

ARTICLE



United and flexible: a collaborative approach to early vocational rehabilitation on a spinal unit. A realist study

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STUDY DESIGN: Qualitative study using realist review.

OBJECTIVES: To conceptualise how Early Intervention Vocational Rehabilitation (EIVR) functions within inpatient multidisciplinary contexts during spinal cord injury (SCI) rehabilitation.

SETTING: New Zealand Spinal Unit.

METHODS: People with newly acquired SCI and members of their rehabilitation team were observed in a range of rehabilitation sessions, team meetings and therapeutic interactions. Participants were also interviewed to explore how EIVR functioned alongside the multidisciplinary team (MDT). Interviews and observations were transcribed, coded and analysed using realist methods.

RESULTS: We identified three primary contexts which influenced how EIVR was delivered within the MDT: (1) a united approach, (2) a flexible approach, and (3) a hesitant approach. These contexts generated four work-related outcomes for people with SCI; enhanced work self-efficacy, strengthened hope for work, maintained work identity, and the less desirable outcome of increased uncertainty about work.

CONCLUSIONS: To optimise work outcomes for people after SCI, it is important to consider how EIVR is delivered and integrated within the wider MDT. Such an understanding can also inform the establishment of new EIVR services in different settings. Results suggest that unity, flexibility and clarity between EIVR services and the wider MDT are essential foundations for supporting people with SCI on their journey to employment.

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INTRODUCTION

Work is a central component of identity in western society [1–3], providing financial independence, social standing, purpose and self-esteem [4]. After any injury, returning to work is linked to increased wellbeing, quality of life and better physical and mental health outcomes [5, 6]. However, unemployment rates after spinal cord injury (SCI) remain significantly higher than the general population, with only 35–45% of people in developed countries returning to work after SCI [5] and return to work occurring an average of five years after injury [7, 8].

In New Zealand (NZ), people with SCI have paid employment rates below those of the general population of working adults [9–11]. In an NZ SCI cohort study, only 49% had returned to work by 18 months [12]. This inequity is more apparent for Māori (the indigenous people of NZ), who have a higher age-adjusted SCI incidence rate (46%) compared to NZ European (29%) and lower return to work rates at 18 months post-injury [13].

Vocational rehabilitation has been shown to improve work outcomes for people after SCI. Vocational rehabilitation can be defined as “whatever helps someone with a health problem to stay

at, return to and remain in work: it is an idea and an approach as much as an intervention or a service” [[14], p. 5]. This broad definition reflects the diverse nature of vocational rehabilitation services, making it more challenging to understand what constitutes best practice. There is strong evidence that early intervention vocational rehabilitation (EIVR), commencing during the initial/hospital rehabilitation phase, is effective [14, 15]. EIVR goals are achieved through empowering people [16] providing hope [17] and early practical support such as engaging employers or exploring work options [2, 18, 19]. However, it is not yet fully understood *how* EIVR works for people with SCI, especially within the wider rehabilitation environment. There is also some hesitancy about delivering vocational rehabilitation too early due to concerns that newly injured people require time to adjust before engaging in conversations about work [20]. However, there is evidence that this adjustment period is shorter than previously thought [21, 22], and a better understanding of EIVR complexities will further address some of these concerns whilst optimising how EIVR is delivered.

In NZ, EIVR is delivered in-person to people with SCI during their inpatient rehabilitation. EIVR providers, employed by a charitable

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trust (New Zealand Spinal Trust), use a 'client-centric' framework to provide early individual career coaching, workplace support, early engagement with employers and personalised education designed to promote empowerment and foster hope for RTW very early after injury [23–25]. The NZ Spinal Trust EIVR service engages with 80% of people within the first three weeks of having an SCI [23].

This research study is a part of a larger Early Vocational Services study (EVocS) which used a three-phase knowledge synthesis, evaluation and knowledge translation exploratory design [19, 26]. The particular focus of this study was to conceptualize how an EIVR service functions within an inpatient multidisciplinary SCI team.

METHODS

We employed a realist research approach to better understand how EIVR functions in real-time clinical rehabilitation. Realist approaches aim to describe and understand context-mechanism-outcome configurations to build emergent theory about what works, for whom, and in what circumstances. EIVR is individually tailored, so understanding how contextual factors and mechanisms of intervention effect interact contributes to a deeper understanding of how work outcomes can be optimised. An observational design helped to capture the manifestation of real-time outcomes for people receiving EIVR. This study was ethically approved by the University of Otago (H19/170).

Procedure

People from one NZ specialist spinal unit were invited to participate if they had sustained an SCI in the previous six months, were employed at the time of injury, were NZ residents over 18 years and could participate in interviews in English. People were recruited purposefully either by a NZ Spinal Trust EIVR staff member or physiotherapists who had daily contact with patients on the spinal unit. Purposeful sampling ensured Māori (indigenous people of NZ) and people with differing injury severity and funding sources were included. The recruiter provided potential participants with an information sheet, and the researcher visited potential participants approximately a week later, allowing opportunities to ask questions, discuss any concerns and talk about study logistics. Members of the participant's rehabilitation team, including EIVR staff, were also invited to participate in the study.

Data collection

Following recruitment, if the participant and staff member consented, a range of rehabilitation sessions were observed. During observational sessions, the researcher was physically present and briefly introduced themselves to the participant, reminding them they could ask her to leave at any time without providing a reason. To capture what happened and record analytical data on those observations, sessions were audio-recorded, and field notes written. As soon as possible after observing EIVR or rehabilitation sessions, semi-structured interviews were conducted with the participant and their clinical team members. By observing sessions, the researcher was able to explore specific examples of EIVR and team activities within the interviews, to understand better how EIVR was delivered, including why and how it was adapted for different participants (see Appendix 1 for sample interview questions). Observed sessions and subsequent interviews occurred on multiple occasions during each participant's inpatient stay to explore how participants' rehabilitation experiences changed. The ratio of interviews to observation sessions, and the order in which they were conducted, developed organically depending on the unique trajectory of each person's circumstances and rehabilitation path. Data collection occurred over a 16-week period.

Data analysis

Transcripts were uploaded into data analysis software NVivo (Version 1: QSR International Pty Ltd) for initial open coding. Sensitized coding then sought data that supported, refuted or refined the initial programme theory developed during previous stages of the EVocS study [2]. Data were coded in terms of contexts, activities/reasoning (mechanisms) and outcomes in keeping with realist principles [27]. Emerging ideas then informed future interviews, with some concepts being explicitly explored with participants where appropriate. This process led to the refinement

and iterative development of 'if-then' statements. This iterative process involved ongoing analysis, conceptualisation and theory refinement in collaboration with three team members (ET, JB, RM). The significance of how both EIVR and the wider MDT influenced participants through work conversations became apparent over time, contributing to a progressively increased focus during analysis and questioning. Through this process, some themes from initial programme theories and previous stages of the EVocS study became more or less prominent.

RESULTS

Twenty-four people participated in the study: seven people with SCI (Table 1) and 17 clinical staff members (Table 2). The majority of participants with SCI were male ($n = 6$) and of NZ European ethnicity ($n = 6$). Participants had a range of educational background, employment backgrounds, injury severity and employment outcome at the time of leaving the spinal unit (Table 1). Data collection occurred at the spinal unit and associated rehabilitation workspaces and consisted of 16 observations (7 h 36 min; mean: 29 min, range 8–75 min) and 54 semi-structured interviews (total time 21 h, 22 min; mean 24 min per interview; range 4–93 min).

Findings

Overall, people with newly acquired SCI valued early conversations about work with a team culture that work was assumed as

Table 1. Demographic data of participants with SCI.

Demographic	Group	<i>N</i> = 7
Gender	Male	6
	Female	1
Ethnicity	NZ European	6
	Māori	1
Age (years)	30 and under	3
	31–45	1
	46–60	2
	61 and over	1
Cause of injury	Transport	4
	Sports	2
	Fall	1
Severity of injury (AIS)	C1-4: B	1
	C5-8: A	1
	T1-S5: A	3
	D	2
Time post injury at recruitment (months)	1–2.	3
	3–4.	4
Length of spinal unit admission (months)	2–3	4
	4–5	2
	6–7	1
Occupation at time of injury	Labourer	2
	Trades and technicians	3
	Professionals	2
Qualifications	Secondary school	2
	Post secondary school qualification	2
	University degree	3
Work outcome at time of hospital discharge	No clarity	1
	Exploring options	2
	Approximate return to work plan in place	3
	Early retirement	1

possible but was discussed without agenda. EIVR was an integral part of the rehabilitation service. It was a flexible service that sat together with the MDT, but with some separation in terms of processes. *How* EIVR works with the MDT, and under *what* circumstances, will be explored in detail in terms of contexts, mechanisms and outcomes (CMOs; see Fig. 1 and Table 3).

Table 2. Demographic data of staff participants.

Demographic	Group	N = 17
Profession	Physiotherapist	5
	Occupational therapist	2
	Vocational consultant (EIVR staff)	2
	Social worker	1
	Psychologist	1
	Nurse	1
	Doctor	1
	Independent Living Coach	1
	Health care assistant	1
	Transitional rehabilitation coordinator	1
	Māori health worker	1
Gender	Female	12
	Male	5
Ethnicity	NZ European	9
	European	4
	Māori	2
	Cook Island Māori	1
	Other	1
Age (years)	18–30 years	2
	31–45 years	7
	46–60 years	5
	Over 61 years	3
Time working on spinal unit (years)	0–5 years	7
	6–10 years	5
	11–15 years	2
	16–20 years	1
	Over 21 years	2

Key contexts impacting mechanism activation

Early work conversations across the EIVR team and the MDT occurred organically in response to three key contexts that determined how EIVR and the MDT functioned together: a united approach, a flexible approach, and a hesitant approach. These contexts resulted in four possible primary work outcomes for people with newly acquired SCI: enhanced work self-efficacy, strengthened hope for a working future, maintenance of a working identity and the less desirable outcome of increased uncertainty for work. Table 4 provides additional data extracts.

A united approach

Often the entire team had a united approach to work conversations. The shared stance of team members was that work was possible for people after SCI regardless of individual circumstances, although it was widely acknowledged that understanding a person's unique circumstances was important in approaching any work conversations. Most MDT members felt that they had a role in work conversations and integrated work goals into their rehabilitation activities. Some staff identified that people with SCI would discuss various aspects of their thoughts about work with different staff members, often due to a trusted relationship. Therefore, work conversations were viewed as everyone's responsibility. One staff participant said, *"that's the strength of this service... it's interdisciplinary, so there is a little blurring"* (S16).

However, it was unique for each therapeutic dyad (i.e., staff member and person after SCI) as to how much each staff member delved into work discussions, with the person with SCI often guiding the process. For example, one staff member stated, *"It's really led by him. It is 100% led by him. So, I don't really bring up work into conversation. I'll let him bring it up"* (S13). Staff communication and collaboration were effective when there was a united approach to work conversations across the entire team. This was underpinned by mutual respect and understanding of one another's role. The value of a united approach was echoed by participants with SCI who noticed collaboration when EIVR and MDT staff incidentally crossed paths and saw the value in blurring professional roles and being physically on-site together.

I think [the entire team] all cross over. I think the more that you can have everyone in sort of one place....I reckon it's really good....I reckon it definitely connects, you know, crosses boundaries and stuff (Participant with SCI; P5)

EIVR staff spoke of tailoring how and when they approached people with SCI based on information from the MDT. EIVR staff either prioritized seeing a person or giving them space, based on

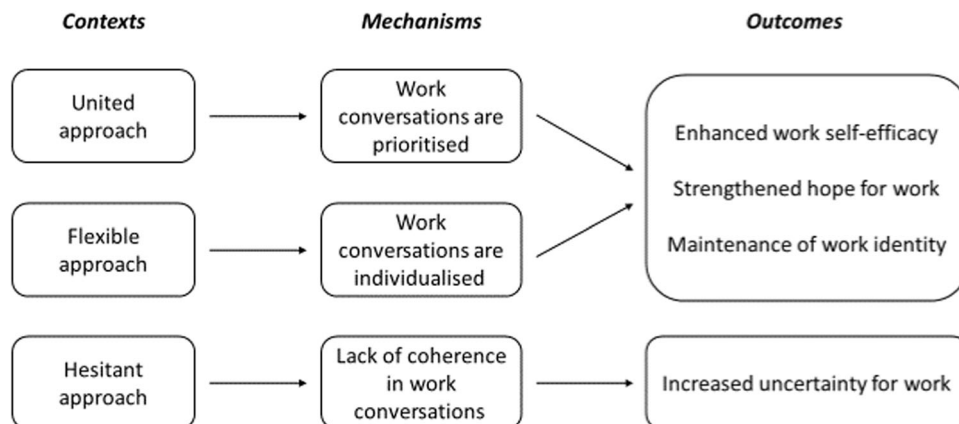


Fig. 1 Overview of how early intervention vocational rehabilitation outcomes are achieved in the context of inpatient SCI rehabilitation. The contexts relate to the approach used by the multidisciplinary team, and the mechanisms overview the ways that work conversations occur within the person's rehabilitation to influence vocational outcomes.

Table 3. Overview of context-mechanism-outcome (CMO) configurations.

CMO title	Contexts of EVIR and MDT working together	Resources provided by EVIR and MDT staff	Outcomes for person with SCI	Mechanisms	
CMO 1: 'A united approach': The team have a united approach to work conversations where team members understand what others are doing and why	United culture amongst the EVIR and MDT that work is possible, AND	Communication with people with SCI about work.	A feeling that I have control of my work destiny.	Work is valued and prioritised.	
	Work conversations are part of everyone's role, AND	Communication between all staff about work.	A belief that work is possible for me even if I don't know how or what yet.	Building trusted relationships.	
	Work conversations start from a person arriving on the spinal unit but without pressure	Presence of EVIR in meetings.	A continuity of self, including work identity.	Feeling respected.	
		Shared work goal activities.		Reduced anxiety for the future.	
		Clarity in who is doing what, when.		Being understood.	
		Trusting one another's expertise whilst blurring some professional boundaries.		Power of a consistent message – 'if everyone is talking like work is possible, it must be'	
		Sharing stories of peers work journeys with people with SCI.		Staff understanding of me increasing as they collaborate.	
		Exploring practicalities of work with both EVIR and MDT staff.		Staff better able to consider the best approach to rehabilitation (including work) as they collaborate.	
		People with SCI 'testing' themselves to better understand how things may be at work			
		Taking time to build relationships.		A feeling that I have control of my work destiny.	Work conversations are individualized.
CMO 2: 'Flexible approach but with clarity': The team are flexible but clear with a person with SCI about how they can support them with carving a working future	There is a flexible approach to work conversations by the whole team but especially EVIR AND				
	There is clarity around how the MDT and EVIR team can support a person with SCI return to work AND	Understanding the 'space' a person with SCI is in on any given day.			Discussions about work are tailored to me.
	Work conversations are not pressured.	EVIR being able to work flexibly but with anchoring processes.	A continuity of self, including work identity.		EVIR can be more or less present in my rehabilitation as I need it.
		EVIR and MDT staff providing a combination of formal and informal avenues for sharing information, planning and updating			MDT can have more or less of a role in supporting me with work depending on my needs.
		Using conversations about work and productivity to support people's adjustment			MDT staff are supported and influenced by the EVIR staff.
		Avoiding difficult conversations about work with a person with SCI.		I experience increased uncertainty for my work possibilities and future.	EVIR staff are supported and influenced by the MDT staff.
		Being vague in how EVIR are or could provide work support.		I lose confidence in staff (EVIR and/or MDT).	Lack of coherence in work conversations
		EVIR and/or MDT staff having conflicting conversations about work.			Conflicting, faltering or absent message about if and how work may be possible for me.
		EVIR and MDT not communicating well with one another.			Confusion or ambivalence between EVIR and/or MDT staff.
					Reduced agency.
CMO 3: 'Hesitant approach': There is not a united voice and there are missed opportunities to discuss and support people with their work journey					Loss of confidence in returning to work.
					Work identity is diminished or confused.

Table 4. Additional data extracts illustrating context-mechanism-outcome (CMO) configurations.

CMO title	Example quotes
CMO 1: 'A united approach'	Interviewer: Do you remember the first conversation you had with P4 and what he spoke about in terms of work?
	S17: I do. I recall he was keen to go back to work and I said to him 'what would be your goals?' He said 'oh' and he was so excited, it was everywhere. He said "I want to get a job, you know, 'what are your interests, actually think about what you'd like to do and always don't stop dreaming about what you'd like to do'. And so he did. So I said 'shall we engage early with [EIVR]?' (S17 - MDT staff)
	The times where they have linked in most with some of the vocational therapists, its been really great because it's been led by the patient.....it's been nice to have that conversation and then to kind of carry that through to be able to be like, 'oh, look, I hear you've been talking to the vocational therapist, is there anything you want to focus on in these sessions?' (S7 - MDT staff)
	Most people, they kind of, as they go from hope to despair, they also juggle the things they've lost against the things they haven't lost. Part of our job, and the staff's job here, is to help people see that the things they've lost maybe are not as big as they seem and the things that they retain maybe are more enduring or valuable than they think they are. (S5 - MDT staff)
	Interviewer: And did that [practice session] give you any more thoughts about picturing work?
	P6: Oh yeah, it'll be pretty easy, yeah, yep. There's usually a bit of track work in the winter. Getting out and getting the gates is going to be the annoying thing. But nah, that'll be alright....it'll sort of just be slower.
	I think we hear more about the emotional trauma and turmoil of what to do - should I be pursuing this, should I be concentrating on being able to do my ADLs and get myself up and ready for the day, or should I be more focused over here, about returning to work, and getting other people to hurry along to get me done, and things like that.... And that's the strength of this service....it's interdisciplinary, so there is a little blurring, or crossing some different lines (S16 - MDT staff)
CMO 2: 'Flexible approach but with clarity'	So you've got this huge variation in people's adaptation, so having one single, unless it was extremely had a lot of branches in it, and a lot of contingencies, having one method of addressing vocational issues that fitted everybody in terms of the nature of the disability, the extent of the disability, the timing, the likelihood of recovery, you know, it requires a lot of flexibility. (S5 - MDT staff)
	But if we can get started in, like, um, what is my occupational role, that'll be cool. You know, because that'll just really, um, well, it'll just put me to work, really. You know, and I can't wait to be put to work. And something that I'm really passionate about. (P5)
	Interviewer: And how does that feel, that conversation [about career options]?
	P4: Opened my eyes. I feel like my brain's on fire, getting some ideas and stuff.
	I don't think there's any harm in raising the vocational issue really early on. It's all how you do it. It's not the way you approach it is perhaps more important than when you have the conversation, and clearly some people won't be ready to even talk about it so you kind of back off and come back later. (S5 - MDT staff)
	It's not often that we set a specific time because what we find is, the information that we pass on is received a lot better, the barriers come down, and the, you know, they open up in what they're saying. It always happens better on a spontaneous, informal situation. Um, yeah, you know, rather than saying, "OK, at 10 o'clock we're going to talk about work." (S10)
CMO 3: 'Hesitant approach'	We probably don't communicate with the voc rehab people either, we rarely sit down with them and go 'this is what your job role looks like, these are the things that she would need to do, what do you think we need to do to get there?' So I think from an MDT perspective, it's something we don't do well. (S3 - MDT staff)
	I kind of think, "is it me that's supposed to contact them when I want them?" I'm probably unsure of that. I think that will be one thing that would be quite good, is to have, maybe, like, an induction when you come into
	something, and, um, and... like, they did all come in and introduce yourself, but you're like, you're still half out
	of it, you know, in your early days. But just to know what the expectations of each person's job is, like, you know, told that [this person does EIVR], and this is her type of work...But knowing what's the process - do they come and see you regularly, or do they not come unless you request them? (P2)
	I haven't seen [him] for a long time because I... and I do need to... but I don't know how he'll receive me (S2 - EIVR staff)
	But what's the purpose of those 'chats' [EIVR have with patients]? What's the aim? Where are you heading? What's your goal? (S14 - MDT staff)
	...he's in a really vulnerable space at the moment so I wasn't sure whether asking those questions [about work] would add pressure that he didn't need. 'Cause he's been a little bit up and down mood-wise, physically he's responding really well with his injury and his rehab, but mentally he's really been struggling (S3 - MDT staff)

P participant with SCI, S staff participant.

information from the MDT about medical complications, psychological state, or social concerns on any given day.

If the entire team had a united approach that reinforced work as possible following SCI, then work conversations were prioritized and permitted as part of the whole team's rehabilitation role. Many participants with SCI spoke of increasing confidence to take control of their pathway back to work (enhanced work self-efficacy). There was also a strong narrative in observations and interviews about a person's work identity and its meaning, alluding to a biographical continuity whereby a person was understood and respected in their entirety.

'A flexible approach'

The early weeks and months after SCI were often a turbulent time for participants with SCI, and they spoke of the need for flexibility by the entire team but especially from the EIVR staff. EIVR staff often had unscheduled sessions with people with SCI, which created a more informal conversation, allowing them to understand a person with SCI more deeply and holistically.

[The EIVR staff] popping in is quite good because they catch you in different environments...so I think that's quite good because you sort of get to have different conversations than you sort of wouldn't have, and you know, other things pop up Participant with SCI; (P5)

One participant with SCI spoke of the value of developing a trusted relationship with EIVR staff, describing them as a "super helper" (P4). This participant stated that EIVR staff would often not have a specific agenda for a session. Instead, the sessions were guided by their needs on any given day, using a "caring" approach (P4). Many participants echoed the value of being understood by EIVR staff.

MDT members also found people with SCI were more likely to raise work in informal moments of rehabilitation sessions, such as during a rest between exercises or going on an outing. Having the space and flexibility to embrace these moments allowed an individualized approach and "the barriers come down" (S10). One staff participant spoke of how a flexible approach was necessary given the large variation in how people adapt after SCI. Flexibility allowed work discussions to be individualized to each person's unique needs and situation. In addition, well-framed, non-pressured work conversations could help people psychologically adjust to their SCI. Thus, an early but flexible conversation about work with someone grieving after SCI could strengthen a person's hope for the future.

'A hesitant approach'

There were times when staff were hesitant to discuss work with people early after their SCI due to concern that this might "add pressure" (S3). This often occurred when uncertainty was present for a person with SCI, regarding areas such as expected neurological recovery, an unclear path back to work, psychological adjustment to their injury, or a high level of grief and uncertainty after their SCI; "I haven't seen [person with SCI] for a long time because I... and I do need to... but I don't know how he'll receive me" (S2 – EIVR staff). In addition, some SCI participants felt confused about identifying EIVR staff and a lack of clarity about their role when conversations with EIVR staff were vague in efforts to not "push an agenda" (S2). One participant with SCI described a lack of clarity around how EIVR services worked, which resulted in confusion about what had or hadn't been actioned.

...it would've been good for [EIVR staff] to come back to me and say, "I spoke to [your employer], and they're working on this." Just that, you know, closing it off. (P2)

Whilst the MDT consistently felt work was possible after SCI, there were some conflicting messages about work from within the MDT, and between EIVR and the MDT. This led to some participants with SCI drawing their own conclusions about work. For instance, one participant stated, 'by the sounds of it I won't be able to do much [work] (P3), which contrasted with what many staff believed. Other participants felt more uncertain about their working future due to inconsistency from staff: *There's a disconnect between the messages that the medical team will give, versus what the rest of the team will give (S3)*'. This was not just a difference in approach between disciplines, but at times was also between individual staff members who took a different approach to work conversations; *'So, what it looks like to me is individual staff with their individual capacity and biases coming to some conclusion (S14)*'.

When work conversations were approached hesitantly, participants with SCI described increased uncertainty for work, often on top of existing uncertainties in other areas of their life such as housing, finances and identity. This increased uncertainty contrasted with the other three outcomes and uncertainty was least frequently observed. See Table 4 for further data extracts.

DISCUSSION

This study sought to understand how the contexts of EIVR working with the wider team activated mechanisms that improved (or not) work outcomes for people early after their SCI. Results build on existing knowledge of the value of EIVR for empowering and instilling hope early for people after SCI [2, 16] and demonstrate the importance of a united and flexible approach taken collectively by the entire team. EIVR has been suggested to 'sow the seeds' of returning to employment [28] and this study shows how the optimal environment provided by the wider team can either enhance or stunt the growth of these seeds.

Our study is unique in focusing on how EIVR is embedded within the MDT, with a united and flexible approach being paramount. Previous research has described team culture and collaborative working as sharing, partnership, and interdependency underpinned by effective communication [29]. This study identified structure, clinician training and a belief in future working capacity as important for hospitalized adults with an acquired neurological impairment [30]. This echoes our study's findings and highlights a need for clinician training, which may address some of the observed hesitancy in work conversations. Using a more structured approach to work conversations, such as early orientation of the rehabilitation team towards the patient's work coordinated by EIVR staff, has been found to promote early work conversations in rehabilitation for people with acquired brain injury [31]. Such training and structure may better embed EIVR in the team and reduce hesitancy in early work conversations.

Flexibility in the team's approach relates to the well-established notion of 'person-centred care', originally articulated as 'understanding the patient as a unique human being' [[32], p.269]. Processes required to achieve this have been summarized as cultivating communication, respectful and compassionate care, engaging patients in managing their care and integration of care [33]. However, flexibility is arguably also essential to enable person-centred care. Furthermore, an additional facet of flexibility illuminated in our study was the value of informal connection to build relationships. Once strong relationships are established, general rehabilitation interventions, as well as EIVR, can be individualized and with greater partnership [34]. Therefore, it is important that flexibility, with time for informal relationship building, is a prioritized aspect of EIVR within an inpatient team.

A recent synthesis of vocational rehabilitation for people with SCI deduced that an empowerment model of EIVR could promote wellbeing and employment outcomes and emphasized the

importance of an individualized, person-centred approach [22]. Our conceptualization of EIVR within the wider MDT both supports and builds on this premise, affirming the desirable outcomes of bolstering self-efficacy and fostering hope. In terms of the undesirable context of hesitancy, the issue with conflicting expectations between the individual and health providers has been previously identified [19]. However, some of this hesitancy may be dispelled if people's expectations about returning to work are explored as part of the rehabilitation process from the outset [21], aligning to the findings in the 'united approach' theme. However, what our study adds is the insight that hesitancy in early work conversations not only is a missed opportunity for supporting people on their pathway to work but can detrimentally move them further away from work readiness.

A limitation of the study was the small number of directly observed sessions of EIVR partly due to the impromptu nature of EIVR conversations. Also, EIVR staff were concerned that a researcher might undermine the informal and 'no-agenda' conversations they were striving for. To account for this, interviews with participants occurred as close to conversations as possible to optimize recall of events and capture participants' early thoughts.

In conclusion, we found that embedding an EIVR service within an MDT inpatient team in a collaborative way allows for a united and flexible approach to early work conversations, thereby optimizing outcomes. Conversely, if there is hesitancy in how work is approached by the MDT and EIVR staff, then there may also be a negative effect on a person's outlook for work. Findings can inform the designing of future EIVR services and further research could explore how EIVR services function with rehabilitation teams supporting people with other acquired neurological disabilities such as stroke.

DATA AVAILABILITY

Data generated and analysed during the study are available from the corresponding author on reasonable request.

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AUTHOR CONTRIBUTIONS

All authors were involved in the study design. JD was study principal investigator and provided an overview of interpretation. ET recruited and conducted data collection. ET, JB and RM conducted data analysis. RM advised on methodological considerations. All authors contributed to further edits and iterations of the paper.

COMPETING INTERESTS

The authors declare no competing interests.

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