, because you can't always hear. Look, when you're in the room, it's your hearing, it's how you conduct, isn't it, as well, so I think. And maybe there is stuff out there that I probably should, but I don't I haven't have time to look. I model it, and I alter it the position of the straw Um, depending, just because I want them to feel it lighter at first, so I always tend to start with an inch into the water rather than right on the bottom.

Concern around poor technique from recommending videos

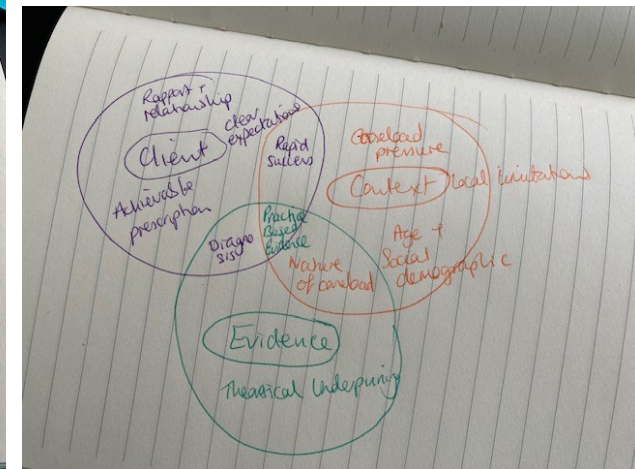
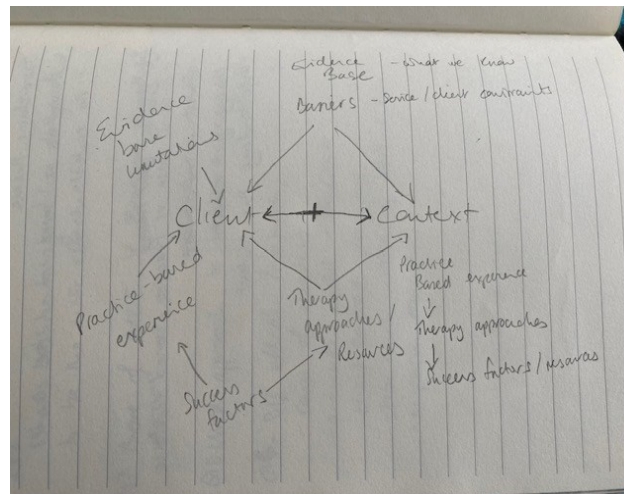
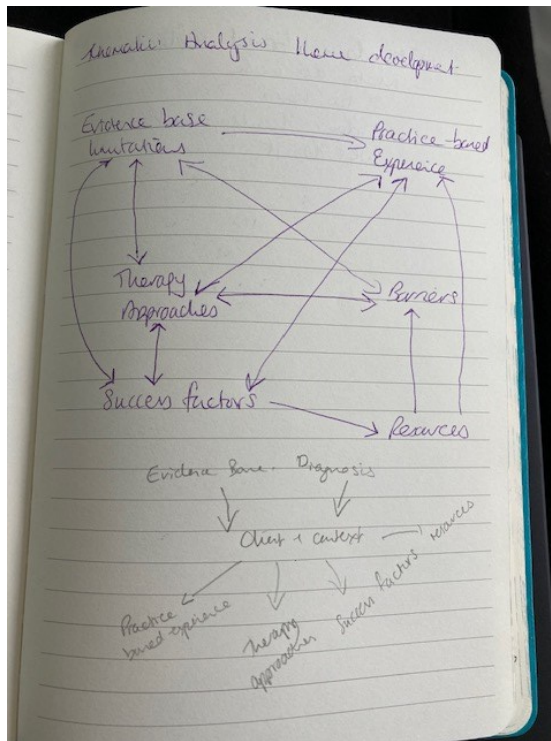
Governance restrictions on recording exercises

Alters exercises for patient success

Appendix 10: Initial Theme Development

Evidence Base	Experience	Therapy Approaches	Treatment success factors	Barriers	Resources
Supporting patient motivation, knowing why you're doing what you're doing	Previous practice-based success influences treatment decisions	The same exercises can be used for different therapy approaches/ different treatment targets with variation	Building rapport	Pressure of caseload numbers limits appointment flexibility	NHS Trust governance limitations
Not always applicable- individual differences in success/ co-morbidities/ cognition/ neurodiversity	Current caseload context impacts decision making e.g. social demographic/ waiting list pressure	Strengthening vs rebalancing vs rehabilitation	Clear expectations	Pressure do achieve more quickly	Phone reminders
Little evidence exists for home practice protocols/ weaning off programmes	Evidence base mixed with the clinical situation and the patient	Accuracy in technique key to motor learning	Understanding what motivates your patient	Reduction in review appointments/ PIFU	Info leaflets
	Confidence from previous experience influences success		Finding an effective, achievable level of exercise	Limitations on learning and service development due to financial and caseload pressures	No one approach suits everyone
			Signs of success quickly	Resource restrictions	Need for resource development

Appendix 11: Iterations of thematic mapping/ conceptualisation from reflective journal



Appendix 12: Refining, defining and naming themes

Theme	Subthemes	Related codes	Exerpts
Knowing your client	Building a relationship and understanding your client is key to success.	Kindness and compassion is the start point in motivation. Rapport impacts compliance. Individuals are motivated in different ways. Whatever works for the patient. Know your patient, engage them.	[P2] Making the patient feel like they can fix their own problem I think is a big factor. I think some people need motivating more than others. Some people are quite self-motivated. [P5] I think your explanation, your case history is important, and your understanding of where they're coming from is crucial. I think success comes from you giving them time to talk. And then explaining what you're going to do, but really getting them to understand. So just know your patient, engage them. [P1] kindness and compassion... ha(s) its place in terms of a starting point
	Find the practice level that is achievable and effective.	Exercise frequency decisions made on patient motivation level and lifestyle. Patients don't have straightforward lives. Be realistic. Overwhelm demotivates Empowerment and self-efficacy improves motivation. Confidence improves motivation and compliance.	[P1] I think if you give people too many things, they're less likely to do anything, so give them 1 or 2 simple things to follow. You have to take into account people's busy lifestyles and where they're going to fit things in. [P5] I really need them to buy into it at home, because they're only with me once a week for so many weeks. So I explain that what we've done in this session, and how long we've done it for needs to be more at home. And I do say, if you can't practice this as many times as I... because I know everybody's busier, nobody's got time to do

			anything. I am realistic But I do say, if you don't do this X amount of times, it won't work. [P3] Doing something like Lax Vox would be a nice quick fix for a patient, but if they've got such a frenetic lifestyle that they need to have a bit of tubing and some water with them. There's absolutely no point giving it to them. [P4] a patient recently... works and... i gave him lax vox to do. And he said, I just can't because I don't have any time at work. So that would definitely influence, because some patients as well, if they go for a dog walk or something, they can do some humming, but they can't get their cup out with the straw. So ... yeah, depends what they're doing.
	Clear expectations.	Patient relationship and their understanding is key to success. Clients aware of need to practice. Clear contracting with patient. Explanations really important. Intention planning for exercise. Intrinsic reward	[P1] Some people say just having something to tick off or colour in will give me a little bit of dopamine, or it's kind of like something that's going to be visually in my face to remind me to do it. So we just need someone to create some beautiful apps That will give people a little bit of that dopamine hit. [P5] You've got to be realistic of what patients' expectations are. If their expectations align with what you give them. I don't think there should be any problem. I think we need to be aware of getting change and getting change quick. Be realistic not to give too much, but be realistic not to give too little.
	Signs of success promote motivation	Buy-in from patient essential for home practice. Getting change quick increases motivation. First session buy-in is important. Mindfulness and self-awareness contributes to success/ generalisation.	[P1] I think being able to get results in the first session with a patient is very important for buy-in, which means that often my first session is quite long, because I need to try something and they go, Oh!, or it might be that the buy-in comes from you really, really listening and reflecting. And they feel heard, so that's also incredibly important in terms of compliance.

			[P3] But I always feel that if a patient's not doing exercises mindfully It's really difficult to get that generalisation. [P3] (patient said) "I really thought what you were saying was, like, a load of old rubbish, basically. But actually, I thought I'd give it a go, and this has happened". Um, and then you get that buy-in then, so I think you need that quite a quick spark of at least one thing that improves, and then you get the buy-in for the rest of it. [P4] So I love it when a patient comes in with a really rough voice quality. And I give them that exercise, and they start to speak to me straight after, and the voice is just normal. [P5] not practicing until you get it right, practicing until you can't get it wrong for me
Knowing your theory	Understanding why you're doing what you're doing	Evidence for why you're doing what you're doing is important. Evidence supports patient motivation and information. Little evidence for direct clinical application to exercise programmes. No long term weaning off/ maintenance evidence. Research evidence doesn't necessarily impact treatment decisions. Application of research difficult due to co-morbidities/cognition/neurodiversity/patient response/psychological readiness. Clients don't always want the 'best' approach e.g. intensive. Accuracy of technique is key for motor learning.	[P5] But you know when you're applying something that it's been researched, so that's really important, because. We don't want to just be doing stuff that hasn't been tried and tested, that we're going to cause any harm. [P4] Because it's good to be able to tell patients, isn't it? This actually does work, there is evidence for it, [P1] It's a funny old word, isn't it? Evidence-based, because we have a sense that the evidence base is the published written literature, and we know that that's part of it, but not the whole clinical situation. [P1] The evidence for that (Laryngeal Manual Therapy) is very fuzzy and I'm not really sure whether I'm just helping with relieving tension or giving the body some suggestions.

		Lack of time/ funding for CPD and service development.	[P3] I think voice is very individual, and I'm not sure I believe that it is something that you can improve in a regimented way, because a lot of it does have that kind of psycho-emotional aspect to it. [P1] She didn't want to come in for intensive Exercise [P3] Do I think this patient is actually in a place where I can help them with therapy? [P3] I'm not sure evidence base really affects my selection of the exercises. Which you probably shouldn't say out loud.(what I prescribe)... often is different from what's recommended. Yeah, often that doesn't really help clear up on dosage. (it would help to have) an idea about weaning off protocols because that's something that... I say with lots of authority to my patients what I want them to do because I don't want them to just stop. And to be honest, I'm making it up. [P4] I mean, that is one area where I feel that I... probably like all therapists in the country, I really would love to have more evidence-base, or have access to it, or have more time to have access to it. [P5] I will just check that they're accurate, because accuracy is key to all of this.
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	Experience matters	Evidence base includes the clinical situation and patient. Driven by clinician experience of success. Adaptation of exercise always required according to the patient. Exercise prescription based on individual and clinician practice experience. Mixing exercises to achieve target. Approach alters for different stages of treatment. Same exercise used in different ways to achieve different treatment goals.	[P1] Sometimes there's a specific type of patient and patient group or disorder that would definitely benefit from something like that (protocol). But I think most of the time we need to adapt. [P3] Finding the exercise that gives the best kind of Vocal result is what I'll go with. [P5] I do kind of use patient case studies for my experience of what works for patients, and I will adapt things.
	Diagnosis is key	Accurate diagnosis impacts effective treatment and patient satisfaction. Diagnosis impacts on prognosis and managing expectations. Diagnosis guides treatment decisions. General theoretical application to different diagnosis-rebalancing/strengthening/recovery. Comparison to physio approach for diagnosis requiring strengthening.	[P1] (if there's) weakness that needs to be strengthened then I'm going to have a much more robust programme and sort of aim for more intense activity. More dosage...as opposed to something like a muscle tension dysphonia which is more of a... Motor program retraining, or kind of rebalancing approach. [P2] The route that I take would be different based on what their diagnosis is. [P5] Accuracy in diagnosis allows accuracy in therapy and quicker recovery. Better patient satisfaction outcomes all round.
Understanding your context	Caseload pressure makes a difference	Impact of long waiting times on severity of symptoms. Restrictions on number of sessions/intensity. Fitting more into less sessions. Pressure for quick progress. Discomfort at pressure not to review patients. Easier to be patient-led when less pressured.	[P3] I've just gone into a post where I can pretty much give how much therapy I think I want to give. Although they are now saying, actually, we need to make sure patients have no more than so many appointments but then I've been using clinical judgements that means it's okay to do more. In... a previous job that I came from it was meant to be capped, so literally It was very much the see, give advice, Patient Initiated Follow Up, if they come

		No change to client offer but pressure to see more.	back do treatment, so that really then did change my practice and how I delivered my therapy. [P3] Because the waiting times to get help are so long, so often those patterns are pretty much entrenched in by the time they come. [P4] we have got a year waiting list at the moment, so I'm feeling really pressurised by that, I do feel like I'm able to offer what I want to, (but) got to get more people seen. [P5] I think the care of the patients is the same regardless, but it's the... damage that can happen if you've got people waiting. I will try and do more in one session than I used to before. But again, I might go back if they don't get it quick enough. I think we just have to be really honest. I don't like limiting sessions. But I think, again, that's something that is coming, where we're asked by managers who aren't speech therapists who manage us. You can only offer so many sessions. I don't really like that, because sometimes I think that doesn't work for me... I've said no so far.
	Where you live and who you see plays a role in your approach	Approach influenced by social demographic. Different caseloads present different challenges in different contexts. Different governance rules on recordings. Social/ age demographic can impact access to resources. No one size fits all for support resources.	[P2] A lot of my caseload currently are 70-plus year old men. And when I say... to them YouTube, they look at me blankly, so I think for them, it's knowing that I'm at the end of the phone if they need something. [P4] Because I work [here], which is really quite a privileged area in that, I know some some students that I've worked with have said they've worked in voice departments in more socially deprived areas, and a lot of the patients don't turn up for the appointments, and a lot of them have got drug and alcohol problems, which I want to say I just don't see that here. And also the fact that they are sort of motivated to start off with, so..., there's a lot of

			barriers that I don't have, which I do appreciate that other services will come up against those barriers, won't they?...Because I work with a lot of singers, a lot of teachers, a lot of business owners, and I guess that's probably the social demographic, isn't it? ...it's interesting how different it is, isn't it? [P5] (patients ask) can I just record your voice, but not video me, because we're not allowed to do that. We've had incidents with this, which is why... I used to give them the old cassettes and record the exercises onto it, so I don't mind if they do put it on their phone. Um, recording, but not videoing. And I don't have any... because I do find sometimes they'll have gone off and found videos, and then I'll just think that's not helped you at all. [P5] I work in two different trusts and the patients I see at another trust are if I'm honest, I will have more complex surgeries there, so sometimes I might spend a lot longer ...doing a little bit more counselling around things.
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Appendix 13: Project Timetable, Gantt Chart

[illegible]