BMC Health Services Research

RESEARCH

Open Access

Interdisciplinary teamworking in rehabilitation: experiences of change initiators in a national rehabilitation hospital

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Abstract

Objective This study aimed to qualitatively explore the experiences of healthcare professionals implementing changes (as change initiators) and operationalizing interdisciplinary teamwork in a rehabilitation service within the Irish healthcare system.

Data sources Data for this study were collected through focus group discussions with change initiators involved in interdisciplinary team initiatives at a rehabilitation service in Ireland.

Review methods A reflexive thematic analysis was employed to analyse the focus group data, which involved identifying patterns and themes within the narratives provided by participants.

Results Three overarching themes emerged from the analysis: 1. "Nature of the Battle for Change", 2. "Characteristics of the 'Status Quo' and Contradictions to IDT Working," and 3. "Power and Identity: Threats to Hierarchy and Status". These themes shed light on the challenges faced in implementing interdisciplinary teamwork, particularly the perceived threats to individual power and professional identity within hierarchical healthcare structures.

Conclusion Implementing healthcare changes, especially in historically hierarchical healthcare systems is complex. Interdisciplinary team rehabilitation can challenge the status quo, posing adoption barriers. A nuanced, bottom-up approach is recommended, emphasizing long-term coalition building, continuous professional development, and early discussions about hierarchy and status. These recommendations offer practical guidance for stakeholders seeking to implement interdisciplinary, person-oriented approaches in rehabilitation practices, facilitating better anticipation and resolution of challenges, and ultimately improving care delivery and patient outcomes.

Keywords Interdisciplinary teamwork, Rehabilitation, Qualitative research, Reflexive thematic analysis, Embedded research

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Introduction

Rehabilitation is delivered by healthcare teams, with a set of interventions which aim to optimize functioning and reduce disability in individuals with health conditions [1]. This definition is holistic and in line with a biopsychosocial model of health [2]. To meet these holistic aims and deliver comprehensive care, rehabilitation teams must work together to deliver treatment tailored to the individual patient's needs, monitor changes associated with intervention, and make changes in goals and actions if needed [3]. Tailored interventions are designed to address specific barriers within a given context, making them more effective than generic approaches in improving professional behavior and healthcare outcomes [4]. In the context of interdisciplinary teamwork, tailoring interventions involves identifying key challenges—such as communication barriers, differing professional cultures, or conflicting priorities—and developing targeted strategies to address them. In rehabilitation settings, these interventions help align team roles, facilitate shared decision-making, and ensure communication strategies are adapted to the needs of interdisciplinary collaboration. Healthcare teamwork can be structured as multidisciplinary, where professionals work in parallel on separate aspects of patient care, or as interdisciplinary, where professionals collaborate closely to address common problems and achieve shared goals [5]. An interdisciplinary team can be described as a more integrated team, with blurred boundaries across disciplines. Health systems research indicates that interdisciplinary teams outperform multidisciplinary teams, leading to better teamwork, success, and staff satisfaction [6–8]. Thus, this study contributes to implementation research by examining these contextual barriers and offering insights into how targeted strategies can improve interdisciplinary teamwork. Implementation research highlights that adapting interventions to local contexts enhances their adoption and sustainability. By addressing setting-specific barriers, tailored interventions not only improve interdisciplinary collaboration but also contribute to long-term integration into routine practice, leading to improved patient outcomes [9]. In the context of the current research, within the Irish health system, the latest reform emphasizes the importance of establishing the "right team" to facilitate interdisciplinary team-based collaboration [10]. While CORU and the Medical Council mandate interprofessional education (IPE) in Ireland, its implementation varies across higher education institutions, with differences in the extent and structure of IPE programs [11]. A systematic review by Dyess et al. [12] found that IPE enhances teamwork, communication, and shared problem-solving among health profession students. However, despite these benefits, research indicates that IPE in Ireland is not yet uniformly embedded across disciplines, and its impact on fostering interdisciplinary practice remains inconsistent. As a result, many healthcare professionals continue to train within discipline-specific groups, reinforcing a uni-professional approach and making the transition to interdisciplinary teamwork challenging.

Existing literature on team improvement in rehabilitation settings focuses on evaluating interventions or their implementation [13, 14], neglecting insights from healthcare professionals leading these changes. More specifically there is a dearth of research on staff-driven quality improvement projects enhancing teamwork and work efficiency. Staff-led initiatives in healthcare, though rare in scientific literature, show promise for efficiency and teamwork enhancement [15, 16]. Bottom-up approaches, originating from staff, have potential to be more effective and align closely with user needs compared to top-down interventions [17]. These initiatives foster collaboration and stakeholder involvement, creating inclusive healthcare environments [18].

This study qualitatively explores the experiences of healthcare professionals as change initiators in operationalising interdisciplinary teamwork within a tertiary rehabilitation service. It explores the narrative of their experienced challenges, providing valuable insights for other professionals seeking to enact similar changes. Understanding these challenges can aid in anticipating obstacles and developing effective implementation strategies for IDT working. This focus on personal narratives of change initiators involved in a quality improvement project adds a unique perspective to the literature on teamwork and rehabilitation.

Method

A focus group was conducted with a multidisciplinary group of healthcare professionals leading a quality improvement project within the hospital as change initiators. The aim was to capture their experience and key learnings from operationalizing IDT working within the hospital. The study was conducted in line with the Standards for Reporting Qualitative Research (SRQR) guidelines by O'Brien, Harris [19].

Qualitative approach and research paradigm

To capture participants' experiences, a qualitative approach using focus group discussions was employed. Focus groups allow individuals with similar experiences to openly discuss their thoughts and perceptions. Questions aimed to gather participants' narratives on creating and implementing changes to rehabilitation teams within the rehabilitation service (see Supplement 1 for questions). The interactive nature of focus groups allowed for diverse perspectives and experiences to emerge. Focus groups facilitate sharing and comparing, exploring both

individual and group perceptions [20]. While focus groups often involve unfamiliar participants, our group had pre-existing professional relationships due to years of working together. This familiarity was valuable in supporting deeper interaction and exploration during the session [21]. Although several co-authors were employed as embedded researchers within the rehabilitation service and regularly collaborated with healthcare professionals, patients, and family carers through co-designed research initiatives [22–24], they did not participate in the focus group. Their involvement was limited to data collection and analysis. Therefore, care was taken to be reflective and critical of the researchers' role and relationship with the team when formulating interview questions, with expert guidance sought from the University College Dublin (UCD) School of Psychology.

Theoretical assumptions: epistemology and ontology

This paper is grounded in constructionist epistemology, with a critical hermeneutic orientation to our analysis. In a constructionist view (as opposed to a more essentialist epistemology) language is not considered a simple reflection of reality but is also an implicit tool in socially producing meaning and understanding of experiences. We view this as the appropriate epistemology for this research question. In our view these change initiators were not only engaging in simply sharing their experiences with the researchers but were also engaging in shared meaning-making through reflection of their experiences. We aimed to facilitate and capture their understanding of the cultural, personal, and systemic obstacles one encounters in disrupting an existing system and way of practice. We took a critical orientation to our data analysis. This means our understanding of the data was influenced once again, by the concept that language does not reflect reality but rather creates it [25]. We chose this approach as we aimed to offer interpretations of meaning beyond those explicitly communicated by the participants.

Context and sampling strategy

To give context to this study, global and national perspectives are essential. Globally, the WHO Global Health and Care Worker Compact [1] promotes safe working conditions for healthcare workers, aligning with the Rehabilitation 2030 initiative addressing workforce shortages [26]. Nationally, the National Policy and Strategy for NeuroRehabilitation Services [27] and the National Trauma Strategy [28] in Ireland aim to improve outcomes in rehabilitation and trauma care. These strategies prioritize accessibility, quality, and person-centered approaches.

Aligned with national and international standards, participants in this study initiated an Interdisciplinary Team-working (IDT) framework based on the WHO's Rehabilitation Competency Framework to enhance rehabilitation care delivery and support healthcare workers [29]. This framework was implemented at a tertiary referral center providing complex specialist rehabilitation services for both adult and paediatric populations across Ireland. Feedback from service recipients, families, and staff informed improvements in IDT working, with workshops and listening sessions facilitating input gathering. To facilitate interdisciplinary teamwork (IDT) within the rehabilitation centre, several key changes included a move to shared patient centred goal setting process, increased interdisciplinary meetings, and shared spaces within the organisation across disciplines were implemented in Table 1.

A group of four healthcare professionals who collaboratively led an initiative to transform multiple multidisciplinary teams into interdisciplinary teams across various programmes within a rehabilitation centre were selected as focus group participants. For the purposes of this study, these participants are referred to as change initiators, healthcare professionals who led the implementation of interdisciplinary team models across the centre. The focus group comprised four participants, including nurse and therapists. They were chosen to capture their lived experience of co-creating an interdisciplinary teams framework with hospital stakeholders and implementing changes to the rehabilitation teams. The aim was to gather their unique experiences and perspectives as change initiators within the rehabilitation organization.

Ethics approval and informed consent

The study received ethical approval from the rehabilitation service in question and a research ethics exemption

Table 1 Key changes to facilitate interdisciplinary teamwork in the organisation

Changes	Details
Shared Goal-Setting	A structured goal-setting framework was develop based on previous research, where patient-centred goals were collaboratively developed during interdisciplinary meetings. This ensured that all team members aligned their interventions with shared objectives
Increased Interdisciplinary Meetings	Regular, structured meetings were established, with dedicated time for case discussions, progress evaluations, and collaborative decision-making to strengthen rehabilitation team coordination
Shared IDT Office	Physical co-location of team members from different disciplines was implemented to facilitate informal communication and foster a collaborative team culture

The goal setting approach was informed by the work of Baker et al. [30]

from the University College Dublin Office of Research Ethics (Reference Number LS-E-20–09). Participants were provided with detailed information sheets and gave informed consent before the focus group. A distress protocol was established, although no participants experienced distress during the sessions. Prior to publication, a draft of this article was shared with participants to ensure their comfort with included quotes and themes. Participants were reminded of the possibility of identification within their organization, even with de-identified transcripts, both before data collection and before publication, and they consented to participate understanding this possibility.

Data collection methods

The research team, who are co-authors on this publication, were only involved in data collection and analysis. The focus group was conducted in September 2022, with two researchers present: LC facilitated the session and ZT took field notes. Co-authors who were embedded within the rehabilitation context were not participants in the focus group. A guide was developed, covering the implementation process of teamwork changes in the hospital, including conception, obstacles, facilitators, and perceived outcomes of interdisciplinary teamworking in the rehabilitation centre (guide available in Supplementary materials). The interview lasted 101 min and was audio-recorded. Field notes were taken post-interview to capture important factors for analysis. In addition, participants provided feedback by writing down key points from the session.

Data analysis

The recording was transcribed verbatim by a professional third-party service and checked by the researchers for accuracy. Participant codes were assigned for confidentiality, and NVivo 12 was utilized for coding and analysis.

Reflexive thematic analysis

A reflexive thematic analysis (RTA) was used to analyse the focus group data [31–33], an approach that provides researchers with a method to understand and immerse oneself in a qualitative dataset, which describes patterns of shared meanings [34]. There is variability in RTA as a method and we aligned our approach to a constructivist theoretical framework (as outlined earlier). This involved an inductive or bottom-up orientation to the data where coding and theme development were driven by data content. There are six phases of analysis: familiarisation; coding; generating initial themes; reviewing and developing themes; refining, defining and naming; writing up [32, 33, 35]. These phases were followed iteratively with codes and themes evolving throughout the analysis. Following transcription, the researcher (ZT) read and re-read the transcript while listening to the audio recording, becoming fully immersed in the focus group and creating notes on preliminary reflections and ideas. Next, initial codes were manually created by the lead researcher (LC) using NVivo software. A predominantly inductive and exploratory approach was taken with open coding, though there were points where deductive coding took place. For example, where new codes were created later in the dataset the transcripts would be re-read to specifically apply these codes at earlier points (LC). Codes which summarised a data segment (semantic codes) were created alongside codes which interrogated deeper or underlying meaning behind a data segment (latent codes). This was based on the interpretation of the researcher (LC) but checked by the co-researchers (ZT, AC). Themes and sub-themes were formed by clustering codes with similar meaning units, and recurrence, participant conviction, and relevance to the research question determined theme significance.

Results

Four healthcare professionals who led the initiative to transition from multidisciplinary to interdisciplinary teams within the rehabilitation centre, referred to in this study as change initiators, participated in the focus group. Their gender and discipline of participants could render them identifiable so we have omitted that information from the manuscript. In the focus group, participants were asked to reflect on the interdisciplinary team (IDT) framework and discuss the practical changes they had implemented or proposed within their teams. These changes are outlined in Table 1.

However, participants also identified several barriers to implementing these changes as three resulting themes from the reflexive thematic analysis are presented in this section with 10 sub-themes encompassed (see Fig. 1). These highlight the complexities of embedding interdisciplinary approaches in practice and align with existing research on the difficulties of organisational change in healthcare settings. Each theme illuminates different dimensions of an overall conceptualisation of IDT working as a disruption of the status quo in a rehabilitation healthcare organisation.

Theme 1: the nature of the battle for change

Subthemes: Not walking the walk, Context of change and burnout, Persistence of resistance to change.

This theme captures an overall narrative in which creating changes to healthcare teams was conceived of as a battle, with staff often resistant to introduced changes.

Subtheme: not walking the walk

Participants noted a contradiction: while many staff verbally supported IDT principles, they hesitated to address

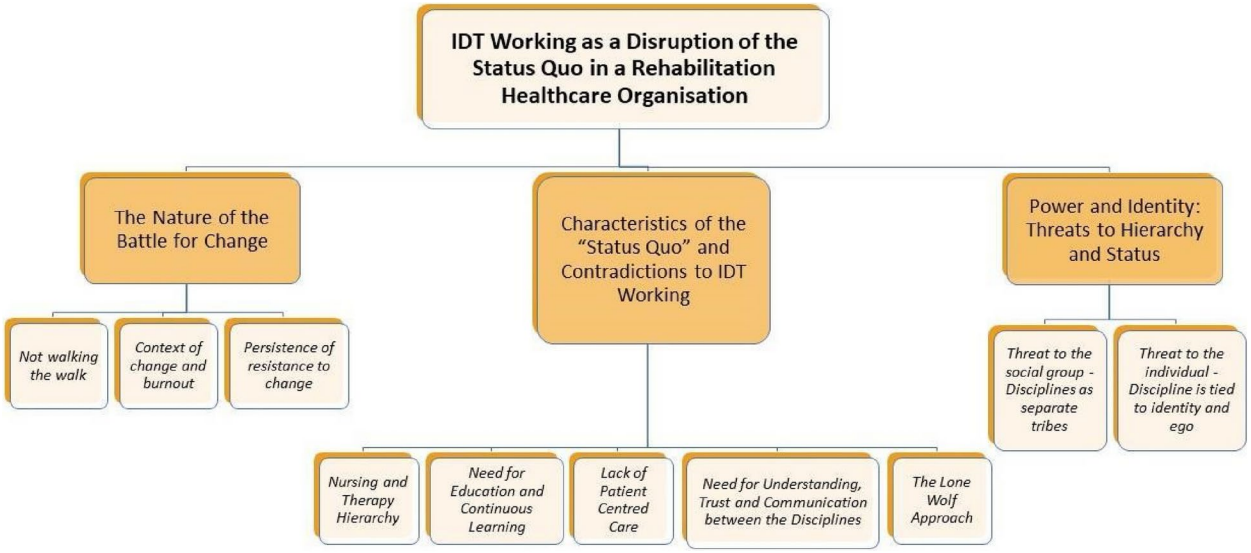

Fig. 1 Themes from the reflexive thematic analysis

team problems actively. IDT became a label rather than a guiding practice. Participants observed that while people were willing to discuss IDT values "beneath the surface" there was often a lack of motivation to truly embed these values into practice and tackle ongoing team issues. This reluctance is further described in the "persistence of resistance to change" subtheme as a struggle against entrenched attitudes.

Subtheme: context of change and burnout

This sub theme focused on participants' description of the context in which they were creating changes. It represents participants' perception of change fatigue within the organization, exacerbated by recent events like COVID-19 and relocation to a new facility. While the pandemic briefly improved teamwork, with a sense of staff pulling together to deal with a crisis, staff burnout and resistance to further change became commonplace. They discussed the specific "non crisis" aspect to a tertiary, non-acute hospital. The comfort of familiarity causing reluctance to change is described by participant 3: *"it's like putting on your comfy clothes, it fits well, I know where I'm going in them".* A sense of busyness and exhaustion seemed to permeate descriptions of staff resistance to change for example: *"People are pulled in so many different directions… and then I think that then fed in with COVID and whatever as well. There was a… Everybody was just burnt out. We can't do anything different anymore… That was the mantra that was common as well… Well, there was a sense of you're really hardnosed, you're trying to push through or, you know, kind of continue to change things. Can you not see*?" Participant 4.

Theme 1 focuses on participants' struggle to change the status quo in rehabilitation teams and give a voice to often unspoken issues. Despite surface-level agreement with IDT values, resistance to change and default to the status quo persisted. The subsequent theme explores the characteristics of this status quo and its challenges to IDT implementation.

Subtheme: persistence of resistance to change

This sub-theme captures how, in creating a narrative of their experiences in introducing changes to teams, participants cast themselves as disruptors within a resistant system. They expressed their own "naivety" and their underestimations of how persistently resistant to change the organisation could be. As reflected by participant 2 "I think we all underestimated. I think we all optimistically hoped that people would want to work differently because it would be more satisfying.."

When physical changes to the hospital environment were made with separate siloed departments eradicated in favour or shared IDT spaces—people reconstructed single discipline spaces. In this way aspects of the working culture outlived the physical environment. The participants discovered the discomfort creating changes to teams can cause, and suggested this was because they were endeavouring to speak the unspoken—giving a voice to issues often left unexpressed, raising issues that many did not particularly want to face. To the authors' interpretation, this created a sense of a 'battle' for the participants, illustrated by a latent weariness in their accounts. As participant 3 expressed: "In the same way as the patient forum has done that for years and years and years, but we kind of keep saying it and we also keep adding, so…".

Theme 2: characteristics of the "status quo" and contradictions to IDT working

Subthemes: Nursing and Therapy Hierarchy, Need for Education and Continuous Learning, Lack of Person Centred Care, Need for Understanding, Trust and Communication between the Disciplines, The Lone Wolf Approach.

The previous theme characterises changes to teamwork as a disruption of the status quo and a battle for the participants, describing the nature of this battle. This theme focuses on the status quo itself and specifically the elements of this that act as obstacles and/or major contradictions to a policy (and underlying values) of IDT working.

Subtheme: nursing and therapy hierarchy

Participants identified a starting point in their work: a divide between nursing staff and therapists. Change initiators described that, in their experience, nursing staff and healthcare assistants often felt undervalued and disconnected from their teams, citing a perceived lack of recognition for their contributions. One example they shared was the reliance on therapists to facilitate breaks for nursing staff, an expectation that therapists were often unaware of, which led to frustration and a sense of being overlooked. This dynamic underscores broader communication and role clarity challenges within the interdisciplinary team. This highlighted not just communication gaps, but also a lack of psychological safety and hierarchical dynamics. Such instances reflected a damaging divide, where frontline staff felt least appreciated. This division was evident in language use, where "the IDT" often referred only to therapists, underscoring the need for education and continuous learning to address misconceptions about IDT working.

Subtheme: need for education and continuous learning

In discussing key aspects of IDT working, particularly emphasizing reflexivity—pausing, reflecting, and learning to adapt—participants highlighted the challenge of translating theoretical knowledge about person-centredness or IDT working into practical application. They created contradictory narratives—while some learn valuable principles during training, some can lose them in entering work environments at odds with that ethos. This sub-theme also represents common misconceptions about teamwork and who constitutes the IDT discussing how, *"teamwork is more than people with the same coloured trousers working together"* (Participant 2) and how teamwork is more than staff "getting along". The central idea revolves around the necessity for continuous education and adaptation, with participants emphasizing the importance of learning from others and developing a shared understanding of interdisciplinary teams and rehabilitation. A lack of continuous learning is further reflected in Theme 3 (power and identity) as participants emphasised how one's professional identity can impede asking questions particularly to other disciplines. This highlights a perceived need for a cultural shift where learning and inquiry are valued.

Subtheme: need for understanding, trust and communication between the disciplines

Participants noted that staff members from different disciplines felt disconnected from each other, both professionally and personally. They discussed activities aimed at fostering understanding of each other's roles as a crucial step toward building a unified team. They also described get-to-know-each-other activities as humanizing and essential for cultivating empathy and respect among team members. Conflicts between staff were identified as a starting point for their work, with instances sometimes escalating to HR. Participants also noted a culture of unhealthy conflict avoidance, where staff struggled to openly disagree or communicate effectively, hindered by jargon and disciplinary language barriers. Together these codes convey teams with a lack of psychological safety and a culture where different staff of different disciplines can feel threatened by one another (see also "Power and Identity" theme), do not like to disagree and struggle to feel understood and to communicate to other disciplines. The participants tied this culture to many incidents of poor communication and collaboration between team members in practice.

Subtheme: lack of person-centred care

Participants highlighted various discrepancies in core values regarding person-centredness within the organization. Sometimes these were explicit statements made to them *"we're too patient centred now".* They recounted incidents where staff disregarded patient communication or made care decisions lacking in person-centredness. They stressed that person-centred care is crucial to IDT working, emphasizing that issues in teamwork and communication directly impact patient care.

> *"Talking over patients, yeah, was a big one, you know? Doing... a procedure and talking to the person working with you and not including the patient and even hardly acknowledging them". Participant 3.*

Subtheme: the lone wolf approach

The participants reflected on various incidents and attitudes encountered over recent years and constructed a narrative of individual choice trumping collective responsibility, as Participant 2 outlines:

"So, that sense of collaborative working... It seemed that if you didn't feel it as an individual, you didn't have to do it because the team wanted it or needed it or it was part of being a team, you as an individual could just decide to do something different. " Participant 2 and "There's a whole lot of stuff like that where it's the way people have always done it" Participant 1.

Participants emphasised that a joined-up, system-wide approach is essential for successfully embedding interdisciplinary teamwork (IDT) in rehabilitation settings. This sub theme has been titled the "lone wolf approach" because to the author's interpretation, the participants were describing people taking an individualistic approach to care that meant principles of IDT working or person-centred care were not really being fulfilled. Siloed disciplinary approaches were criticized for hindering holistic rehabilitation goals and neglecting shared responsibility.

"It feeds into the myth that rehabilitation is therapy, which, you know... I think for me, rehabilitation is about everything you do trying to get back to life, so it's about us providing that overall experience and opportunities but yet it's nobody job in a way to do it, so it's not my job as an SLT necessarily to do... You know, if I was to go into that, and that's nearly where we've gone to. Everybody in a box and a discipline around the individual and that ability to blur and to do shared things. The sharedness of team. That shared tasks of a team, shared responsibility of a team." Participant 4.

This ties into the identified need for continuous education, and a shared understanding of what "rehabilitation" is. Through reflection, participants emphasized the importance of a collective, "joined-up" approach to creating changes to teams. This includes identifying change leaders and ensuring input from all team members, though this was acknowledged as a challenging process.

"doesn't matter whether you call it team training, whether you call it person-centred care, you could use any approach going, but you have to have people who say, 'We're all doing this and we are going to invest the time, and we're going to value that, because it will make us more effective in our jobs.' But if you don't believe that and you believe actually it's all about the doing, 'If I do this in my isolation...' and that's really important, it's more important they get my physio than they get this whole teamworking in a more coordinated, a more collaborative manner, then we don't want to invest and we don't see it as being valuable." Participant 2.

The central organising concept for this theme is the participants' narrative of the default mode of teamworking within the hospital, which poses challenges for IDT. They advocated for challenging and dismantling the nursing and therapy divide, prioritizing person-centredness, continuous education on IDT values and rehabilitation, and fostering a consistent, united effort within the organization to move away from siloed disciplinary approaches.

Theme 3—power and identity: threats to hierarchy and status

Subthemes: Threat to the social group—Disciplines as separate tribes; Threat to the individual—Discipline is tied to Identity and Ego.

The organising concept of this theme is a latent sense of fear, mistrust and defensiveness on behalf of staff towards IDT working. The codes here can be categorised in two interlinked subthemes.

Subtheme: threat to the social group – disciplines as separate tribes

The first subtheme is those pertaining to the social element – where a discipline was conceived of as a tribe separate from others, where loyalty to one's discipline can often prevail over other obligations.

"I think discipline trumps everything for whatever reason. There's a multitude of reasons but discipline does... Discipline is where you're holding your heart and your head." Participant 4.

Subtheme: threat to the individual – discipline is tied to identity and ego

The second sub-theme describes how this operates on the individual level—that discipline is tied to one's professional and personal identity. As such, blurring disciplinary boundaries was seen as provocative by many, leading to fear and resistance. This was implicit and explicit in the participants' accounts -that challenges to the existing siloed approaches were sometimes perceived as threatening to one's status *("... you want to make everyone a healthcare assistant")* within the existing hierarchy and indeed one's very worth and value as a healthcare professional. For example:

"As we've said, if I give you my superpower, you're going to ask about the stairs, I will be diminished. I will have lost something of my superpower." Participant 2.

"We don't live the practice... I think that we are too precious. We're so precious that we can't see that blurring, sharing, is about getting better, not about losing anything. It's adding things. And that seems

to be a real challenge that we cannot crack." Participant 2.

Participant 1 noted that where the values of person-centred care are truly held, it can act as a sort of antidote to issues of ego *"… you should be able to park your ego".*

These subthemes highlight the complexities of professional identity discussed by participants. Another relevant aspect is the notion of being perceived as rehabilitation experts. As Ireland's only specialist neuro-rehabilitation hospital, staff are inherently viewed as experts in rehabilitation, a fact which can be used to hinder change efforts and maintain the status quo.

"but this is what we do… it's almost like, again we don't believe that because this is what we've seen and we're the experts" Participant 2.

Presented here is a pervasive fear and protective element to one's identity—participants discussed how staff fear undermining their expertise by asking questions or appearing incompetent. The protective factor underlines much of the theme, a defensiveness of one' professional identity and thus changes—in particular the blurring of disciplinary boundaries can be perceived as a threat to this identity.

This theme intersects with Theme 1, which depicted the ongoing battle for change amid resistance and burnout. The link between these themes highlights a need for control, as staff experiencing change exhaustion may revert to familiar, discipline-specific practices rather than fully embracing interdisciplinary team (IDT) changes. This finding aligns with research on change fatigue, which suggests that change initiators overwhelmed by continuous transitions may become resistant to new initiatives, preferring to rely on established routines as a coping strategy [22]. Ensuring structured support mechanisms, clear communication, and staff engagement in the change process may help mitigate this tendency and facilitate a more sustainable transition to interdisciplinary practice. This is offered by the participants as an explanation for staff resistance to IDT changes below.

Participant 4: I think people are pulled in so many different directions, to be honest. And I do think the kind of, I think it's natural, the self bit, does you know, kind of my physio, my whatever, my rules is ….

Participant 1: "But there's no control of that as well, you can control that much more easily … Nearly as you're getting pulled in all directions, that's the easiest thing to do, you can timetable, get through the week, get out of here again, because otherwise I'm just going to be …."

Issues described within this theme relating to power and control permeate the other two previous themes. Where theme one and two describe the nature of the challenges and resistance to changes to healthcare teams as a disruption of the status quo, this theme focuses on the very source of the resistance. For many, IDT working poses a mechanism to dismantling an existing hierarchy among change initiators and their healthcare colleagues and can be interpreted as a threat to one's current professional standing within that hierarchy. The fear of a loss of power permeates the "battle" described by the participants.

Discussion

This study explored the lived experiences of change initiators responsible for creating changes to rehabilitation teams within an Irish rehabilitation centre. Data were generated using a focus group discussion with change initiators of various disciplines and data were analysed using reflexive thematic analysis. Three themes were created, with ten sub-themes. All three themes illuminate different aspects of an overarching narrative of IDT working as a disruption to the status quo in rehabilitation healthcare.

Summary of findings

Theme 1: the nature of the battle for change

While the three themes together present a narrative of IDT working as a disruption to the status quo in rehabilitation healthcare, the first theme captures the difficult nature of enacting this disruption. Participants described how on the surface there was an established consensus among staff on the idea of IDT working however, when changes were created to teamworking in line with this resistance was almost always encountered. In this way, participants described how people did not "live the practice" or "walk the walk" of IDT working. The background setting to this resistance was described as a collective feeling of change exhaustion and burnout among health and social care professionals (HSCPs), resulting from contextual changes of the COVID-19 pandemic and the rehabilitation centre moving to newer and larger premises. Changes that came with IDT working such as moving to collective shared working spaces were sometimes clearly rejected by staff, who would reconstruct single discipline spaces or ways of working. The default adherence to a multidisciplinary way of working rather than interdisciplinary teamworking resulted in a sense of battle weariness permeating the participants accounts of their experiences of creating changes to teams. Within their narratives they cast themselves as the disruptors of an existing way of working and expressed surprise at their self-described "naivety" prior to creating these changes.

Theme 2: characteristics of the "status quo" and contradictions to IDT working

In casting themselves as disruptors within a resistant system, the change initiators also articulated features of the prevailing status quo and typical working practices that were often misaligned with the principles of interdisciplinary team (IDT) working. They described a noticeable divide involving nursing staff and healthcare assistants, who were frequently perceived as undervalued and not fully recognised as part of the team. This exclusion stands in direct contradiction to the foundational premise of IDT models, which emphasise the inclusion of all healthcare professionals involved in patient care.

Participants also described other entrenched features of the existing system, including implicit hierarchies between disciplines and a lone wolf approach to care delivery, which undermined collective responsibility. They reflected on specific incidents and behaviours that illustrated a tendency among some health and social care professionals (HSCPs) to prioritise discipline specific tasks over shared team responsibilities. These patterns were seen to diminish opportunities for integrated care and contributed to a lack of patient centredness within rehabilitation services. Participants further noted that some HSCPs appeared to resist or reject the core values of person centred practice.

A clear need was identified for ongoing education to support a deeper understanding of IDT working and person centredness. Participants emphasised the importance of cultivating mutual respect and trust across disciplines to support a truly collaborative team environment. These findings align with broader research on organisational change in healthcare, which highlights that isolated efforts to drive change without comprehensive, system wide support often lead to inconsistency and limited sustainability [36, 37]. Future initiatives may benefit from incorporating dedicated interprofessional training programs, shared governance structures, and formal communication pathways to ensure alignment across teams and services.

Theme 3: power and identity, threats to the status quo

If the previous two themes described the nature of the status quo and the resistance to changing it, this theme focused on the very source of that resistance – issues of power and identity. This theme represents how a healthcare professional's discipline can be considered an integral part of their identity and the blurring of disciplinary boundaries in IDT working can be perceived as threatening to one's identity and value as a HSCP. There was a social element to this, where loyalty to one's discipline prevailed over all else and different disciplines could at times seem like separate tribes. A powerful individual element was also evident both implicitly and explicitly in the participant's account. The blurring of disciplines was often perceived by some HSCPs as an individual loss of power, rather than a collective team gain. If IDT working is an act of dismantling an existing hierarchy among disciplines, then a loss of one's professional value and standing within that hierarchy can be feared by some professionals.

Implications of findings

Post-acute specialist rehabilitation is an inherently complex endeavour involving multiple health and social care professionals collaborating together. Yet, putting these professionals in a team together does not necessarily mean they know how to effectively collaborate and work together [38, 39]. Implementing changes to shift rehabilitation care from being discipline orientated as an MDT, to being person orientated as an IDT [40], requires embedding IDT values within an organisation as well as creating practical changes. In interdisciplinary team rehabilitation, the team set goals with the patient and family carer [26] and based on these goals interventions are implemented with continuous follow-ups [41]. These goals can be unique to that patient and research indicates that they should be driven by the patient not healthcare professionals [42–44] and that the team should support the patient in a shared decision-making process to ensure this happens [45, 46]. However, successful implementation and normalisation of these practices in rehabilitation care is a long way off. For example, studies report that many rehabilitation teams describe themselves as interdisciplinary despite not meeting the criteria [30], clinicians do not consistently use shared decision making in goal setting [47, 48] and teams do not consistently follow up and review goals throughout rehabilitation care [49–51]. Evidently, there are challenges in implementing changes to bring rehabilitation healthcare teams in line with best practices. Our findings explicitly illuminate the nature of these challenges with a unique perspective grounded in rich qualitative data from change initiators within an Irish rehabilitation organisation.

Results from the reflexive thematic analysis conceptualise IDT working as a disruption of the status quo in a healthcare organisation, one that is likely to be met with resistance. Changes to team working can be time consuming with additional meetings, and effortful with adaptive learning and flexibility of roles required. This is certainly one obstacle to IDT rehabilitation care however our findings emphasise a more powerful, latent source of resistance to IDT working. Throughout history, healthcare has been distinguished by a hierarchical power dynamic predominantly led by physicians [52]. Our findings illuminate a conflict between the legacies of this dynamic and IDT working. The participants described unspoken hierarchies among different disciplines in

which nurses and healthcare assistants are often undervalued or excluded altogether, with a lack of healthy conflict and communication between the disciplines, and a discipline-oriented approach to rehabilitation care. Within this context, IDT working is a disruptive force for the status quo that may challenge an individual's professional identity and be perceived as threatening to their individual standing and power within the organisation. The change initiators in our study highlighted many examples where blurring of disciplinary boundaries and shared decision making with the patient were perceived as a personal loss of power rather than a collective gain for the team and patient. Thus our findings align with Rogers, De Brún [53] whose participants also emphasised that a deeply ingrained hierarchical power structure remains embedded in the Irish health system. Although rehabilitation physicians are often well positioned to lead and unify interdisciplinary teams [7, 8], this role was not evident in the context of the current study. The IDT model described by participants was not physician led, and the absence of a clear leadership figure may have influenced the challenges described, particularly in relation to communication and shared goal setting. Future research could explore how different leadership structures, including physician-led models, impact interdisciplinary collaboration and team effectiveness in rehabilitation settings.

Recent Irish healthcare reforms emphasise the need to develop "the right team" to support IDT working [10]. The burden of effort involved in this challenge should not be underestimated. Sufficient time and resources should be given to staff members leading teamwork changes. In rehabilitation care, bringing organisations in line with best practices with a more interdisciplinary, person -centred way of working involves dismantling existing hierarchies, increasing collaboration among team members and placing focus on the individual patient – and all of this is a complex change to create in a healthcare organisation requiring a complexity sensitive approach [54, 55]. Enacting such fundamental changes within healthcare organisations is difficult because of the complex and interconnected nature of care delivery, where multiple stakeholders interact dynamically over various locations and periods, resulting in unforeseen consequences [54–56]. In this case, the changes made to rehabilitation teams were co-created by the stakeholders (HSCPs, patients and family carers) and tailored to this specific context as recommended by health services literature [36, 57–59]. One could describe this as "coalition building". Braithwaite, Churruca [36] discuss the integration of implementation science and complexity science through two case studies, one with a bottom up approach to change and one a top-down initiative. Both cases involved years of coalition building before eventually reaching a "tipping point" for successful changes. This seems to align with the case described in the current study, where the bottom up change initiative is ongoing and in the process of becoming normalised within the organisation. As rehabilitation services seek to scale up, expand and implement changes to be more patient lead, with interdisciplinary teams supporting patient decision making about goals and care, change initiators should be aware that these complex changes may indeed take years of extensive coalition building before reaching a tipping point for change.

Our findings offer valuable insights that can be summarized as follows. Firstly, from Theme 1, implementing changes that blur disciplinary boundaries and foster integration within healthcare teams should be viewed as an ongoing, iterative process involving coalition building with stakeholders. Secondly, drawn from Theme 2, ongoing education and interprofessional training are pivotal in fostering effective IDT collaboration. Such training programs should be designed to promote mutual understanding of roles, enhance communication skills, and develop collaborative competencies among healthcare professionals. This aligns with the World Health Organization's definition of interprofessional education (IPE), which occurs 'when two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes' [60].

Evidence supports the efficacy of IPE in improving healthcare delivery. A scoping review found that IPE enhances students' understanding of the contributions made by different health professional groups to patient care and facilitates effective healthcare team collaboration [61]. Specifically, IPE equips healthcare professionals with the ability to recognise when to refer patients to other team members to ensure holistic, evidence-based care [62]. Establishing ongoing interprofessional education and training initiatives is therefore essential for supporting the transition to and sustainability of IDT working. Activities aimed at fostering mutual understanding of each other's disciplines among staff are pivotal in cultivating trust and respect within an IDT framework. Thirdly, as highlighted in Theme 3, embracing IDT working demands a concerted effort to challenge and dismantle entrenched hierarchical power dynamics and disciplinary boundaries in healthcare settings – this is a conversation that must be initiated openly and explicitly with healthcare professionals. The exploration of hierarchy and power dynamics within health systems research remains relatively rare, and we urge future studies to delve into this aspect, particularly concerning the creation of more integrated healthcare teams. While our paper has emphasised the challenges inherent in effecting change within rehabilitation services, this endeavor holds significant merit. Positive workplace culture correlates with favorable patient outcomes [37], and existing

literature promotes shared goal-setting and patient support in rehabilitation teamwork [42, 45]. Our primary recommendations advocate for stakeholder engagement, viewing changes as a prolonged, iterative journey supported by continuous education and professional development. We identify IDT working as a catalyst for challenging the prevailing status quo within rehabilitation services, disrupting implicit hierarchical power dynamics.

Participants were reminded both before data collection and prior to publication of the possibility of being identified within their organization, even with de-identified transcripts, and they consented to participate with this understanding. While confidentiality measures were in place, including anonymized transcripts, the contextual details of participants' experiences may still have led to recognition, potentially influencing the depth and openness of their disclosures. Research suggests that despite best efforts to anonymize qualitative data, participants may remain identifiable due to the specificity of their experiences, which can affect their willingness to share sensitive or critical information [63]. This underscores the ongoing challenge of balancing respondent confidentiality with the richness of qualitative data. Future studies could explore additional strategies to mitigate this concern, such as conducting individual interviews alongside focus groups or employing anonymous survey methods to encourage more candid responses.

A key consideration in interdisciplinary teamwork is the role of the person receiving rehabilitation as an active team member. While this study focused on healthcare professionals' experiences of interdisciplinary collaboration, it did not examine the perspectives of individuals undergoing rehabilitation. Patient-centred care models emphasize patient involvement in goal setting, shared decision-making, and treatment planning. Research suggests that integrating rehabilitation patients into interdisciplinary collaboration can enhance treatment adherence, satisfaction, and overall health outcomes [30]. The exclusion of patients as interdisciplinary team members in this study represents a limitation, as the extent to which they feel integrated into team-based care remains unclear. Future research should explore rehabilitation patients' experiences in interdisciplinary teams to better understand their role in shaping collaboration and improving rehabilitation outcomes. Such research could inform strategies to enhance patient involvement and strengthen interdisciplinary approaches.

Regarding the methodological concern about relying on a single focus group, while Hennink and Kaiser [64] provide guidance on the number of data collection points in focus group research, this study adopted reflexive thematic analysis, aligning with Braun and Clarke's [32–34] critique of saturation in qualitative research. Rather than defining saturation as the point at which no new themes emerge, reflexive thematic analysis prioritizes the adequacy of data in relation to the research question, the depth of analysis, and the richness of insights generated.

Although this study is based on a single focus group, the participants were senior rehabilitation specialists directly involved in leading the transformation of rehabilitation teams. Their insights, shaped by extensive professional experience, strengthen the credibility of the findings. The perspectives they provided offer valuable depth and practical relevance to understanding interdisciplinary teamwork dynamics in rehabilitation settings. Nevertheless, we acknowledge that broader inclusion of additional healthcare professionals, including physicians, could further enhance the comprehensiveness of future research in this area. In addition, as the study focused exclusively on the perspectives of initiative champions leading the change process, the findings reflect their interpretations of the broader team's engagement with interdisciplinary working. While this focus provides valuable insight into leadership experiences and perceived organisational barriers, it does not capture the views of other team members within the rehabilitation service. This represents a limitation, as direct input from the wider healthcare team may have provided a more comprehensive account of the facilitators and challenges encountered. Future studies could address this by triangulating perspectives through additional methods, such as surveys or interviews with broader staff groups, to enrich understanding and support more inclusive analysis of team dynamics.

Conclusion

In conclusion, implementing changes in healthcare organizations, particularly within hierarchical systems like the Irish healthcare system, is inherently complex and challenging. Our examination of interdisciplinary team rehabilitation reveals how it challenges the status quo and disrupts existing hierarchies, posing significant barriers to adoption. This underscores the need for a nuanced approach, particularly with bottom-up initiatives.

In addition, the findings of this focus group study align with existing research on the challenges of interdisciplinary teamwork, which consistently highlights issues such as communication barriers, differing professional cultures, and conflicting priorities. Effective communication is crucial for patient safety and care quality; however, differences in terminology, communication styles, and information-sharing practices among various professions can lead to misunderstandings and errors. For instance, a lack of standardized communication protocols may result in incomplete or misinterpreted information transfer, compromising patient outcomes [65]. Differing professional cultures also pose a significant barrier to collaboration. Each healthcare profession has its own values,

beliefs, and practices, which can create silos and hinder teamwork. Hierarchical dynamics may discourage open dialogue, leading to power imbalances and reduced team cohesion [66].

Our recommendations emphasize the importance of viewing the transition to interdisciplinary working as a long-term, iterative process. This requires extensive coalition building with stakeholders, supported by continuous professional development and education initiatives aimed at fostering understanding and respect between disciplines. Explicit discussions about hierarchy and status should be initiated early on to address potential sources of resistance.

These recommendations are intended to provide practical guidance for healthcare practitioners and policymakers navigating the complexities of implementing interdisciplinary, person-oriented approaches in rehabilitation practices. By heeding these insights, stakeholders can better anticipate and address challenges, ultimately enhancing the quality of care delivery and patient outcomes.

Supplementary Information

The online version contains supplementary material available at https://doi.org/10.1186/s12913-025-12795-6.

Supplementary Material 1.

Authors' contributions

Funding acquisition for the study came from AC. Conceptualisation of the study originated from LC, ZR, and AC. LC and ZT developed study protocol and collected study data. LC completed thematic analysis of data, while ZT completed secondary analysis as additional coder. LC and ZT drafted the final report, and AC and LC completed reviewing and editing of manuscript. AT prepared figures, supplementary materials, and prepared the manuscript for journal submission. GH reviewed and revised manuscript. All listed authors meet authorship criteria. All authors have reviewed this manuscript and approved manuscript submission.

Data availability

The datasets generated and/or analysed during the current study are not publicly available due to privacy purposes but are available from the corresponding author on reasonable request.

Declarations

Ethics approval and consent to participate

The study was approved by the University College Dublin Office of Research Ethics (Reference Number LS-E-20–09) and conducted in accordance with the principles of the Declaration of Helsinki. All participants provided informed consent prior to participation and publication.

Competing interests

The authors declare no competing interests.

Received: 24 July 2024 / Accepted: 23 April 2025
Published online: 07 May 2025

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