

Supplementary file S1. Completed STROBE checklist.

| | Item No. | Recommendation | Page No. | Relevant text from manuscript |
|---------------------------|----------|---|----------|--|
| Title and abstract | 1 | (a) Indicate the study's design with a commonly used term in the title or the abstract | p.1 | “What do employers need when supporting stroke survivors to return to work?: A mixed-methods study” |
| | | | p.2 | “Methods: Mixed-methods study...” |
| | | (b) Provide in the abstract an informative and balanced summary of what was done and what was found | p.2 | <p>“Methods: Mixed-methods study. Participants recruited through voluntary response/purposive sampling. Survey of employers investigated stroke knowledge (maximum score: 7), RTW process knowledge (maximum score: 8), and perceived competency for actions supporting RTW (maximum score: 100%). Regression analyses explored relationships between employers' demographic/contextual characteristics and knowledge and perceived competency scores. Interviews with employers explored factors influencing employers' post-stroke RTW support. Interview data were analysed using framework analysis. Survey/interview findings were synthesised with those from a qualitative systematic review.</p> <p>Results: Across the survey (n=50), interviews (n=7), and review (25 studies), employers' support was influenced by stroke survivors' decisions to disclose stroke-related limitations, employers' knowledge regarding roles/responsibilities, employers' communication skills, and information provided by healthcare. Regression analyses: Human resources/occupational health support was positively associated with stroke knowledge ($\beta=2.30$, 95% CI 0.36-4.41, $p=0.013$) and RTW process knowledge ($\beta=5.12$, 95% CI 1.80-6.87, $p=0.001$). Post-stroke RTW experience was positively associated with stroke knowledge ($\beta=1.36$, 95% CI 0.46-2.26, $p=0.004$) and perceived competency ($\beta=31.13$, 95% CI 18.40-44.76, $p=0.001$). Organisation size (i.e., working in a larger organisation) was positively associated with RTW process knowledge ($\beta=2.96$, 95% CI 1.52-4.36, $p<.001$).”</p> |
| Introduction | | | | |
| Background/rationale | 2 | Explain the scientific background and rationale for the investigation being reported | pp.4-5 | “Annually 15 million strokes occur worldwide [1]. In high-income countries, stroke incidence has increased among working-age people [2-4]. Stroke has been associated with more disabilities than any other condition [5], including pain, fatigue, epilepsy, and problems with vision, hearing, communication, physical abilities, and cognition |

[6]. Such disabilities can restrict work participation for many years following stroke [7].

Ongoing employer support is essential for making return-to-work (RTW) sustainable after stroke [7]. In many countries employers are legally obliged to provide reasonable adjustments [8], i.e., modifications to the work role/environment to eliminate or minimise barriers to a disabled person's work performance [9]. However, employers often lack access to adequate information, and do not know how to implement or tailor them to disabled people's needs [9, 10]. Vocational rehabilitation (VR), i.e., rehabilitative support for retaining-, or returning to and remaining in work after illness/injury [11], may provide employers with advice on reasonable adjustments. However VR is often delayed or unavailable through the National Health Service (NHS) [12, 13]. Where available, VR from the third sector, employer organisations, or government schemes may lack stroke-specific knowledge and expertise, or may not be comprehensive rehabilitative programs [13]. Work-related barriers to stroke survivors' return to- and retention in work include inadequate reasonable adjustments, high work pressures, and lacking or lack of RTW policies [10, 14, 15]. In the United Kingdom (UK), a survey of stroke survivors aged under 65 years (N=9254), 37% reported stopping working post-stroke [16]. Respondents also reported: lack of employer support (9%), reduced working hours/responsibility (16%), missing out on promotion (4%), discrimination (6%), redundancy (5%), and career changes (6%). Online resources exist to guide employers through the RTW process and beyond, but templates to aid application of learning are infrequently included. It is also unclear how acceptable, useful, and effective these resources are for guiding employers and stroke survivors. This study formed part of a needs assessment for a larger project [17], working with stakeholders to co-design a self-guided, RTW intervention for employers and stroke survivor employees [18]. A previous qualitative systematic review [19] only identified three studies focused on factors influencing employers RTW support for stroke survivors. Information on contextual characteristics, i.e., circumstances facilitating or hindering employers' support opportunities, was also limited. Further qualitative research was required to enhance understanding of influential factors. It was also unclear which employers would benefit from a self-guided RTW intervention. Quantitative research was warranted to investigate frequency of employer-related barriers (e.g., limited stroke knowledge) identified in the review [19]; and to explore relationships between these barriers and employers'

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| | | | | demographic characteristics. Therefore, this study aimed to explore employers' needs for supporting stroke survivors to return to- and stay in work post-stroke (see Figure 1 for objectives)." |
| Objectives | 3 | State specific objectives, including any prespecified hypotheses | p.5 | "Therefore, this study aimed to explore employers' needs for supporting stroke survivors to return to- and stay in work post-stroke (see Figure 1 for objectives)." |
| | | | p.6 | "Figure 1. Study objectives and linked data sources" [presented in figure] |
| Methods | | | | |
| Study design | 4 | Present key elements of study design early in the paper | p.5 | "This mixed-methods study had a concurrent triangulation design (survey, interviews) [20]. An integrative, mixed-methods approach was important for increasing understanding and validity of findings from the previous systematic review [19, 21]." |
| | | | p.6 (Figure 1) | "Figure 1. Study objectives and linked data sources" [presented in figure] |
| Setting | 5 | Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection | pp.6-7 | "February-April 2023, the study was advertised on X and LinkedIn®, the Different Strokes charity website, and newsletters/bulletins of professional membership organisations, including: the Royal College of Occupational Therapists – Specialist Work Section, Society of Occupational Medicine, Faculty of Occupational Health Nursing, Association of Occupational Health and Wellbeing Practitioners, University of Nottingham Business Network, and Social Enterprise UK. Emails with attached adverts were sent to 27 National Health Service (NHS) occupational health departments, university business schools, Federation of Small Businesses, the Business Support Organisation, East Midlands Chamber of Commerce, Business for Health, other health/disability charities, and members of the researchers' networks, e.g., researchers in stroke rehabilitation, equality, diversity and inclusion professionals, and those working in the UK NHS integrated Stroke Delivery Networks. KC attended business networking events and conferences (Health and Wellbeing at Work, European Life After Stroke) in the East Midlands, UK, to raise study awareness." |
| | | | p.7 | "The survey was administered via Microsoft Forms February-April 2023..." |

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| | | | p.8 | “Semi-structured interviews were conducted by KC via Microsoft Teams February-May 2023.” |
| Participants | 6 | (a) <i>Cohort study</i> —Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up | p.7 | “Eligible survey and interview employer participants were aged 18 years or older, working in an occupational role involving staff responsibility (i.e., responsible for decision-making and supportive actions during an employee’s RTW following illness or injury). Employers are a hard-to-reach population [22], and others have used this broad definition of ‘employer’ in their research [23]. To be inclusive of all employers’ needs, self-employed individuals were included, because they would be responsible for their own RTW process in the event of an illness or injury (including stroke). VR specialists who met this definition of employer (e.g., occupational therapists with supervisory responsibilities) were also included because they could add further description and insight into the barriers and facilitators experienced by employers when providing RTW support. All participants were also required to be proficient in use of English language. Interview participants were required to have post-stroke RTW experience, either as a stroke survivor or someone supporting a stroke survivor, e.g., occupational health (OH) or human resources (HR) personnel and line managers.” |
| | | <i>Case-control study</i> —Give the eligibility criteria, and the sources and methods of case ascertainment and control selection. Give the rationale for the choice of cases and controls | | |
| | | <i>Cross-sectional study</i> —Give the eligibility criteria, and the sources and methods of selection of participants | | |
| | | (b) <i>Cohort study</i> —For matched studies, give matching criteria and number of exposed and unexposed | | Not applicable [not a cohort or case-control study] |
| | | <i>Case-control study</i> —For matched studies, give matching criteria and the number of controls per case | | |
| Variables | 7 | Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable | p.8 | “The survey tool assessed: <ol style="list-style-type: none"> 1. Stroke knowledge (how strokes happen, risk factors, how strokes are treated, ways it can impact a person’s abilities). 2. RTW process knowledge (employers’ role/responsibilities and relevant legislation, range of supportive actions potentially needed). 3. Perceived competence for carrying out supportive actions (whether employers felt they had/would have the skills needed for particular actions, e.g., supporting stroke survivors to improve role-related confidence).” |

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| | | | Supplementary file S3 | <p>“Survey data were analysed by KC using SPSS (Version 28.0) [20] and STATA (Version 17) [21]. Frequencies of responses per survey item and respondents’ total scores per dependent variable were calculated. Total scores per respondent were calculated by assigning 1 point per correctly answered survey item for stroke knowledge (maximum score=7) and return-to-work (RTW) process knowledge (maximum score=8). Total perceived competency scores per respondent were calculated by working out total percentage of survey items (i.e., specific supportive actions) they responded ‘yes’ to, where they felt competent.”</p> <p>[Mann-Whitney U tests] “Groups were defined by potential influential factors, identified in previous research, i.e., employers’ post-stroke RTW experience (yes/no) [16], organisation size (small or medium-sized enterprises [SME]/large enterprises) [23], and access to human resources (HR) or occupational health (OH) support (yes/no) [16]. SMEs were classified as organisations with ≤250 employees, and large organisations as those with >250 [24].”</p> <p>[exploratory univariate linear regression analyses] “... Selection of confounder variables was informed by research team discussion, and included respondent age (<40 years/40-50 years/50+ years), organisation size (SME/large), occupational role (manager/health professional/other), organisation industry (human health and social work/other), and access to HR or OH support (yes/no).”</p> <p>pp.8-9 “Interview questions were informed by the Theoretical Domains Framework (TDF) domains [24], and explored barriers and facilitators to supporting stroke survivors to RTW (Supplementary file 2).”</p> |
| Data sources/ measurement | 8* | For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group | Supplementary file S1 | Online employer survey tool [including items relating to the outcomes/dependent variables] |
| | | | Supplementary file S2 | [Interview questions, categorised according to TDF domains] |
| | | | p.10 | “The triangulation protocol [21] was followed to synthesise findings from the previous qualitative systematic review [19], survey, and interviews.” |

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| | | | p.10 | “Convergence codes included <i>full agreement, partial agreement, silence, and dissonance</i> (defined in Table 4).” |
| | | | pp.19-20 | Table 4. Synthesised findings and convergence ratings, with environmental levels based on the Disability Prevention Management Model [34]. |
| Bias | 9 | Describe any efforts to address potential sources of bias | p.8 | [selection bias] “Eligibility was checked and informed consent verbally obtained at the start of interviews.” |
| | | | p.10 | [selection bias] “Fifty-four respondents participated in the survey; four were omitted from analyses (and not replaced because it was suspected they were bots), i.e., because they failed two or more validation checks, including the trick question, age or name check, and/or did not respond to the validation email.” |
| | | | Supplementary file S3 | [confounding bias in survey statistical analyses] “Analyses were conducted unadjusted using the General Linear Model technique [26], and confounder variables added one at a time (i.e., with a maximum of two independent variables included per regression analysis, including the original independent variable) to see their effect on the correlation co-efficient. Selection of confounder variables was informed by research team discussion, and included respondent age (<40 years/40-50 years/50+ years), organisation size (SME/large), occupational role (manager/health professional/other), organisation industry (human health and social work/other), and access to HR or OH support (yes/no).” |
| | | | p.8 | [researcher/confirmation/interpretation biases]: “The survey tool (Supplementary file S1) was reviewed by two members of the expert advisory group, i.e., a stroke survivor/manager and HR consultant, and wider project team (JH, JK, KR) for acceptability.” |
| | | | p.9 | “Coding was completed by KC, checked by BDP, and disagreements resolved through discussion. Theme constructions and summaries were produced by KC; these were checked with the wider project team (KR, JH, JK), and amendments made following group discussion.” |

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| | | | p.10 | “KC organised data within a matrix to construct meta-themes. The meta-themes were checked by CS and amendments made following discussion. KC and CS independently performed convergence coding per meta-theme, with disagreements resolved through discussion.” |
| Study size | 10 | Explain how the study size was arrived at | p.7 | “The survey was exploratory (i.e., not testing a hypothesis), so a formal sample size calculation was not required. Based on published guidance (41, 42), the sample size target was approximately 10 employers for the interviews.” |

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| Quantitative variables | 11 | Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why | p.9 | “...Frequencies of responses per survey item and respondents’ total scores per dependent variable were calculated. Frequency histograms revealed non-normal distribution of scores, therefore non-parametric Mann-Whitney U tests were conducted to determine between-group differences in median scores for dependent variables [29]. Groups were defined by potential influential factors identified in previous research, i.e., employers’ post-stroke RTW experience (yes/no) [19], organisation size (small or medium-sized enterprises [SME]/large enterprises) [30], and access to HR or OH support (yes/no) [19]. Where statistically significant differences were found between groups, exploratory univariate linear regression analysis was performed.” |
| Statistical methods | 12 | (a) Describe all statistical methods, including those used to control for confounding | Supplementary file S3 | <p>“Frequencies of responses per survey item and respondents’ total scores per dependent variable were calculated.”</p> <p>“Frequency histograms revealed non-normal distribution of scores, therefore non-parametric statistics were used, i.e., Mann-Whitney U tests to determine between-group differences in median scores for dependent variables [22].”</p> <p>“Where statistically significant differences were found between groups, exploratory univariate linear regression analysis was performed. For example, if a Mann-Whitney U test showed that median stroke knowledge scores differed significantly between those with post-stroke RTW experience versus those without, a regression analysis was then performed to see if post-stroke RTW experience (yes/no) was statistically significantly associated with stroke knowledge scores. Each regression analysis was repeated three times with bootstrapping applied across 5000 iterations to calculate correlation co-efficients, p-values, and bias corrected accelerated (BCa) confidence intervals [25]. Analyses were conducted unadjusted using the General Linear Model technique [26], and confounder variables added one at a time (i.e., with a maximum of two independent variables included per regression analysis, including the original independent variable) to see their effect on the correlation co-efficient.”</p> |
| | | (b) Describe any methods used to examine subgroups and interactions | See 11 and 12 (a) above | See 11 and 12 (a) above [i.e., Mann-Whitney U tests, regression analyses]. |
| | | (c) Explain how missing data were addressed | p.10 | “Fifty-four respondents participated in the survey; four were omitted from analyses (and not replaced because it was suspected they were bots)...” |
| | | (d) <i>Cohort study</i> —If applicable, explain how loss to follow-up was addressed | | Not applicable |

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| | | <i>Case-control study</i> —If applicable, explain how matching of cases and controls was addressed | | |
| | | <i>Cross-sectional study</i> —If applicable, describe analytical methods taking account of sampling strategy | | |
| | (e) | Describe any sensitivity analyses | See 12 (a) above | See 12 (a) above [i.e., bootstrapping in the regression analyses, adding confounder variables one at a time in regression models]. |
| Results | | | | |
| Participants | 13* | (a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed | p.10 | “Fifty-four respondents participated in the survey; four were omitted from analyses (and not replaced because it was suspected they were bots)...” |
| | | | p.12 | “All those expressing interest participated in the interviews; their demographic characteristics (n=7) are presented in Table 3.” |
| | (b) Give reasons for non-participation at each stage | | | Not applicable |
| | (c) | Consider use of a flow diagram | | Not applicable [all those expressing interest were eligible and took part in the survey and/or interviews, aside from the four omitted from survey analyses] |
| Descriptive data | 14* | (a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders | p.10 | [Survey respondents] “More than half were aged less than 55 (n=33; 66%); 46 (92%) were White, and 30 (60%) female. Most were managers/supervisors (n=22; 46%), healthcare professionals with supervisory responsibilities (n=10; 20%), or business owners/directors (n=6; 12%). Nearly half worked in human health and social work activities (n=22; 44%), or manufacturing (n=10; 20%) industries. |
| | | | | Twenty respondents (40%) had professional experience of supporting someone to RTW post-stroke and 17 (34%) had 6 or more years’ experience of this. Five respondents (10%) had personal experience of RTW post-stroke.” |
| | | | p.11 | Table 1. Demographic details of the survey sample (n=50). |
| | | | p.14 | Table 3. Demographic characteristics of the interviewees (n=7). |
| | (b) | Indicate number of participants with missing data for each variable of interest | p.12 | “Employers’ median stroke knowledge score was 7 (Inter-quartile range [IQR] 4.75 to 7) (n=50). The median RTW process knowledge score was 6.5 (IQR 4 to 8) (n=50) and median perceived competency score 83% (IQR 67% to 100%) (n=48). Two |

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| | | | respondents were omitted from the last analysis due to having 3 or more item responses indicating action was not applicable.” |
| | | (c) <i>Cohort study</i> —Summarise follow-up time (eg, average and total amount) | Not applicable |
| Outcome data | 15* | <i>Cohort study</i> —Report numbers of outcome events or summary measures over time | Not applicable |
| | | <i>Case-control study</i> —Report numbers in each exposure category, or summary measures of exposure | Not applicable |
| | | <i>Cross-sectional study</i> —Report numbers of outcome events or summary measures | p.12 “Employers’ median stroke knowledge score was 7 (Inter-quartile range [IQR] 4.75 to 7) (n=50). The median RTW process knowledge score was 6.5 (IQR 4 to 8) (n=50) and median perceived competency score 83% (IQR 67% to 100%) (n=48).” |
| Main results | 16 | (a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included | p.12 “Regression analyses results are shown in Table 2. Access to HR/OH support was positively associated with stroke knowledge scores ($\beta=2.30$, SE=0.97, 95% CI 0.36-4.41, p=0.010) and RTW process knowledge scores ($\beta=5.12$, SE=1.28, 95% CI 1.80-6.87, p=0.001). Experience of post-stroke RTW was positively associated with stroke knowledge scores ($\beta=1.36$, SE=0.45, 95% CI 0.46-2.26, p=0.004) and perceived competency scores ($\beta=31.13$, SE=6.54, 95% CI 18.40-44.76, p=0.001). Organisation size (large/SME) was positively associated with RTW process knowledge scores ($\beta=2.96$, SE=0.75, 95% CI 1.52-4.36, p=<.001). This association weakened but remained borderline statistically significant when adjusted for access to HR/OH support ($\beta=1.94$, SE=0.92, 95% CI 0.02-3.81, p=0.050). Based on a statistical significance threshold of p<.05, significance of all other associations remained following adjustment for confounder variables (Table 2).” |
| | | | p.13 Table 2. Results from the survey linear regression analyses. |
| | | (b) Report category boundaries when continuous variables were categorized | p.13 Table 2. Results from the survey linear regression analyses [categories of potential confounding variables, e.g., age]. |
| | | (c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period | Not applicable |

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| Other analyses | 17 Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses | Supplementary file S4 | Results from the independent-samples Mann-Whitney U tests. |
| | | Supplementary file S5 | Detailed overview of framework analysis findings (interviews). |
| | | pp.15-18 | <p>Framework analysis themes are summarised hereafter. A detailed overview of findings is provided in Supplementary file S5, with example quotes. Codes indicate where interviewees were a manager/HR officer (E), stroke survivor (SS), or occupational therapist (OT).</p> <p>Employers' beliefs about stroke survivors' RTW capabilities were influenced by stroke survivors' residual limitations, or the employer's knowledge and experience of stroke or the RTW process (SS_01, SS_02, E_04, E_07). Compassion and commitment for supporting stroke survivors was limited among employers with no RTW process experience (OT_03) or limited time availability (OT_06). Employers and stroke survivors did not understand stroke and its impact (SS_01, SS_02, E_04, OT_06). E.g., one stroke survivor (SS_01) felt an OH advisor did not realise strokes occur and impact differently across individuals. The stroke survivor felt their symptoms were not investigated and their capabilities under-estimated, e.g., they were trusted with little work, thus hindering a sustainable RTW.</p> <p>Awareness of limitations enabled stroke survivors to advocate for OH support (SS_01), self-refer for therapy (SS_02, SS_05), seek insurance pay-outs (SS_01, SS_05), and alter working patterns (SS_02, SS_05). One HR officer (E_07) commended a stroke survivor's openness about their progress and capabilities. Another stroke survivor feared communicating attentional issues to their manager or co-workers (OT_06). Consequently, they had a too-large workload and unsuitable workplace environment. This negatively impacted their energy levels and home life.</p> <p>Various stakeholders influenced employers or stroke survivors. E.g., a manager's honesty about her own transient ischaemic attack helped the stroke survivor (SS_02) believe things would improve. Family members informed employers about the stroke (E_04, E_07). With stroke survivors' consent, health professionals provided information about their symptoms and medication, including when it was unsafe for them to return to the work environment (SS_02, SS_05, E_07). Conversely, lack of communication from a stroke survivor employee and OH advisor caused stress and anxiety for a manager (E_04) and stroke survivor (SS_01).</p> |

Two stroke survivors (SS_02, SS_05) felt invalidated when others did not take their invisible disabilities or psychological wellbeing seriously.

Contextual characteristics and resources also influenced employers' RTW support. These included the workplace environment and policies/procedures, health care system (timing of stroke diagnoses and referrals), legislation/welfare and insurance policy pay-outs, and global and local events. E.g., stroke survivors could not always return to previous roles, due to their disabilities and employers' concerns about health/safety and accessibility. Short staffing meant co-workers were unavailable to supervise or be shadowed, or there were restrictions having a flexible work schedule (OT_06). Organisational policies and procedures restricted when working hours could be changed (OT_06), and stipulated consultant sign-off for RTW (SS_02). Other times, policies and procedures helped a manager (E_04) and HR officer (E_07) know how to communicate with people on long-term sickness absence. Other useful aspects included guidance on risk assessments and phased RTW (SS_02, E_07), approved leave for health appointments (SS_02), and the option of part-time working hours (SS_02).

In the healthcare system, it sometimes took months for stroke diagnoses to be confirmed. Frequent health appointments disrupted stroke survivors' working patterns (SS_02, SS_05). Others were referred for specialist support too late (SS_01, OT_06), or it was never arranged (SS_05). A self-employed stroke survivor (SS_05) felt abandoned because of their hidden disabilities, age, and health professional status. They struggled with aspects of their work and experienced low mood.

Stroke survivors' personal insurance policies had not resulted in pay-outs (SS_01; SS_05). One individual's stroke was not considered severe enough (SS_01). In this case, the stroke survivor was on the waiting list for work-related rehabilitation (i.e., vocational rehabilitation) through the NHS. Thus, the only source of funded RTW support for them and their employer was from an OH provider with little knowledge of stroke (evident through their underestimation of her work abilities) (Supplementary file S5: Table 2, theme entitled, "Knowledge of stroke and potential impact"). In the context of a self-employed stroke survivor, they were required to be off sick for 12 weeks to be eligible for a pay-out (SS_05). This stroke survivor's (SS_05) need to run their business (without funded support) meant they could not put into place reasonable adjustments to support their return, e.g., reduced hours during a phased return. Elsewhere, an HR officer (E_07) found it helpful knowing a stroke survivor was receiving half-pay linked to an organisational insurance policy.

COVID-19 caused issues still experienced in the aftermath of the pandemic (which may affect employers' ability to provide reasonable adjustments), e.g., staffing issues and delays in healthcare appointments (and thus information on rehabilitative prognosis) (SS_02, OT_03, E_04, SS_05). One self-employed stroke survivor's (SS_05) workload tripled and their phased RTW had to stop, because they had to spend time altering and adapting to new working practices (e.g., they [and employees] working with clients online instead of face-to-face). Visual fatigue and hearing loss made it difficult to work remotely online (SS_05) (Supplementary file S5, Table 2, theme entitled 'Global and local events at the time of the RTW process.'). Outside of COVID-19, events within organisations included changes to staffing, site, and procedure (OT_06).

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Synthesised findings across data sources are shown in Table 4. Qualitative data sources showed stroke knowledge deficits among employers, though survey stroke knowledge scores were high (dissonance). Across all data sources, employers lacked knowledge of responsibilities according to legislation and organisational policy/procedure (full agreement). Full agreement was shown regarding employers' fear of causing another stroke, stress managing stroke survivors' needs versus co-workers' needs, co-workers' frustration supporting stroke survivors, health and safety concerns relating to stroke survivors' RTW, and lack of suitable, alternative roles within organisations.

pp.19-20

Table 4. Synthesised findings and convergence ratings, with environmental levels based on the Disability Prevention Management Model [33].

Discussion

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| Key results | 18 | Summarise key results with reference to study objectives | p.21 | “This study revealed factors that influenced employers' RTW support for stroke survivors (objectives 1-3). For example, at the individual level they included stroke survivors' decisions to disclose stroke-related limitations (all data sources), employers' knowledge regarding their roles and responsibilities (all data sources), and employers' communication skills (qualitative data sources). At the environmental level, an example was healthcare professionals' provision of information to employers (qualitative data sources). In regression analyses, having HR/OH support, post-stroke RTW experience and/or working in a larger organisation were positively associated with stroke and/or RTW process knowledge scores (and post-stroke RTW experience with perceived competency scores) (objective 2 and 3).” |
| Limitations | 19 | Discuss limitations of the study, taking into account sources of potential bias or | pp.21-22 | “Another limitation related to dissonance in findings across the review/interviews and survey. For example, employers lacked stroke knowledge in the review/interviews, but survey median stroke knowledge scores were high. This may have been due to employers in |

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| | | imprecision. Discuss both direction and magnitude of any potential bias | | the review/interviews lacking post-stroke RTW experience (50% of survey respondents reported having this experience). Adjusted survey regression analyses showed statistically significant positive association between post-stroke RTW experience and stroke knowledge. In 2021, 37.5 million of the UK population were working-age [34], and among these 0.007% experienced strokes [35]. Thus, UK-wide, the percentage of employers with post-stroke RTW experience is likely much smaller (and their stroke knowledge potentially more limited, etc). |
| Interpretation | 20 | Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence | pp.22-25 | <p>“Across the review and interviews, stroke survivors feared highlighting limitations to employers. In interviews, these limitations were invisible (e.g., fatigue). Such individuals present an able-bodied appearance, yet can have restricted work capabilities. Disclosing such impairments may be met with disbelief, and explaining them can be difficult [36]. Individuals with disabilities may also expect negative outcomes related to perceived public stigma [37] or dissimilarity to others [38] upon disclosing their social identities. In another qualitative study, stroke survivors considered it risky talking about their stroke at work, as others might consider it a weakness [39]. Stroke survivors may be encouraged to disclose needs if organisational cultures value understanding, trustworthiness, and supportiveness [40].</p> <p>Interview data showed that employers do not always communicate with stroke survivors. Others have reported employer anxiety, and not wanting to pressurise stroke survivors and risk potential litigation [10]. Review and interview data in this study showed that employers feared causing another stroke, negatively impacting work allocation. In another study (n=26,812), psychosocial stress was associated with increased stroke risk [41]. However, higher perceived sense of control weakened the association between stress and stroke occurrence [41]. Enabling stroke survivors to participate in planning and managing their RTW may reduce risks of psychosocial stress and recurrent stroke, and alleviate employers’ fears. Employers with these fears may also benefit from education on causes of stroke and communication with stroke survivors.</p> <p>The survey showed that RTW process knowledge scores (including knowledge of roles/responsibilities) were higher among employers in large organisations and/or with access to HR/OH support. Large organisations often have formal training programs in place, covering topics like workplace adjustments and legal obligations, and readily available support from OH services, e.g., to provide medical guidance regarding an employee’s RTW. Large organisations also tend to have HR teams dedicated to developing and enforcing organisation wide RTW policies, and advising staff on roles and responsibilities. In this</p> |

study interviews showed that employers in SMEs mostly lacked knowledge of their roles/responsibilities, and did not always have relevant policies in place. Both the survey and interviews' findings suggested that employers lacking post-stroke RTW experience had lower perceived competency for carrying out RTW actions. Elsewhere, employers have experienced uncertainty supporting breast cancer survivors with RTW, and linked this to lack of experience, information, and training on providing such support [42]. Altogether, these findings suggest that employers in SMEs and those without HR/OH support may benefit from education on their roles/responsibilities, and support developing organisational policies.

Notably, employers received information about stroke survivors' rehabilitative progress/prognosis if they were receiving VR support, e.g., through the NHS. Review and interview data suggested this information facilitated employers' decisions regarding the RTW, e.g., whether it was safe for a stroke survivor to return to their pre-stroke working role. VR helps people to return to- and stay in work following injury or illness [43], and depending on the individual's geographical location and context may (or may not be) available through various stakeholders and systems. Importance of communication across all relevant stakeholders is widely recognised in VR [11]. However, interview data and others [44] have shown that employers do not always engage with VR professionals, due to limited time availability, lack of RTW experience, or belief that dismissal would be less costly than retainment. Organisations may benefit from education on potential benefits of including VR among employee benefits, and in liaising with health professionals about stroke survivors' work participation. Strong evidence suggests improved communication across stakeholders is cost-effective, speeds up RTW processes, and reduces sickness absence duration [11]. Despite small sample sizes, high levels of statistical significance and corresponding qualitative findings suggest that employers from SMEs, with no access to HR/OH and no post-stroke RTW experience may benefit *most* from guidance in supporting stroke survivors. In the UK, the government is committed to minimising ill health-related job loss, e.g., by improving OH provision for self-employed and SME employers, and providing employers with high-quality advice and information (including support with sickness absence management) [45]. This study's findings demonstrate the need for such work.

In conclusion, this study provides triangulated evidence showing that employers may benefit from education and training to improve their post-stroke RTW support. Findings suggest greater need among SME employers with no access to HR/OH support or post-stroke RTW experience. Further research with more representative employer samples is needed.”

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| Generalisability | 21 | Discuss the generalisability (external validity) of the study results | p.21 | “One limitation is that, despite employing a broad ‘employer’ definition, and multi-channel recruitment strategy over several months, the resulting interview and survey sample sizes were small. It is uncertain whether these results are generalisable/transferable.” |
| | | | p.22 | “Others have experienced issues engaging employers, e.g., managers, in research [22], particularly those from SMEs and non-service sectors. In the current study, employers from SMEs and the non-service sector (e.g., manufacturing) were successfully recruited through business networking events or management staff meetings. In line with previous research [22], recruitment of employers for interviews was achieved through pre-existing local relationships. Future employer recruitment may prove more fruitful if funding applications include budgets and generous timelines for study advertisement and recruitment. Recruitment efforts should be shared across research team members and various strategies employed.” |
| Other information | | | | |
| Funding | 22 | Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based | p.25 | “This study was funded by the Ossie Newell Foundation (ONF) and the National Institute for Health and Care Research (NIHR) Applied Research Collaboration East Midlands (ARC EM). The funders played no role in the study design, data collection and analysis, or writing of this article. The views expressed are those of the authors and not necessarily those of the ONF, NIHR or the Department of Health and Social Care.” |

*Give information separately for cases and controls in case-control studies and, if applicable, for exposed and unexposed groups in cohort and cross-sectional studies.

Note: An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at <http://www.plosmedicine.org/>, Annals of Internal Medicine at <http://www.annals.org/>, and Epidemiology at <http://www.epidem.com/>). Information on the STROBE Initiative is available at www.strobe-statement.org.