

Sustaining work ability amongst female professional workers with long COVID

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Teaser text

Qualitatively exploring female worker's lived experiences of returning to work with, or having recovered from long COVID has demonstrated circumstances where this is possible. It highlights how flexible working conditions can be implemented to allow for the apparent protracted and uneven nature of long COVID recovery. Highly iterative symptom-responsive return-to-work planning and autonomous roles appears key. Such working conditions could help counter any worklessness attributable to long COVID and related health conditions across genders.

Abstract

Background: Long COVID (LC) compromises work ability (WA). Female worker WA has been more adversely impacted than men. Exploration of their lived experiences could elucidate the WA support required.

Aims: To explore the working conditions and circumstances experienced as affecting sustained WA amongst female workers with LC, to help mitigate worklessness risks.

Methods: Online semi-structured qualitative interviews were conducted with 10 female workers self-reporting or formally diagnosed with LC who had made some attempt to return-to-work (RTW). Interviews were analysed using template analysis to map themes informing WA enablers and obstacles onto a biopsychosocial model of rehabilitation.

Results. All participants were professionals working in an employed or self-employed capacity. Key themes reflecting circumstances that afforded sustained WA included the autonomy over where, when and how to work indicated as afforded by a professional role, rapid healthcare access, predominantly sedentary work, competent colleagues able to cover for transient reduced WA, a strong interface between specialist health and management support, and accessible organisational policies that steer health management according to equity rather than equality. Highly flexible, iterative, co-produced RTW planning, tolerant of fluctuating symptom expression appears vital. In return for providing such flexibility, participants felt that employers' workforce diversity and competence would be protected, and that workers would need to reciprocate flexibility.

Conclusions. These qualitatively derived findings of worker's lived experiences add to existing guidance on supporting WA for people struggling with LC. Moreover, the same principles seem appropriate for tackling worklessness amongst working age adults with complex long-term health conditions.

Introduction

“Long COVID” (LC) is defined by the World Health Organisation (WHO) as a “*condition with a history of probable or confirmed SARS-COV-2 infection, usually 3 months from the onset of COVID-19 with symptoms that last for at least 2 months and cannot be explained by an alternative diagnosis*” [3]. In the UK, during February 2023, two million people reported having LC, of whom 77% reported that their ability to undertake everyday tasks was “limited a lot” [4]. While fatigue, malaise, neurocognitive impairments (‘brain fog’), shortness of breath, muscle and joint pain are frequently reported symptoms [5], LC symptom clusters can be highly heterogenous, indicative of potential multi-system pathological damage [6]. Women appear to have been more adversely affected by LC symptoms than men, which has been attributed to factors including differences in immune function depression and lifestyle habits [7,8,9]. Employees reporting sick with COVID-19 are shown to return-to-work (RTW) slower than those with flu-like symptoms unrelated to COVID-19 [10]. Predictors of later RTW comprise being female, older age, pre-existing conditions, obesity, and specific symptoms including shortness of breath, fatigue and earlier virus strains [11].

Potential benefits to employers and the economy of improved RTW rates and work ability (WA) [12] for LC include valued skills retention, avoiding reputational risks, longer-term productivity gains and countering worklessness/lower economic inactivity within working-age adults [13,14,15,16]. Work ability refers to physical and mental occupational competence [12]. In a recent survey of over 3,000 LC UK workers, 14% reported losing their job, 66% reported unfair treatment, while 48% reported lacking adjustments to support RTW [17]. One UK study of workers with post-COVID symptoms found that only 13% and 18% respectively rated their physical and mental WA as “good” or “very good” [13]. The main WA obstacles were multi-level, including symptoms and job interactions, job pressures,

inappropriate sickness absence management policies, and lack of COVID-aware organisational cultures [14].

Current LC RTW and Vocational Rehabilitation (VR) guidance advocates long-term flexibility, early support, WA assessment, biopsychosocial based obstacle identification, targeted workplace accommodations [18,19], supplemented for LC with safety critical tasks and active line management input [1, 2, 3]. However, the guidance available to employers and “rehabilitation professionals” is rather broad [20] suggesting a need for clearer, more specific evidence-based guidance about how to implement such recommendations for LC.

An obvious evidence source of nuance around WA challenges is the LC worker’s lived first-hand experiences of attempting to RTW. The present study explored the RTW of female workers with LC across industry settings to provide more tangible evidence about the enablers and obstacles to sustained WA experienced by a segment of the working-age population disproportionately affected by LC. Findings could help improve current LC RTW guidance and help offset any worklessness [12] attributable to LC and other complex long-term conditions (LTC).

Methods

Online qualitative semi-structured interviews with ten workers self-reporting as having LC were conducted between January and April 2023. Use of a qualitative approach permitted in-depth exploration of RTW experiences [21]. The study was approved by the University of Derby’s College of Health, Psychology and Social Care’s ethics committee (ETH122-2947). Interview subject areas were based on a biopsychosocial VR model [14,18,19] differentiating WA obstacles according to individual (biological and psychological) and contextual

(immediate job environment, management support, organisational and external) factors, with pre-interview questions undertaken to inform volunteer selection, sample description and enhance interview efficiency (see Table 1). Transcribed interview data were analysed using template analysis as a hierarchical form of thematic analysis and adopting a ‘realist’ [22] stance to discover informative WA explanations. This balanced alignment of ‘first order’ themes with an established biopsychosocial VR model (VR) as reflection of good practice, and capturing of sub-themes based on patterns within workers’ WA experiences (see Table 2).

To capture ‘lived’ WA obstacles and enablers, and allow for evolving LC definitions, working age (>18-year-old) adults were recruited who either had been formally diagnosed with or had developed suspected LC, and who had attempted to RTW successfully or otherwise. No constraints were placed according to industry sector or job-type. Participants recruitment occurred via social media (posting to LC support groups), and via the research team’s occupational networks. Of 45 volunteers, 10 female workers were selected to allow for role variations in physical and psychological demand, and focussed analysis. Following participant provision of consent interviews occurred online for up to an hour. Interviews were separately conducted by two research team members, utilising the same interview schedule. Table 3 summarises participant characteristics. Ages ranged from 25 to 63 years. All worked in professional roles; three worked in mainly non-sedentary roles. Eight reported a formal LC diagnosis, 6 had attended LC clinics, and all had been off-sick with LC. The majority (N=9) were undertaking paid work over hours ranging from 0.5 days a week to full-time; six were in the same role as pre-pandemic; seven rated their then physical WA as moderate or better; six rated their mental WA as at least moderate [23].

The analysis proceeded iteratively with one research team member re-reading transcripts , and then initially coding 7 to produce an initial template. A priori themes based on the biopsychosocial VR model were retained as first order themes (see Table 2). Inductively generated sub-themes were aligned with higher ordered themes according to whether they meaningfully represented higher order theme attributes. A second team member independently checked coding against the 7 transcripts to check data saturation and an appropriate hierarchical structure. Minor revisions to improve template coherence were then made. The remaining transcripts were then coded by the first researcher against a modified template, illustrative quotes collected, and independently verified by the second coder.

Results

The VR biopsychosocial-based [18,19] first order themes were separated into 11 second order and 42 third order sub-themes, some of which are further divided (see Table 2). Definitions of reported WA obstacles and enablers are provided in Table 4 and Table 5. First and second order themes are italicised hereon.

At the *individual level*, as facets of LC *impact* physical and cognitive WA *limitations* was described by most as co-occurring, but with exceptions. A public sector manager reflected: “*I can sit down and rest physically and can be better physically, but not cognitively*” (p1). For most participants, *uneven symptom journeys* reflecting symptom ebb and flow were portrayed as protracting RTW, attributable to COVID-19 reinfection, contracting other “*horrible*” (p2) viruses or secondary conditions. Several risk factors were reported as aggravating LC’s impact, including demographics and pre-existing health status. One management consultant recounted medical advice that they “*fitted exactly the same profile as the majority of the patients with LC*”, by being “*female, perimenopausal, overweight, and in*

a high stress job”(p3). Work identity characteristics including not wanting “*people to think that I’m a shirker*” (p3) reportedly compelled premature work resumption in some. For those contracting COVID-19 early on in the pandemic, condition uncertainty whereby sufferers were “*finding their own way*” (p2) prompted premature RTW, as had uncertainty about the “*duration of policies and procedures around income protection*” (p6). Conversely, having a *professional role* that enabled timely (private) health care access; and an established reputation that made someone “*harder to replace at that same level*” (p6), appeared to assist recovery.

For LC *psychological adjustment*, some participants indicated a sense of loss at being unable to “*get to the level they were at before*” (p7). Reappraising impact by accepting “*where you’re willing to push yourself, and where you need to step back*” (p2) so that “*you can be clearer with your employer on how that works*” (p8) implied positive psychological adjustment [17]. Becoming *self-employed*, to “*still achieve in my career but with more freedom*” (p5) also appeared adaptive.

Various *self-management strategies* for enabling WA were indicated. These included lifestyle changes to “*address underlying risk factors*” (p3) taking initiative to “*investigate whether there is something underneath that’s preventing recovery*” (p9), and treatment adherence to, for example, “*strong antihistamines to calm my immune system*” (p4). Other reported self-management strategies entailed managing energy expenditure. Careful pacing, by “*listening to yourself, and not getting to the point where you’re tired*” (p3) and avoiding “*doing what you think you should be able to do*”(p5) was advocated. Having quality breaks, reducing “*my personal life to accommodate my work life*” (p9), and detailed travel planning to avoid scenarios including “*station routes which don’t have lifts*” (p10) were used to

regulate energy. Microplanning cognitive demands by *“managing each hour to vary activities”* (p5) was used to regulate cognitive load. Communication strategies involving using assertiveness to *“be specific about what I’m going to have move”* (p3) , and disclosure of availability constraints including , *“telling my clients that I am part-time,”* (p10) were used to manage expectations.

At the *job level, flexible workplace accommodations* to when and how work is done (p16) were depicted as vital for WA. This included a fine-tuned phased return process, endorsed by most participants, *that “needs to be slow and adjustable,”* (p1) by which *“you can take a step back as much as you can a step forward”* (p9) to *“you nibble your way up”*(p7) to usual WA. Allowing for the *“ups and downs”* (p9) was considered necessary for individuals to *“contribute more”* (p1) and have *“a relaxed mindset that helps with symptoms.”* More effective phased return was described as involving a gradual increase in hours, by *“not initially being online for more than three hours”* (p3) a day, coupled with deferring cognitively complex tasks. A few participants indicated that working patterns involving *“more hours across more days as opposed to focusing on extending one full day”*(p2) was helpful. One health professional had undergone therapeutic return, involving *“ticking along doing little bits and pieces but not doing anything patient facing”* for safety reasons ,”and not *“doing more than 12 hours”* a week (p9). Thereafter, the employer’s standard phased return would *“kick-in,”* requiring resumption of usual hours after a fixed time point. Extended phased return, beyond standard *“4 weeks”* or *“8 weeks”* was judged necessary for LTCs *“whether it’s chronic fatigue, or LC”* (p8) to avoid *“prematurely charging back”* (p7). Having autonomy over when and how to work appeared favourable for *“managing workload around health”* (p6) without *“any pressure”* (p6). Providing autonomy by managing performance according to *targets* was also advocated: *“as long as you are working to your*

objectives, it doesn't necessarily matter what hours you work?" (p6). Where possible, the flexibility afforded by virtual working *"to build a relationship visually but virtually"* (p10) was described as helpful. Some reciprocity in the flexibility operating between employer and employee was considered as necessary for sustaining goodwill. According to a Financial Director, *"a manager feels that they're getting support from their staff"* (p10) through staff willingness to be flexible about when they worked.

Work-relevant stress appeared to counter WA. This was attributed to either excessive workload, so that *"when there's a lot of deadlines, the brain fog gets worse again"* or to, placing LC workers under seemingly symptom-insensitive performance management. Having to *"turn performance around in 4 to 8 weeks"* (p1) was deemed unfair since performance levels *"were not due to a negative attitude"*, but *"because of my condition"* (p1) which, was reported as triggered symptom resumption.

For *management support*, empathic line management that *"encouraged me to do exactly what the Doctor said, and no more;"* (p3) understood *"that they're going to get presented with a changing story"* (p1) or assured job security was reported to mitigate premature return. As a contingency *"having team members that can pick up work"* (p4) allowed several participants to pace their return.

For *specialist support*, several participants portrayed a strong interface between internal or external health (occupational health, VR or wellbeing) experts and line management as enabling WA: *"having vocational rehabilitation paperwork written down provided a kind of a menu of different ways by which management could help me"* (p5). Exclusion of LC

employee from management and human resource consultations was indicated—preventing employees from “*speaking up for themselves*” (p1).

At the *organisational level*, cultures encouraged openness about COVID, that conveyed trust, through supporting a “*longer phased return*” (p8), and possessing wellbeing leadership recognising that “*we are only as good as the people we employ*” (p3) were described as WA conducive. Organisational culture in which “*I got over it, why can’t you*” attitudes, or attitudes that “*disabled*” (p3) LTC employees were reported as hindering WA. The LC experience appeared to fuel doubt over the suitability of “*standardised occupational health absences*” (p5) because LC “*covers a myriad of different symptoms and experiences*” (p5). Instead, a *whole person* or “*case-by-case*” approach to flexible working was emphasised by several participants as more suitable for helping companies “*to get people back to work*” (p10). A strong *join-up* between the internal and external services involved in case management, including between HR, and insurers [24,25] , was judged necessary for reducing the “*stress upon both workers and managers*” (p5). LC education within organisations and society generally, and *education on RTW approaches* was considered necessary for dispelling employer’s “*fear as to what to do with me*” (p5).

Organisational policies ambiguous about income protection, or unduly long were described as “*cognitively challenging for people with fatigue*” (p5), and heightened perceived job and financial security. *Sickness absence policies* based on “*equity rather than equality*”, was considered to drive employer practices that “*treat people in the way that enable them to do what they're good at doing*” (p6). In return for accommodating LC, retaining workforce diversity and competency were described as benefits. At the *external/societal level*, use of long-COVID clinics was reported as helpful where multi-professional support was frequently

provided, and unhelpful where appointments were not forthcoming. *Timely access to healthcare* was highlighted by many participants providing their WA a particular advantage:

"If I hadn't been in the ecosystem where I had access to people who could help me, it would have been very, different outcome."

Discussion

Through using qualitative interviews to tease out lived experiences this study has highlighted circumstances where it is possible for female LC workers to more sustainably work either in an employed or self-employed capacity. These experiences could read across to other unpredictable fatigue-based conditions. Where work: provides autonomy over how, when and where to work; was more sedentary; supports remote or hybrid working; enables access to timely (by implication private) healthcare; has competent colleagues capable of covering WA dips; has empathic line management operating in organisational cultures that tangibly value workforce well-being, then it seems possible for workers recovering from LC to sustainably RTW. All volunteers were professionals. Participant's accounts implied their professional status as heightening their employability, and leverage for becoming self-employed.

The circumstances that enable sustained WA appears to reflect some social advantage stemming from professional roles and private healthcare access. However, findings also elucidate recovery pathways potentially applicable to most work contexts that are also amenable to delivery by occupational health practitioners and allied professionals. These could also augment current LTC RTW [1,2,3] guidance by unpacking how flexible workplace accommodations can be implemented. Frequently reviewed, iterative co-produced RTW planning that allows for daily fluctuations in symptoms appears vital for LC and merits

further research. Planning could include a suite of options from which workplace accommodations (e.g., working patterns and job modifications) could be “cherry picked” to steer good RTW practice should understanding of this area be lacking. Physical and timebound space to self-manage symptoms, and psychological support for adjusting expectations could be incorporated [26]. Phased return may need to be protracted to allow for uneven LC symptom. Consideration of how workers can reciprocate some flexibility (e.g., attending meetings outside usual office hours) may need to be assimilated to sustain cooperation. Consistent with education recommendations from the Scottish Parliament’s LC Inquiry [27], workplace education on changeable WA status could steer appropriate support. Case studies demonstrating that RTW is possible could be used to enhance collective WA beliefs.

Embedding a person-centred health-at-work approach within organisation’s management systems was considered by several participants as necessary for creating WA conducive working conditions, which implies a biopsychosocial approach so that multilevel WA drivers are addressed. According to these findings, embedding would entail: employee and employer coproduction of sickness absence policies to ensure usability; avoiding performance management without due consideration of health needs, clarity over income protection to ease anxiety; join-up of human resource, health insurance and VR relevant support to improve efficiency and more protracted phased return to prevent premature or revolving door RTW. Some participants experienced fixed RTW schedules as particularly unhelpful, so one key lesson from the findings is that employers and OH practitioners carefully negotiate with how LC RTW are implemented.

A shortfall in male volunteers led to an exclusive focus on female workers. While LC is more commonplace amongst women [28], gender differences in willingness to speak out about health issues [29,30] may explain the female bias of study volunteers. However, there is no obvious reason why WA enablers and obstacles identified here will not apply to the RTW planning for professionals across genders.

Exploring WA challenges according to whether workers are: men given their omission from this sample; blue collar workers given their role as essential workers at the height of the COVID-19 pandemic and relative replaceability; in more physically demanding roles liable to fatigue; reliant on NHS healthcare accessibility, or from organisations of different sizes with varied OH access and resources, would help verify finding's transferability prior to quantitative testing of any variation.

In summary, this study has demonstrated that it is possible for LC workers to sustain their WA under certain conditions. Iterative flexible working conditions, and management of need according to equity rather than equality regardless of the nature of a health condition seems vital. Providing such conditions should enable employers to protect workforce diversity and competence levels, protect an organisations overall resilience and help counter worklessness attributable to complex LTCs.

Key learning points

What is already known about this subject:

- The unpredictable, fluctuating nature of post-COVID sequela presents complex challenges for affected workers and their employers in managing productive and sustained return-to-work.
- Early in the pandemic, long COVID return-to-work guidance for healthcare professionals and the workplace [1,2,3] was developed and informed by the evidence base on long-term conditions, with limited information specifically on long COVID.
- Female workers have been more adversely affected by long COVID than men in terms of impact on functioning and ability to return-to-work.

What this study adds

- The lived experience of workers affected by long COVID in this study provides insights into the circumstances that facilitated their sustained work ability; this included having autonomy of how, when and where to work: facilitated here by a professional role, access to timely healthcare, and predominantly sedentary work.
- The protracted, unpredictable, and fluctuating nature of long COVID recovery appears to necessitate highly flexible iterative return-to-work planning that can incorporate day-by-day variations in symptom expression; findings imply that time scales for phased return should be regularly reviewed and renegotiated, with responsibility for implementation being shared between manager and employee.
- There seems no reason why these implications for return-to-work planning and work ability, which affirm the importance of a person-centred approach to managing health at work on the basis of equity rather than equality support, should not apply in principle across genders and to other types of work.

What impact this may have on practice or policy

- The findings indicate how current guidance on flexible workplace accommodations can be further specified to increase the prospects of sustained workability amongst workers with long COVID; the relevance of these findings is enhanced by drawing upon the lived experiences of workers with long COVID.
- Fixed, prescriptive phased return may not be fit-for-purpose. Regularly reviewed highly iterative phased return plans may be necessary to avoid revolving sickness absence amongst workers with long COVID, though this requires further testing.
- Providing flexible working conditions on the basis of equity rather than equality could help overcome worklessness attributable to long COVID, and may similarly be applied to other fatigue-based conditions with unpredictable symptom expression; this is in keeping with the biopsychosocial approach to rehabilitation.

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Table 1: Pre-Interview Questions and Semi-Structured Interview Schedule

Pre-Interview Question: Open ended items on age, gender, job role, time scale, Covid onset, LC duration, whether LC diagnosis formal, when symptoms arose for informing sample characteristics (see Table 3)

Interview Questions: Section A – Health and Work Ability (open ended questions with the exception of WA)

1. How would you describe your health status right now?
 2. How would you rate your mental work ability on a scale from very good to very poor?*
 3. How would you rate your physical work ability from very good to very poor?*
 4. What are the reasons for your answer?
 5. How has your work ability changed whilst you have had long COVID?
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Interview Questions: Section B – For those working (prompts indicated in brackets)

1. How would you describe the circumstances in which you are working? (*Role, where, transport etc*)
 2. How is this different from the circumstances in which you were working before contracting Covid-19? (*Role, hours worked*)
 3. How have you found the process of resuming work? (*Number of attempts/continuity etc*)
 4. What has helped your resumption of work (self-management, workplace accommodations workplace management, management support, peer support, HR/OH support, organisational support)?
 5. What has hindered your resumption of work (*self-management, workplace management, management support, peer support, HR/OH support including sickness absence management, organisational support*)?
 6. What needs to be done to make you resumption of work sustainable?
 7. What advice would you give to anyone else returning to work after long-COVID? (*e.g.; self-employed, directly employed, essential workers etc*)?
 8. What are the key messages that you would like to convey about the support that people with long COVID need in order to resume their work?
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Interview Questions: Section B – For those working

1. How have you found the process of resuming work? (*Number of attempts/continuity etc*)
 2. What has hindered your resumption of work (*symptoms, self-management, workplace management, management support, peer support, HR/OH support including sickness absence management, organisational support*)?
 3. What would make your resumption of work more likely (*self-management, workplace management, management support, peer support, HR/OH support, organisational support*)?
 4. What could be done to make you resumption of work sustainable?
 5. What recommendations would you now make about how people can return to work following long COVID?
 6. Would these need to vary in any way across different groups of workers (*e.g. self-employed, directly employed, essential workers etc*)?
 7. What are the key messages that you would like to convey about the support that people with long COVID need in order to resume their work?
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*Based on [23]

Table 2: Template Showing Final Thematic Structure

A Priori/First Order	Second Order	Third Order (+ enablers, - obstacles, +/- mixed effect)
Individual (Physical, Psychological)	<p>1. Impact</p> <p>2. Psychological Adjustment</p> <p>3. Self-management</p>	<p>1.1. Cognitive workability (-)</p> <p>1.2 Physical workability (-)</p> <p>1.3 Inter-related cognitive and physical workability</p> <p>1.4 Worker unreliability (-)</p> <p>1.5 Uneven symptom journey</p> <p>1.6 Risk factors</p> <ul style="list-style-type: none"> -1.6.1 Pre-existing health status (-) -1.6.2 Work identity (-) -1.6.3 Condition uncertainty (-) -1.6.4 Income uncertainty (-) <p>1.7 Risk Buffers</p> <ul style="list-style-type: none"> - 1.7.1 Professional role/track record (+) - 1.7.2 Private health care (+) <p>2.1 Sense of loss (-)</p> <p>2.2 Gratitude (+)</p> <p>2.3. Acceptance (+)</p> <p>2.4 Becoming self-employed (+)</p> <p>3.1 Lifestyle changes (+)</p> <p>3.2 Taking initiative (+)</p> <p>3.3 Treatment adherence (+)</p> <p>3.2 Managing energy expenditure</p> <ul style="list-style-type: none"> -3.2.1 Careful pacing (+) -3.2.2. Quality breaks(+) -3.2.3. Prioritising time for work (+) -3.2.3 Detailed planning of travel logistics (+) -3.3.4 Microplanning cognitive tasks (+) <p>3.3. Communication strategies</p> <ul style="list-style-type: none"> -3.3.1 Assertiveness (+) -3.3.2 Disclosure (+)
Job (Immediate work Environment)	<p>6. Flexible workplace accommodations</p> <p>7. Work-relevant stress</p>	<p>6.1 Fine-tuned phased return</p> <ul style="list-style-type: none"> -6.1.1. Gradual increase in hours worked (+) -6.1.2 Defer complex tasks (+) -6.1.3 Stretched working patterns(+) <p>-6.2 Therapeutic phase return (+)</p> <p>-6.3 Extended phased return (+)</p> <p>-6.4 Meaningful work</p> <p>6.8 Autonomy</p> <ul style="list-style-type: none"> - 6.8.1 To manage workload around health, including time (+) - 6.8.2 To reach targets (+) <p>6.9 Working virtually</p> <p>6.10 Reciprocity (+)</p> <p>7.1 Workload (-)</p> <p>7.2 Counterproductive performance management (-)</p>
Work Support (Managerial/Peer Support Factors))	<p>8. Management and peer support</p> <p>9. Specialist support</p>	<p>8.1. Empathic line management (+)</p> <p>8.2. Peer support (+)</p> <ul style="list-style-type: none"> - 8.2.1 Allies (+) - 8.2.2 Competent contingencies (+) <p>9.1 Strong mainstream/specialist management interface (+)</p> <p>9.2. Exclusion of employees from management and human resource consultation (-)</p> <p>9.3 Occupational health myths (-)</p>
Organisational support/Context	<p>10. Culture</p> <p>11. Health at Work Approach</p> <p>12. Business Case</p>	<p>10.1 Openness about COVID(+)</p> <p>10.2 Trust (+)</p> <p>10.3 Wellbeing leadership (+)</p> <p>10.4 Diversity underappreciated (-)</p> <p>10.5 Attitudes I got over it why can't you? (-)</p> <p>11.1 Whole Person-embedding (+)</p> <p>11.2 Join-up (+)</p> <p>11.3 Education about Long COVID (+)</p> <p>11.4. Education of RTW Approach (+)</p> <p>11.5 Organisational policies</p> <ul style="list-style-type: none"> - 11.5.1 Income protection (+) -11.5.2 Usability (+) - 11.5.3 Sickness Absence (+) <p>1.5 Valued skills set (+)</p> <p>1.6 Knock-on-effects for worklessness (+)</p> <p>1.8 Diversity (+)</p>
Organisational/External Interface	<p>13. Health Care Access</p>	<p>13.1 Timely access (+)</p> <p>13.2 Long-COVID Clinics (+/-)</p>

Table 3: Sample Characteristics

Gender	Age	Professional Role at time of interview	Other conditions?	Self-reported Workability Status	COVID-19 Onset	
	A: 20 to 29; B: 30 to 39; C: 40 to 49; D: 49 to 50; E: 50 – 59 F: 60 +	<ul style="list-style-type: none"> Mainly sedentary/non sedentary 		<ul style="list-style-type: none"> Psychological cognitive rating (CW) (trend) Physical rating (PW) Currently working? 	<ul style="list-style-type: none"> LC Duration Formal/informal diagnosis LC clinic attendance 	
p1	F	E	Senior manager, public sector Mainly sedentary work	Stress induced LC cognitive symptom exacerbation	Moderate CW Good to very good PW Currently working full time, same role	Autumn 2021, off sick for 17 months, ongoing symptoms Formal diagnosis Not attended LC clinics
p2	F	F	Health professional, own business/self employed Mainly non-sedentary	Pre-existing neurological condition (functional neurological disorder)	Poor CW (can no longer multi-task) Very poor PW (post-exertional malaise) Part time (0.5 day), different role, admin, 5 RTW attempts to original role	First Wave Ongoing Formal diagnosis > 30 clinics attended
p3	M	A	Professional Consultant, Private Sector Mainly sedentary	Secondary allergy related condition (successfully treated) Long Covid x 2	Very good CW (very poor when LC at worst) Very good PW (less affected) Working, same role, full time	X2. Second early 2022 4 months (8 months previously) No formal diagnosis
p3	F	C	Director, Management Consultancy , private sector Mainly sedentary work	Undiagnosed circulatory condition. Self-reported as overweight	Very good CW (from very poor) Very good PW (from very poor) Currently working full time, same role	Spring 2022 5 months Formal diagnosis Not attended LC clinics
p4	F	D	Director, Professional Services Mainly sedentary work	Pre-existing endocrine condition	Very good CW (from very poor) Very good PW (from very poor) Currently working full time, same role	First wave, March 2020 Two years, now recovered Formal diagnosis, Not attended LC Clinic
p5	F	C	Professional services consultant, self-employed Mainly sedentary	Pre-existing minor circulatory condition Recent surgery. Secondary allergy related condition	Good CW (from very poor) Good PW (from very poor) Working, same area, changed from employed to self-employed	Spring 2020 (first wave) Two years off sick (mild symptoms still experienced) Formal diagnosis 2 clinics attended
p6	F	A	Sustainability professional, construction, private sector Mainly sedentary work	COVID x 2	Moderate to good CW (from very poor) Good PW (from very poor) Currently working full time , same role	Winter 2021 One year Formal diagnosis Not attended LC clinics
p7	F	E	Health professional, public sector Mainly non-sedentary	Contracted unrelated virus post COVID infection	Very poor CW Very poor PW Long-term off sick (several RTW attempts, varying durations)	x2 Spring 2020 and Autumn 2020 Ongoing (part recovered then contracted unrelated virus) > 30 clinics attended
p8	F	E:	Education professional, Independent Sector Mainly sedentary work	Pre-existing chronic pain and respiratory conditions X2 COVID infections	Very poor PW Poor CW Changed from employed to self-employed 1 RTW attempt in employed role	Spring 2021 Ongoing, multi system Attended 10 LC clinics
p9	F	B	Community health professional, public sector Mainly non-sedentary	Pre-existing respiratory and common mental health condition	Moderate CW (from very poor) Poor PW (from very poor) PT (12h hours) on/therapeutic return	Winter 2021 Ongoing Formal diagnosis Several LC clinics attended over 2 years
p10	F	C	Finance Director, Private Sector Mainly sedentary	Pre-existing neurological condition	Good CW Poorer PW (mobility) Work, same role, part time	6 months duration, current No formal diagnosis

Table 4: Summary of WA Obstacles (Factors that hamper sustained W.A)

Individual factors that hamper sustained W.A	
Impact (Effect of LC on functioning and aggravating factors)	<ul style="list-style-type: none"> • Physical W.A. effects • Cognitive W.A. effects • Reliability of contribution to the workplace • Uneven symptom journey due to reinfection, development of secondary conditions or contraction of other infections. • Self-reported physical and psychological risk factors that heightening LC symptom susceptibility, severity and/or duration including demographics and pre-COVID health status, work-relevant stress, strong identification with work, uncertainty about the condition, uncertainty about income protection.
Psychological adjustment challenges	<ul style="list-style-type: none"> • A sense of loss over career aspirations
Job factors that hamper sustained WA	
Work-relevant stress	<ul style="list-style-type: none"> • Exceed workload where demands exceed coping resources for managing symptoms alongside workload • Performance management increasing the likelihood symptom exacerbation.
Management factors that hamper sustained WA	
Management and peer support	<ul style="list-style-type: none"> • Management and human resource consultations that exclude the LC employee due to failure to take due account of employee needs
Specialist support	<ul style="list-style-type: none"> • Occupational health myths held by workers of Oh internal policing role
Management factors that hamper sustained WA	
Organisational cultures	<ul style="list-style-type: none"> • Emerging attitudes of “<i>I got over it, why can't you</i>” amongst colleagues • Diversity insensitive attitudes that disables people with LC by underestimating their contribution
Health-at-work approach	<ul style="list-style-type: none"> • Standardised occupational health absence management due to its insensitivity to individual needs and management of conditions according to equality rather than equity.

Table 5: Enablers (Factors that hamper sustained W.A)

Individual factors that make sustained W.A easier	
Risk buffers	<ul style="list-style-type: none"> • Professional role, a profession that requires advanced training or qualifications • Rapid access to private healthcare • Established reputation
Positive psychological adjustment	<ul style="list-style-type: none"> • Gratitude based coping strategies entailing a focus on what individuals still have • Acceptance based coping strategies undertaken to reappraise limitations and abilities.
Self-management strategies for managing LC effects and managing symptoms alongside work demands	<ul style="list-style-type: none"> • Lifestyle changes to mitigate underlying physical risk factors • Taking initiative to obtain an informative diagnosis • Medication adherence to manage symptoms • Managing energy expenditure by pacing exertion according to symptoms and well within energy limit, having quality breaks, prioritising time for work, detailed planning of travel logistics, microplanning cognitive demands. • Communication strategies including assertiveness to disclosure of conditions and availability to manage expectations. • Knowing your employment rights
Job factors that make sustained W.A easier	
Flexible workplace accommodations providing autonomy over when and where to work	<ul style="list-style-type: none"> • Fine-tuned phased return in which gradation in job requirements are incrementally increased, closely monitored, allow for day-by-day fluctuations in WA without penalty, can be long-term and based on equity rather than equality principles so that they are proportionate to need. Phased return could include a gradual increase in hours in hours worked built into RTW planning, defer of complex tasks as confidence returns. • Stretching working patterns across days rather than working longer on fewer days • Therapeutic phase return involving being providing opportunity to undertake non-critical job tasks prior to reaching the minimal number of hours required for graded return. • Extended phase return to prevent premature RTW. • Autonomy to manage workload around health by working according to targets and not directing how work is done. • Virtual working • Reciprocity and recognition by employee that flexibility between the employee and employer is two-way.
Management factors that make sustained W.A easier	
Management and peer support	<ul style="list-style-type: none"> • Empathic line management that encourages adherence to specialist advice, perspective taking and understands changeable nature of LC and provides clarity over job security. • Peer support that keeps in contact, accepts conditions • Competence contingency and the ability of workers to stand-in and undertake tasks that LC work cannot undertake.
Specialist health expertise support	<ul style="list-style-type: none"> • A strong interface with mainstream management whereby management attends to specialist advice within support provided LC employees.
Organisational level factors that facilitate WA	
Cultures	<ul style="list-style-type: none"> • Organisational cultures that convey trust that LC workers can complete work autonomously, encourages openness about LC, possesses wellbeing leadership that values workforce wellbeing.
Health-at-Work Approach	<ul style="list-style-type: none"> • Whole person approach to managing health conditions that affect WA by treating them on a case-by-case basis, and targeting return-to-work planning or staying at work planning according to individual work ability needs based on equity not equality • Join-up in case management services to improve efficiency of and certainty of support. • Education on Long COVID on the changing nature of symptoms and potential for LC workers to still contribute to the workplace to help manage expectations • Education on RTW to create certainty over how to manage LC cases. • Organisational policies that clear about income protection, are co-produced with workers to ensure usability, manage sickness absence according to equity rather than equality and are unbounded by time limits for phased return to prevent premature RTW.
Business Case	<ul style="list-style-type: none"> • Employers should benefit from retained valuable experience and skill sets, heightened self-confidence in ability to work and enhance to diversity of their workforce. Society should benefit from reduced worklessness and a workforce confident in their ability to work with health limitations.
Societal level factors that facilitate WA	
Health care access	<ul style="list-style-type: none"> • Timely health care access so that work-place accommodations stay in step with symptoms. Currently this is more likely where private health care is used.