

Evidence review: **Employment support for people with disabilities and health conditions**

July 2019

Summary

- There is a growing body of evidence on Individual placement support (IPS), which has traditionally focused on individuals with severe mental health conditions, and its effectiveness in supporting individuals with a wider range of mental and physical health conditions.
- Supported employment and internships can lead to large employment gains for those with learning disabilities.
- Overall, there are far fewer specialist trials designed for people with physical health conditions – particularly for those who have not recently engaged with the labour market. Yet there is some evidence on the positive impact role models can have for young people and the effectiveness of one-to-one support (compared to group support). There is also emerging evidence on the effectiveness of IPS for people with physical health conditions.
- Evidence on the effectiveness of employer-interventions is more limited, with mixed evidence on the effectiveness of campaigns and wages subsidies.
- The personalisation of services provided by specialist advisors (who have lower caseloads) can improve the effectiveness of interventions.
- Integrating support is increasingly being viewed as an important way to support people with additional and complex needs – as is the co-location and co-production of support.
- There is some evidence to show that early intervention to support employed people with health conditions can help prevent labour market exit. Robust trials and follow up are required to build the evidence in this area.

Background

There are significant disability employment gaps across the UK. On average, 51.3% of people with disabilities were in employment, compared to 81.4% for people without a disability: a disability employment gap of 30.4 percentage points.¹ The disability employment gap varies by region, broadly following overall regional labour market trends with the largest gap in Northern Ireland (44%) and smallest in the South East (24%).² The gap in employment rates varies between disabilities and health conditions: just 5.8% of people with learning disabilities and 32% of people with mental ill health are in work, compared to 46% of people with musculoskeletal conditions.³

The government has set a target of placing and retaining 1 million more people with disabilities and other health problems in work by 2027 (from 3.5 million in 2017 to 4.5 in 2017). While the disability employment gap has narrowed slightly over the last five years (from 33.7% in 2013 to 30.2% in 2018)⁴, the government acknowledges that there is a lot further work to be done to support disabled people to work.

The UK support landscape

Government support for people with disabilities can be categorised into four broad groups:

- National contracted programmes: including Work Choice, Specialist Employability Support and the Work and Health Programme
- Jobcentre Plus provision: including direct support from Work Coaches to gain a job, enhanced offers for those with more complex needs and access to locally funded specialist disability support through the Flexible Support Fund.
- Grant based employment support: such as Access to Work
- Initiatives targeting employer behaviour: including Disability Confident

In 2015, the Department for Work and Pensions (DWP) and the Department of Health and Social Care (DoHSC) set up the Work and Health Unit to work across government and wider public sector to develop policies and programmes for people with disabilities. An innovation fund announced in the 2015 Spending Review is testing new integrated health and work interventions to March 2020. This work aims to develop a framework for 'effective, locally driven employment support' that can be sustained after the initial innovation funding has been depleted. It will also build the evidence base for innovative employment interventions to facilitate the national roll out of proven approaches.⁵

¹ Powell, A (2018), *People with disabilities in employment*, House of Commons Library.

² Powell., opt cit., p.6

³ Hope, G (2017) 'Thinking differently: a new vision for disability and employment', in, Sayce, L et al, (2017) *Opportunity for all: essays on transforming employment for disabled people and those with health conditions* Learning and Work Institute: Shaw Trust.

⁴ Ibid., p. 22.

⁵ DWP, *Improving lives: the future of work, health and disability*, 30 November 2017

This review

This evidence review covers interventions designed to support those with mental and physical disabilities into work and to retain a job or return to work following sickness. It also explores the implementation of interventions to support disabled people in local contexts.

Quality and nature of the evidence base

The evidence base on disability and health conditions is complex, due to the wide range of potential conditions (spanning physical and mental health conditions), numbers and severity of conditions. As the population ages, the number of people with long term conditions increases, as does the likelihood of multi-morbidity of conditions. The Department of Health predicted that the number of people with three or more long term conditions would rise from 1.9 million in 2008 to 2.9 million in 2018.⁶

The evidence used in this report uses academic and grey literature. In reporting, we have prioritised robust research studies, including randomised control trials, meta analyses and systematic reviews (sometimes referred to as level 1 level of evidence). The majority of level 1 studies have been conducted in the United States. Within the disability and health field, groups of people with different mental and physical health conditions have distinct barriers to work and are therefore examined separately. The majority of level 1 studies (those at meta-analysis, systematic review or RCT level) are for people with mental health disability, whereas studies evaluating the effectiveness of interventions for other types of disability were primarily using lower levels of evidence.

Implementation literature is less likely to be tested explicitly through trials and therefore much of the evidence is based on process evaluations or policy papers. Wherever possible, local studies have been selected for review to give insights for local delivery and implementation.

Interventions to support people with disabilities and health conditions to work

This section describes the current evidence on what works to support the labour market integration of those with existing health conditions and disabilities. It first looks at supply-side interventions for people with mental health conditions, learning disabilities and physical health conditions. It secondly looks at demand-side interventions, such as financial incentives for employers.

Key interventions

- **Traditional models of vocational rehabilitation (TVR)** – a stepwise programme of training followed by transition to the open employment market e.g. Work Choice which provides up to six months personalised support in advance of participants finding a job
- **Supported employment interventions (SE)** – are based on a theory of work rehabilitation that states that individuals with some identified disability should be helped to find competitive employment as soon as possible, rather than after undergoing (clinical or other support) treatment or having completed a training programme

⁶ Department of Health (2012). Report. Long-term conditions compendium of Information: 3rd edition

- **Individual placement and support (IPS)** – a model of support that sits within the Supported Employment (SE) family of interventions. It is a more structured model of intervention designed for jobseekers with severe and enduring mental health conditions⁷. It has eight principles: focus on competitive employment outcomes; zero exclusion – open to anyone with a severe mental health condition who wants to work; rapid job search; attention to client preferences in services and job searches. Key to its efficacy is a high fidelity to the model. It was initially developed for jobseekers with severe and enduring mental health conditions.

Support for individuals with severe mental health conditions

There is strong evidence of the effectiveness of Individual Placement Support (IPS) in increasing employment rates for individuals with severe mental health conditions. This evidence spans different populations and different economic and labour market contexts. Based on an international RCT and meta-analysis evidence focused on individuals with severe mental illness (schizophrenia or schizoaffective disorder), participants on IPS are twice as likely to find competitive employment⁸ and three times more likely to find any employment than those receiving traditional vocational rehabilitation services.⁹ Similar results have been observed in European studies. In Europe, the effectiveness of IPS was tested in an international project called EQQLISE trial in six European countries including the UK. The evaluation concluded that IPS clients were twice as likely to gain employment (55% compared to 28%), sustained employment for a significantly longer period and had reduced hospitalisation rates.¹⁰ A small scale RCT for those with severe mental health participants found that 30% of participants on IPS gained competitive employment compared to 7% of those on Work Choice.¹¹

Employment gains for those with severe mental health conditions are also likely to be sustained as a result of IPS. Two RCTs comparing IPS with traditional vocational

⁷ Suijkerbuijk YB et al., (2017) Interventions for obtaining and maintaining employment in adults with severe mental illness, a network meta-analysis (Review). Cochrane Library: Cochrane Database of Systematic Reviews.

⁸ 21 RCTs across 30 sites in 21 countries (33% in the United States). Metcalfe, JD (2017) Economic, Labor, and Regulatory Moderators of the Effect of Individual Placement and Support Among People With Severe Mental Illness: A Systematic Review and Meta-analysis, *Schizophrenia Bulletin* vol. 44 no. 1 pp. 22–31, 2018; Kinoshita Y, Furukawa TA, Kinoshita K, Honyashiki M, Omori IM, Marshall M, et al. Supported employment for adults with severe mental illness. The Cochrane database of systematic reviews.

⁹ Frederick, D. E and Vanderweele, T, J (2019) opt cit.

¹⁰ UCL (2014) Increasing employment opportunities and retention for people with a long-term health condition or disability: local action on health inequalities.

¹¹ Bond GR, Salyers MP, Dincin J, Drake R, Becker DR, Fraser VV, et al. (2007) A randomized controlled trial comparing two vocational models for persons with severe mental illness. *Journal of consulting and clinical psychology*. 2007; 75(6):968–82; Bond GR, Kim SJ, Becker DR, Swanson SJ, Drake RE, Krzos IM, et al. A Controlled Trial of Supported Employment for People With Severe Mental Illness and Justice Involvement. *Psychiatric services (Washington, DC)*. 2015; 66(10):1027–34.

rehabilitation (TVR) found that individuals on IPS reached a mean level 48.2% compared to 18.5% for TVR and this was maintained in a five year follow up.¹² A 10 year follow up found that 33% of those on IPS worked for at least 5 years in 10-year period. The UK SWAN Study also found that IPS was significantly more effective in helping individuals with severe mental illness obtain competitive employment (twice as likely) compared to TVR at a 2 year follow up. However, results were lower than previous US/international RCTs.¹³

IPS performs well in a variety of economic contexts.¹⁴ Although the relative benefits of IPS are lower in more challenging economic times (for instance where GDP growth was below 2%), IPS remained significantly more effective at gaining those with severe mental illness competitive employment compared with traditional vocational training. In the European case, the EQQLISE trial found that the local labour market context was important: the local unemployment rates explained a substantial proportion of the observed variation in IPS effectiveness (with better outcomes in low-unemployment regions).¹⁵

Evidence reviewed shows that IPS is more cost-effective compared to TVR programmes, particularly in European countries. Cost-benefits of IPS are largely accrued through reduced hospital admissions, benefit reductions where employment outcomes have been achieved. In US studies that compare IPS cost and outcomes to other vocational service models, costs tend to be comparable, but IPS programmes achieve employment and vocational outcomes two to three times greater than alternative programmes. In the European EQQLISE trial, total per person costs over 18 months were about a third lower for the IPS group than for the control group receiving vocation rehabilitation services. A further study looking at the cost effectiveness found a range of cost-effectiveness across the different sites, with no overall positive cost benefit but that IPS had an average cost benefit/employment value difference of -£9,440 per individual for IPS compared to -£25,151 for those in TVR.¹⁶

For individuals who do not respond to standard IPS, augmented forms of IPS (i.e. IPS combined with cognitive or skills training) can be effective. A 2017 systematic review of all IPS interventions found that augmented IPS was more effective than IPS in obtaining and maintaining competitive employment.¹⁷ IPS combined with cognitive training can more effective for individuals with impaired cognitive functioning than standard IPS. Some

¹² Smith, DL (2017) Evidence-Based Interventions for Increasing Work Participation for Persons With Various Disabilities: A Systematic Review, OTJR: Occupation, Participation and Health 37(2S); Hoffman et al (2014) found in their RCT beneficial effects of SE at 2 years sustained at 5 years. Participants in supported employment were more likely to obtain competitive work than those in traditional vocational rehabilitation (65% compared with 33%), worked more hours and weeks, earned more wages, and had longer job tenures. Hoffmann, H et al., (2014) Long-Term Effectiveness of Supported Employment: 5-Year Follow-Up of a Randomized Controlled Trial, *Am J Psychiatry* 171:11, November 2014.

¹³ Heslin L, Howard M, Leese P, McCrone P, Rice C. Randomized controlled trial of supported employment in England: 2 year follow-up of the Supported Work and Needs (SWAN) study, *World Psychiatry*, 2011; 10, 132–137

¹⁴ Modini et al., (2016) Supported employment for people with severe mental illness: systematic review and meta-analysis of the international evidence, *The British Journal of Psychiatry* (2016)209, 14–22

¹⁵ UCL (2014) opt cit.

¹⁶ Knapp, M (2013) Supported employment: cost-effectiveness across six European sites, *World Psychiatry* 2013;12:60–68.

¹⁷ Suijkerbuijk YB et al., (2017) opt cit.

individuals (particularly those with schizophrenia) don't respond to standard IPS. Behavioural training seeks to enhance cognitive processes (attention, memory, executive function, social cognition or meta-cognition).¹⁸ Meta-analysis conducted in 2015 found that cognitive training improved participants' vocational outcomes and was cost effective: adding training significantly increased the employment outcomes of participants (30% compared to 9%).¹⁹ For those who don't respond to standard IPS, participants on enhanced programmes were more likely to be in employment (60% vs. 36%), worked longer (23.9 vs. 9.2 weeks), and earned more (\$3,421 vs. \$1,728) than the control group that had an enhanced version of SE.²⁰ IPS combined with skills training or Integrated Supported Employment (ISE) works with people to remediate problems in activities of daily living, leisure, relationships, or employment. Research has found that ISE increases participant knowledge of fundamental workplace concepts (e.g. job performance) improves employment rates sustained over 39 months.²¹

Support for people with lower level mental health disorders

Based on the success of IPS for those with severe mental health disorders, IPS treatments have been expanded to broader range of mental health conditions. There is good emerging evidence for the effectiveness of IPS for expanded mental and physical health disabilities compared to traditional models of intervention. From May 2018 the Work and Health Unit have trialled a new IPS service for those with mild to moderate mental health and/ or physical conditions, with a target of 11300 participants in two English sub-regions.²²

IPS is also effective for those with less severe mental health conditions, including anxiety, depression and Post Traumatic Stress Disorder (PTSD). Across all mental health conditions, Frederick et al., (2019) found that those in IPS conditions were 1.6 times more likely to have found any competitive employment during the intervention compared to those in controlled TVR conditions.²³ Those in IPS conditions were 1.8 times more likely to be have been competitively employed at the end of the trial. Additionally, an RCT in the US compared IPS to TVR for veterans with PTSD. It found that more participants in the IPS group achieved steady employment than in the transitional work group (38.7% vs 23.3%). A higher proportion of IPS participants attained any competitive job (68.6% vs 57.0%) and had higher cumulative earnings from competitive jobs (an of \$7,290 in IPS vs \$1,886 in transitional work).²⁴ An RCT in Norway (the 'At Work and Coping Pilot') found that IPS plus Cognitive Behavioural therapy was effective for those with anxiety and depression for those on partial sickness benefits, full sickness benefits and on long term benefits.²⁵ At 12 months the proportion of participants with increased or maintained work participation was higher (44.2% vs 37.2%) and this difference remained at 18 months. For the long-term benefit group, the effect was stronger (24% versus

¹⁸ Suijkerbuijk YB et al., (2017) opt cit.

¹⁹ Yamaguchi, S et al., (2016) Cost-effectiveness of cognitive remediation and supported employment for people with mental illness: a randomized controlled trial, *Psychological Medicine* (2017), 47, 53–65.

²⁰ Frederick, (2019) opt cit.

²¹ Smith, DL et al., (2017) opt cit.

²² NAO (2019) opt cit.

²³ Frederick, (2019) opt cit.

²⁴ Lori, LD et al., (2018) Effect of Evidence-Based Supported Employment vs Transitional Work on Achieving Steady Work Among Veterans with Posttraumatic Stress Disorder A Randomized Clinical Trial, *JAMA Psychiatry*, April 2018 Volume 75, Number 4.

²⁵ Scharle (2016), opt cit.

12% controls).²⁶ Augmented IPS (supported employment plus cognitive training) is effective for those suffering with PTSD.²⁷ In an RCT PTSD were more likely to be employed than those under TVR.

Support for people with learning disabilities

There is a broad spectrum of learning disabilities from severe autism and Asperger's syndrome to diffuse and undiagnosed behavioural symptoms. Much of the research looks young people, particularly those transitioning from education or Education and Health Care Plans. Some research studies have noted that there needs to be more research done on adults with learning disabilities.

Supported employment (SE) approaches (similar to IPS) can be effective in supporting those with learning disabilities. One RCT found that tailored supported employment was more effective at supporting employment outcomes than traditional vocational rehabilitation for individuals with autism.²⁸ Similarly a 2009 study in the US found that supported employment schemes are more effective than sheltered employment schemes and is more cost effective. Beyer and Robinson (2009) state that the cost-benefit of supported employment schemes improves over time in comparison to sheltered workshops where cost-benefits tend to be static. However, a study of outcomes from the Prospects Service found evidence of high net costs per job gained (£1,500 per job), despite positive findings on improved employment prospects and benefit savings (Eurofound, 2012).²⁹

Supported internships can lead to large employment gains. Project SEARCH provided supported internships for people with a learning disability in their transition from education to employment. The programme provided a 9-month industry (e.g. banking centre, hospital) internship for youth with developmental disabilities in their final year of high school, modified to accommodate youth with ASD. The programme led to more individuals gaining competitive employment (87.5% compared to 6.25% of individuals receiving services according to their Individualized Education Plans (IEPs) only, and 84% compared to 55% retention when compared to individuals receiving supported employment services at 18months), higher wages (US\$9.89/h compared to US\$8.82/h) and fewer intervention hours required to secure employment (80.64 h compared to 184 h) compared to standard supported employment programmes.

There is some evidence that IPS is effective for those with learning disabilities and autism. International studies show that IPS can have a positive impact on employment and job retention for those with autism. One trial in the UK has also looked at the cost

²⁶ Reme, SE et al (2015) Work-focused cognitive-behavioural therapy and individual job support to increase work participation in common mental disorders: a randomised controlled multicentre trial, *Occup Environ Med* 2015;72:745–752

²⁷ McGurk SR, Mueser KT, Feldman K, Wolfe R, Pascaris A. Cognitive training for supported employment: 2–3 year outcomes of a randomized controlled trial. *The American journal of psychiatry*. 2007; 164 (3):437–41.

²⁸ Wehman et al.,m 2017 Wehman P, Schall CM, McDonough J, et al. Effects of an employer-based intervention on employment outcomes for youth with significant support needs due to autism. *Autism* 2017;21:276–90; Wehman P, Chan F, Ditchman N, et al. Effect of supported employment on vocational rehabilitation outcomes of transition-age youth with intellectual and developmental disabilities: a case control study. *Intellect Dev Disabil* 2014;52:296–310.

²⁹ Coleman, N et al., (2013) What works for whom in helping disabled people into work? DWP

effectiveness of using IPS for individuals with autistic spectrum disorder. While costs are higher overall, the results show that IPS yields a higher number of weeks in employment compared to standard care.³⁰ The costs were £18 per week extra but yielded an average 34 additional weeks of employment (in 17 months intervention and 8 years follow up).

Support those with physical health conditions and disabilities

Physical health conditions and disabilities form a large part of the disability benefit bill – with musculoskeletal conditions being the second most common impairment of ESA claimants.³¹

Overall, there are far fewer specialist trials designed for people with physical health conditions – particularly for those who have not recently engaged with the labour market. The majority of people are supported by national employment programmes such as the Work Programme or Work Choice which cover all types of disability. However, it is reasonable to assume that as individual physical disabilities have different causes, progression and level of impact on an individual's life, this will likely produce different kinds of barriers and necessitate unique interventions for each disability cohort. The Department for Work and Pensions (DWP) has recognised that it has limited evidence of what works. While large scale evaluations have been conducted, it has rarely undertaken rigorous evaluation of programmes' impact on disabled people's outcomes.³²

Young people with physical disabilities can benefit from peer mentoring with 'role models' that include young adults with a physical disability – modelling opportunities through greater knowledge of the skills and abilities of similar people.³³ For young people, using a team approach with multiple health professionals was also effective in increasing satisfaction and self-efficacy regarding seeking and maintaining employment.³⁴

For disabled people of all ages with neurological disabilities (especially with cognitive issues) one-on-one (as opposed to group) intervention was the most effective. Two programmes, similar to IPS, were shown to be successful in return to work for persons with neurological conditions.³⁵ The studies showed that – similar to those with mental health disabilities – mentoring and support to gain competitive employment was shown to be an important part of work preparation. One Level II (Quasi experimental design) study evaluated the effectiveness of the Vocational Transitions Program (VTP) compared with a waiting-list control group, on employment status and productivity, as well as knowledge of skills, attributes, and work-related information for persons with acquired brain injury (ABI).³⁶ Results of the study showed that individual clubhouse members who participated in VTP were significantly more likely to be productive and be employed following treatment than the control group.

³⁰ Mavranzouli, I et al., The cost-effectiveness of supported employment for adults with autism in the United Kingdom, *Autism*. 2014 vol 18 975-984.

³¹ Dobson & Pickles (2016) opt cit

³² NAO (2019) *Supporting Disabled People to Work*. HC 1991 SESSION 2017–2019 28 MARCH 2019

³³ Smith, DL et al., (2017) opt cit.

³⁴ Ibid; Fraker T (2013). The Youth Transition Demonstration: lifting employment barriers for youth with disabilities. *Mathematica Policy Research Issue Brief*, February 2013, 13–01.

³⁵ Smith, (2017) opt cit.

³⁶ Niemeier, J. P., DeGrace, S. M., Farrar, L. F., Ketchum, J. S., Berman, A. J., & Young, J. A. (2010). Effectiveness of a comprehensive, manualized intervention for improving productivity and employability following brain injury. *Journal of Vocational Rehabilitation*, 33, 167-179. doi:10.3233/JVR-2010-0525

Evidence suggests that IPS interventions can be effective for individuals with physical health disabilities. One RCT has looked at spinal cord injuries with veterans in the United States. The 'Spinal Cord Injury Vocational Integration Program', used IPS principles to place participants into competitive employment. Compared to treatment as usual controls the IPS participants were 2.5 times more likely than the TVR group to obtain competitive employment.³⁷

Trials are in progress such as the SEED-trial in Norway which is seeking to compare IPS to TVR for young people with a variety of health conditions.³⁸ Additionally, the UK Innovation trials will be testing IPS for physical disabilities in addition to individuals with mental health conditions.

Implementation literature suggests³⁹ that there may need to be some subtle modifications of the core IPS principles for physical disabilities. For instance, IPS workers may need to spend more time on employer engagement to help them understand how a person with given impairments can competently and capably perform a job with appropriate support from the IPS specialist and health care team.⁴⁰ Moreover, some logistical issues such as transportation and lower caseload ratios than those in the mental health field may be preferable given the level of medical complexity.

Employer interventions

In the UK, governments have focused most on the supply side – funding programmes to support disabled people into sustainable work – rather than the demand side i.e. influencing employers to open up real employment opportunities.⁴¹

There are a wide range of potential interventions which can promote the employment of people with disabilities, by influencing the attitudes and perceptions, or enhance the financial gains of employers. The rationale for these interventions is that those with disabilities may have additional costs attached to workplace adjustments or that employers perceive their productivity to be lower.

Evidence on the effectiveness of UK demand-side interventions is limited. Access to Work (ATW) provides grants to support the employment of people with disabilities or significant health conditions. There has been no counterfactual impact analysis of the scheme to date. Qualitative studies have suggested that ATW mainly supports the continued employment of people with disabilities already in a job at the time of applying for assistance, rather than new hires or job applicants. This implies that ATW has a limited effect on the re-

³⁷ Dobson, B, Pickles, C and Titley, H (2016) Stepping up, breaking barriers. Transforming employment outcomes for disabled people. Reform.

³⁸ Sveinsdottir, V et al., (2016) Protocol for the SEED-trial: Supported Employment and preventing Early Disability. *BMC Public Health* (2016) 16:579

³⁹ Ottomanelli, L., Barnett, S.D. and Toscano, R. (2014). Individual placement and support (IPS) in physical rehabilitation and medicine: The VA spinal cord injury experience. *Psychiatric rehabilitation journal*, 37(2), p.110.

⁴⁰ Bevan, S (2018) *Improving Health and Employment Outcomes through Joint Working*. Public Policy Institute for Wales

⁴¹ Sayce, L et al, (2017) *Opportunity for all: essays on transforming employment for disabled people and those with health conditions* Learning and Work Institute: Shaw Trust.

employment rate of people with disabilities.⁴² The Disability Confident campaign run by the DWP to give guidance on how to attract, recruit and retain people with disabilities, with a special focus on inclusive communication. DWP officials estimated that the number of people with disabilities in work increased by 238,000 during the second year of the campaign and 376 UK companies supported the campaign.

Evidence on the effectiveness of financial incentives is mixed. Wage subsidies for workers with disabilities in Sweden, where employers may be entitled to a wage subsidy of up to 80% depending on the degree of disability, have been associated with a large positive impact on labour incomes and employment. An impact analysis conducted in 2014 showed that it had a 40-50 percentage point impact on these measures in the first and second year, dropping to 25 percentage points in, three to five years after entry. However, this assessment also found impact lock in effects – the probability of taking up unsubsidised employment is lower by 15-20 percentage points in the short run and by 10 percentage points in the medium run.⁴³

Other studies found that there may be a marginalising effect of subsidies – with disabled people encouraged into low skilled work, mainly outside the legal framework of employment rights.⁴⁴ Flexijobs in Denmark awards employers who offer adjustments to hours and workplaces for eligible disabled people a permanent wage subsidy of 50 to 60%. An evaluation found positive effects on employment for people aged 35-44 but not in other age groups. DWP has experimented on a small scale with providing financial incentives and support to employers to take on disabled people. In 2012, it announced a wage subsidy scheme associated with Work Choice, available to employers who recruited an 18–24 year old disabled person from the programme. The Department's evaluation of the scheme found that there did not appear to be clear evidence of its benefits, and recommended that a review of further evidence might be conducted to see if financial incentives should form part of the future delivery model.⁴⁵

⁴² Clayton et al., 2011, Assembling the evidence jigsaw: insights from a systematic review of UK studies of individual-focused return to work initiatives for disabled and long-term ill people, *Public Health*, 11:170

⁴³ Eliason and Angelov (2014) The effects of targeted labour market programs for job seekers with occupational disabilities, Working Paper Series 2014:27, IFAU - Institute for Evaluation of Labour Market and Education Policy.

⁴⁴ Coleman, N et al., (2013) *What works for whom in helping disabled people into work?* DWP.

⁴⁵ HoC (2017) Disability employment gap: Seventh Report of Session 2016–17. HC 56

Apprenticeships have been floated as a good way to increase the participation of disabled people undertaking training and work. So far the focus of apprenticeship access has been on young disabled people. In 2017 the UK government, following the Maynard Review has committed to flexible entry criteria to apprenticeships for people with learning disabilities – making them more accessible. The government is working with social enterprises and disabled entrepreneurs to set up apprenticeships specifically for young disabled people. Jobcentre Plus is also increasing support in schools for young disabled people, by bringing in Supported Employment providers, business mentors and young disabled people who are in work to inspire young people to see employment as an achievable goal. This could include two weeks supported work experience. While these reforms have been welcomed, some analysts have suggested that the government could do more to support apprenticeships for older age groups – particularly as the likelihood of disability increases with age and apprenticeships could be a good vehicle for supporting career changes where someone needs this.⁴⁶

Intermediate labour markets: Solent Jobs Programme

The Solent Jobs Programme was part of the Southampton and Portsmouth City Deal agreement with national government. The programme was funded by the European Social Fund and City Deal/ local matched funds.

It was a multiagency partnership programme with some co-location, providing intensive case management, occupational health support and transitional employment offer (a subsidised job for up to 25 hours per week paid at the National Minimum Wage for those deemed further than 6 months away from entry to employment). The programme also included in-work support. The programme seeks to engage employers (particularly SMEs) to create a pipeline of employment opportunities.

The evaluation⁴⁷ found that 28% of participants moved into open employment with at least 17.5% sustaining this for 26 weeks. The average time taken for a job outcome was 5 months. Participants with severe mental illness had the highest employment rate at 38%, closely followed by participants with a visual impairment (36%). 32% of participants with Autism/Asperger syndrome moved into employment.

The impact evaluation carried out by Learning and Work (comparing to matched participants in the Labour Force Survey) estimated that SJP has a positive and statistically significant impact on job entry within 12 months for its participants. The findings suggest a treatment effect of between 7.0 and 8.7 percentage points on the job entry rate. The results of the CBA show that for every £1 of costs, the programme provides an estimated £1.76 of benefits.

Local implementation strategies: supporting disabled people through partnerships, integration and co-location

This section reviews evidenced implementation practices to give insights for local implementation strategies. Within implementation literature and as often found in process

⁴⁶ Dobson and Pickles, (2016) opt cit.

⁴⁷ Learning and Work Institute (forthcoming) Solent Jobs Programme Evaluation: Final Report

evaluations of support interventions, support interventions can fail (or are not as successful as they could be) due to implementation gaps.

Personalisation

Given the variety of barriers people with health conditions and disabilities can have (and which can be transient or change) personalisation of services is important for outcomes. Purvis et al., (2014) found across a number of national evaluations, a key driver of quality was personalised services where advisors were able to tailor support to each individual and vary the nature and intensity of support according to participants' needs, aspirations and the impacts of their individual impairments.⁴⁸ Evidence from the IPS literature shows that clients achieve greater numbers of days in work (job tenure) where advisors take into account clients' occupational preferences and find tailored employment that meets these needs.⁴⁹ Evidence from the Pathways to Work programme also found that personalised action plans and individual counselling in work focused interviews with clients increased the probability of disabled clients on benefit for eight weeks achieving employment. An 18 month follow up study showed that compared to controls who only received a work focused interview, 31.7% achieved employment compared to 29.7% in the control group.⁵⁰

Specialist advisors

Specialist training is necessary to enable advisors to assist people with different health conditions and disabilities overcome barriers to work. Qualitative evaluations of Jobcentre Plus provision often find that users report negatively about how advisors talk to them – that they do not understand their particular needs or do not modify their language to ensure all clients can understand what they are saying.⁵¹ Skilled advisors who could develop a good relationship with their client was found to be an independent predictor of employment outcomes in the EQQLISE trial, a European-wide trial of IPS.

Low caseloads

Lower caseloads are associated with higher employment outcomes. The Work Choice programme – a specialist disability programme delivered by providers for disabled people in the UK was found to be much more effective than the all customer group Work Programme. In

⁴⁸ Purvis et al. (2014) *Fit for Purpose - Transforming employment support for disabled people and those with health conditions*, Centre for Economic and Social Inclusion

⁴⁹ Gary Bond, (2004) 'Supported Employment: Evidence for an Evidence-Based Practice,' *Psychiatric Rehabilitation Journal* 27, no. 4 (2004): 355; ⁴⁹ Fioritti, A (2014), Individual placement and support in Europe, *Psychiatric Rehabilitation Journal* 37(2):123-128; Vonk Noordegraaf A, Anema JR, van Mechelen W, Knol

DL, van Baal WM, van Kesteren PJ, et al. A personalized eHealth programme reduces the duration until return to work after gynaecological surgery: results of a multicenter randomised trial. *BJOG: An International Journal of Obstetrics and Gynaecology* 2014;121(9):1127-35;

⁵⁰ Scharle, A (2016) opt cit.

⁵¹ Asquith, H et al, (2013) A Review of Employment Support for People with Mental Illness, Physical Disabilities and Learning Disabilities Tri-Borough Joint Strategic Needs Assessment (JSNA) Report; Jane Harrison, Personal Experiences of Employment Support in London (London Councils, 2015), 3.

the full evaluation, lower caseloads were found to be a key reason for Work Choice's effectiveness⁵².

Employer engagement

Models of support that have employer engagement are more effective but there are low levels of research on how to do this effectively.⁵³ These models often combine 'agency' and 'individual' support (the former focused on meeting employers' recruitment needs and placing disabled people as part of that; the latter on one-to-one job matching and brokerage).⁵⁴ Given that many of the models of support reviewed above rely on working directly or indirectly to create a suitable role or job opportunity, more research is needed on how best to engage and develop relationships with employers. More research should also examine how employers make decisions around employing disabled people, create work adaptations or breakdown the skills required for jobs so that support users can be effectively matched or placed.

Fidelity to an effective support model

Programmes with good fidelity have better employment outcomes than programmes with poor fidelity.⁵⁵ Where existing evidence is strong for a particular support model – as it is for the IPS model of support - ensuring that any programme holds true to these elements will be important to ensure that outcomes will be achieved and evaluations can further evidence its effectiveness (or not) in particular local contexts.

In some cases, early trials of IPS services in the UK were not implemented fully true to the evidenced model and as a result were not as successful at delivering employment outcomes⁵⁶ – particularly in the context of recession.⁵⁷ Where IPS has been delivered with a clear correlation to programme fidelity and health/employment outcomes, the model lends itself to scalable and transferable interventions which can be audited compared and evaluated.

Integrating support

Integrated support is increasingly being viewed as an effective way to provide employment support for disabled people. IPS is generally not integrated into the mental health system in the UK as is typical in the United States. Lessons from IPS delivery and trials found that integration between employment and health services was an important way to support people with additional and complex needs.⁵⁸ In particular health and employment

⁵² Purvis et al (July, 2013), Evaluation of the Work Choice Specialist Disability Employment Programme- Findings from the 2011 Early Implementation and 2012 Steady State Waves of the research,

⁵³ Risen, T (2015) Customized employment: A review of the literature. *Journal of Vocational Rehabilitation* 43 (2015) 183–193.

⁵⁴ Ingold, J. and Valizade, D. (2016) Employer engagement in active labour market policies in the UK and Denmark: a survey of employers, Leeds University Business School, Policy Report no 6

⁵⁵ Bond, Becker, & Drake, 2011; Bond, Peterson, Becker, & Drake, 2012, in, Pinto, AD et al., Employment Interventions in Health Settings: A Systematic Review and Synthesis, *Annals of Family Medicine* Vol.16(5) 447-460. <https://doi.org/10.1370/afm.2286>.

⁵⁵ Luciano 2014

⁵⁶ Fioritti, A., et al, (2014). Individual placement and support in Europe. *Psychiatric Rehabilitation*

⁵⁷ Schneider, J and Akhtar, A (2012) Implementation of Individual Placement and Support: The Nottingham Experience *Psychiatric Rehabilitation Journal* 2012, Volume 35, No. 4, 325–332

⁵⁸ Modini 2016, opt cit.

integration promotes a culture shift in clinicians who can better support the occupational needs of their patients.⁵⁹ A 2018 systematic review found that overall successful interventions for individuals with mental health conditions are multidisciplinary, with patient centred and engaged teams comprising health care worker and employment specialists who communicate regularly.⁶⁰ Integrating clinical and employment services achieves significantly higher competitive employment rates compared with controls.

Multi-agency support specialist support for long term unemployed: Greater Manchester Working Well Pilot

The Working Well pilot in Greater Manchester was set up in 2014 to test whether a locally integrated and co-located support model could deliver better outcomes for Greater Manchester residents with multiple barriers to work compared to the Work Programme.⁶¹

The programme provides intensive personalised support, integrated into Greater Manchester's public services. Its core principles are to:

- Be led by a keyworker who creates a personalised action plan
- An overall 'Work First' approach (similar to IPS)
- Talking Therapies Service (TTS) for those with mental health needs
- Skills for Employment service for those with skills issues
- Sequencing of support interventions with other agencies
- Local leads integration boards to coordinate programme delivery and performance

The client group are long term unemployed disabled clients with complex needs. An expansion phase is supporting clients with less time on ESA WRAG benefit and therefore closer to the labour market.⁶²

The latest evaluation found that for the pilot, there were 4,700 attachments and 610 job starts (13% of attachments, or closer to 20% when discounting clients that dropped out without completing the programme). For the expansion programme (augmented based on lessons from the pilot) there were 12,400 attachments and over 2,200 job starts (18% of attachments).⁶³

⁵⁹ Ottomanelli et al. (2014) opt cit.

⁶⁰ Pinto, AD (2018) Employment Interventions in Health Settings: A Systematic Review and Synthesis

⁶¹ SQW (2018) Working Well: Fourth Evaluation Report (GMCA).

⁶² SQW (2018) Working Well: Fourth Evaluation Report (GMCA).

⁶³ Greater Manchester Combined Authority (2018) Working Well: Fourth Annual Evaluation Report, GMCA

Integrated employment and health for very long term unemployed

Working Capital is an innovative, pilot programme of integrated employment and health support for people with disabilities and/or health conditions who have been out of work for more than two years. It was designed by Central London Forward (CLF), working with eight central London local authorities, the Mayor of London and central government and it is funded by the European Social Fund (ESF). It commenced in 2015 and will run for up to five years.

The pilot programme has been designed to support Employment and Support Allowance (ESA) claimants in the 'Work Related Activity Group' (WRAG) on a voluntary basis (following a mandated first appointment referred by Jobcentre Plus) who had been through the government's Work Programme without securing sustained employment; and to test the effectiveness of providing more intensive and specialised support for this group.

The programme provides a full assessment, action plan, caseload management, health and wellbeing sessions and in-work support for those who gain employment.

The programme is being run as a randomised control trial – the results of which will not be available until the programme end.

Employment outcomes on the programme are provisional due to the programme still running (as the above evidence from national programmes shows, programmes need time to establish and enter a steady state). To date, 93 Working Capital participants were verified as entering work, accounting for 11 % of the 814 participants on the programme.⁶⁴

Local authority involvement in the delivery of Working Capital has enabled access to a wider range of support options, while co-location with other local services and APM staff involvement in local forums and networks has enabled local service integration.

There is very little current evidence on the cost-benefit of integrating employment and health services. However, in one study, RAND Europe estimate that based on available evidence, embedding an IPS model in a primary mental health service IAPTs (Increasing Access to Psychological Therapies (IAPTS) would create a cost benefit ratio of 1.41. This means that for each £1 spent to achieve an employment outcome, the Government would save about £1.41. This option has a relatively high cost per participant (about £750) and appears particularly effective in terms of achieving an employment outcome compared to the other options proposed.

Co-location of support

Further along the integration scale, co-location allows for better understanding of each others' roles, responsibilities and skills across disciplines which better enables the service-user's needs to be met.⁶⁵ Again, evidence is emergent, with interventions being developed in the context of ongoing partnership - working and integration between local authority services and DWP services (such as Jobcentre Plus)⁶⁶. Although small scale, one

⁶⁴ Learning and Work Institute (2019) Working Capital: Third Evaluation Report

⁶⁵ Ibid.

⁶⁶ Learning and Work (2016) *Evaluation of the Universal Support delivered locally trials*, DWP.

study highlighted the use of co-location in three localities where an Employment Advisor was working alongside a number of urban and rural GP surgeries. The study showed some positive outcomes: for those who were on sick leave at time of referral 10 out of 11 were back to work in a short time (in the long-term all of them returned to work).⁶⁷

Sainsbury et al. (2008) evaluated a pilot project to locate employment advisors from JCP in GP surgeries. In this pilot, advisers acted as a broker between patients at the surgery and services offered at the JCP. Ninety-one per cent of participants found the meetings with the EA helpful. Other examples of integration include strengthening referral routes between Jobcentres, primary care and Work Programme providers: this is happening in areas such as the Borough of Newham, where the reported number of IAPT service users coming off sick pay and benefits appear to be among the highest in London (Newham CCG Mental Health Board, 2013).

Shaw Trust Community hubs

The Shaw Trust Community Hubs pilot was established in Hackney and Lewisham in September 2014 when Shaw Trust converted its Work Programme delivery centres in these boroughs into one-stop hubs for employment and wellbeing support.

Bringing employment, financial, health and wellbeing support under one roof has allowed for much better communication between teams and led to a clear rise in engagement and attendance from jobseekers using the service.⁶⁸ In addition, having easy access to multiple services has allowed service users to access support for specific obstacles faster, and as a result the pilot hubs have seen service users moving into work more quickly and an increase in job sustainment.

Co-production of support

Although it has not been evidenced in academic or evaluation literature, some commentators suggest that future service design should include an element of co-production with disabled people. It is hypothesised that co-production would allow for a rich understanding of the challenges disabled people face in finding work and to structure thinking about how local services such as transport, health and social care and employment and skills can better support disabled people.⁶⁹ Such approaches were key to recent strategies designed by Learning and Work and CLES for Greater Manchester in order to understand how to better support people over 50 into work.⁷⁰

⁶⁷ Pittam et al. (2012)

⁶⁸ Sayce, L et al, (2017) *Opportunity for all: essays on transforming employment for disabled people and those with health conditions* Learning and Work Institute: Shaw Trust.

⁶⁹ Sayce, L et al, (2017) *Opportunity for all: essays on transforming employment for disabled people and those with health conditions* Learning and Work Institute: Shaw Trust.

⁷⁰ <https://cles.org.uk/news/centre-for-ageing-better-commissions-research-helping-over-50s-get-back-into-work-in-greater-manchester/>

Early Intervention: supporting those with health conditions to stay in or return to work

This section reviews the evidence from return to work and job retention literature. Each year, just under one million employees in Great Britain are on sick leave for a month or more and analysts found that employment exits connected to disability and ill health are increasing.⁷¹ Prolonged absence from work tends to reduce motivation, employability and in some cases the underlying health condition itself.⁷²

Overall in the UK, there are few requirements of what employers and employees must do during periods of sickness absence, beyond the legal requirement to make reasonable adjustments for those with disabilities. There is no difference between disability leave as an example of a reasonable adjustment and there is no distinction between sickness absence in general (which can constitute grounds for dismissal). The TUC has highlighted this as a key challenge of maintaining the employment relationship for disabled people.⁷³

Given the challenge of supporting people who have not engaged with the labour market or have become unemployed due to health or disability, it is useful to consider early interventions to assist people at risk of unemployment to stay in work or return to existing jobs.

Clinical interventions

For disabilities which have a health-related onset and happen during working life, the first encounter people will have is with a health clinician. Evidence shows that this an important time in which health professionals can influence patients' views of their capacities, but that in the UK this has not recently been a priority within the health sector.⁷⁴

Early healthcare interventions can lead to greater productivity among people with physical and mental health conditions. A 2015 report, *Fit for Work Europe*, found evidence from 7 studies in Sweden, Spain and Holland that early healthcare interventions which promote work ability and increase productivity among people of working age who have chronic ill health are cost-effective. For those with musculoskeletal disorders, sick leave and lost productivity was reduced by 50%; and healthcare costs reduced by up to two-thirds.⁷⁵ One early RCT trial developed an intervention to support depressed patients maintain work. Clinicians were trained and delivered a depression management service over 24 months. Employed patients in the enhanced care had 6.1% greater productivity and 22.8% less absenteeism.⁷⁶

Providing training on work outcomes for GPs and other clinical groups can be an effective way to ensure clinicians consider working capabilities in any discussions with

⁷¹ Gaffney, D and Gardiner, L (2016) *Retention Deficit: a new approach to boosting employment for people with health problems and disabilities*. Resolution Foundation.

⁷² Scharle, A Csillag, M (2016) *Disability and Labour Market Integration*. EU Commission Analytical Paper.

⁷³ Gaffney, D and Gardiner, L (2016) *opt cit*.

⁷⁴ Steadman et al., *Social Prescribing: a pathway to work*

⁷⁵ Parkins, A (2017) 'Ageing, disability and employment – a global perspective' in *Opportunity for all: essays on transforming employment for all disabled people and those with health conditions* Learning and Work: Shaw Trust.

⁷⁶ Rosk, K (2004) The effect of improving primary care depression management on employee absenteeism and productivity. A randomized trial, *Med Care* 2004 Dec;42(12):1202-10.

patients.⁷⁷ Another study found that providing access to telephone or online resources on occupational medicine or shared access to OH nursing support within GP surgeries can help GPs put more emphasis on the work outcomes which patients want to prioritise.⁷⁸

Job Retention initiatives

A number of reviews have suggested that supporting disabled people into work can come too late – particularly for those with transient health conditions or those that come on later in (working) life. Long periods of unemployment or economic inactivity can create additional barriers to employment in addition to those of disability.

Measures can be used to predict work instability early enough by clinicians and occupational physicians can use remedial interventions and adjustments to job demands can support job retention. Studies in the US have shown that such practices can be beneficial for those with rheumatoid arthritis and multiple sclerosis.⁷⁹ Involving the workplace in clinical management can also be beneficial, particularly if conducted within 2 and 8 weeks of the start of sick leave.⁸⁰ A dialogue between health professionals about job design or workplace adaptation can improve the likelihood of an individual retaining their job.

Vocational rehabilitation and work capabilities can be effective to prevent job loss and increase productivity. A study trialled a 4.5 hours of one-to-one vocational rehabilitation consisting of an assessment of a person's job, roles and responsibilities in relation to the health condition, disease severity and activity limitations, and a detailed assessment of work barriers for those with rheumatic diseases. The intervention group showed significant improvements regarding presenteeism, absenteeism, risk of job loss, productivity and confidence regarding management of the disease at work, compared to the control group⁸¹

For mental health patients, specialist work-focused cognitive behavioural therapy (CBT) can be helpful. Seven studies found that CBT that focused on identifying work relevant solutions had a strong positive effect on reducing lost time for individuals with mental health conditions⁸². These studies also found significant cost benefit. In contrast, traditional CBT was found in several trials to *not be effective*.⁸³

One-to-one support is effective over self-management. A self-management programme for employees with irritable bowel disease (IBS) consisting of an individualized problem profile with recommendations regarding treatment and guidance, showed no positive effects on work-related outcomes, the tailored 12-week phone-based coaching (six one-hour sessions) for

⁷⁷ Bevan, S (2018) *Improving Health and Employment Outcomes through Joint Working*. Public Policy Institute for Wales.

⁷⁸ Cohen et al, 2016

⁷⁹ Bevan, S (2018) *Improving Health and Employment Outcomes through Joint Working*. Public Policy Institute for Wales

⁸⁰ Rick, J et al., (2008) *Review of the Effectiveness and Cost Effectiveness of Interventions, Strategies, Programmes and Policies to reduce the number of employees who take long-term sickness absence on a recurring basis*. IES.

⁸¹ Ibid.

⁸² Cullen, K, L (2018) Effectiveness of Workplace Interventions in Return-to-Work for Musculoskeletal, Pain-Related and Mental Health Conditions: An Update of the Evidence and Messages for Practitioners, *Journal of Occupational Rehabilitation* 2018 (28)1:15.

⁸³ Ibid.

employees with chronic illnesses showed significantly improved work ability perceptions and work resilience, compared to the control group.⁸⁴

Early Intervention for Workers with Musculoskeletal Disorders

An early intervention clinic was established in Madrid to test the impact of a 5-day early intervention among workers with MSDs compared with conventional treatment.

This two-year intervention (Abasolo et al., 2005) with over 13,000 MSD patients resulted in a 50 per cent reduction in permanent work disability (i.e. people leaving work completely) and a 39 per cent reduction in temporary work disability (i.e. people having sick days from work as a result of their condition).

In addition, patient satisfaction with this intervention was high and, analysis of the cost-effectiveness of the intervention in relation to the reduction in temporary work disability showed that for \$1 of expenditure, \$15 was saved in productivity benefits.⁸⁵

Return to work interventions

Overall this review has found mixed or no impact of return to work (RTW) interventions on reducing sick leave, productivity and job loss. Indeed in some cases, RTW initiatives led to an increased time to return to work.⁸⁶ A 2017 systematic review which included 14 studies from nine countries that enrolled 12,568 workers, and covered musculoskeletal problems and mental health conditions found that there were no benefits for return to work co-ordination programmes on return to work outcomes.⁸⁷ Two reviews that covered RTW initiatives using traditional CBT, stress reduction and fostering patients problem-solving skills showed that overall there were no significant differences in the overall success of RTW⁸⁸ but some evidence to show that sick leave duration could be reduced (an average of 13 days with an effect size of 0.14). Work focused CBT that fosters patients' problem-solving skills may be effective although there are mixed outcomes from a number of RCTs⁸⁹. One RCT did find that

⁸⁴ Ibid.

⁸⁵ Ibid.

⁸⁶ In Denmark, a multidisciplinary, coordinated and tailored return-to-work intervention for both groups of employed and unemployed persons with common mental disorders was developed. The intervention program was shown to exacerbate time to RTW (HR = 0.50; 95% CI = 0.34–0.75). These results determined a rather negative effect and delayed return to work compared to conventional case management, after accounting for confounders. Remarkably, after 1 year, more participants of the coordinated intervention were receiving sickness absence benefits than the conventional case management recipients. Munoz-Murillo, A et al., Furthering the Evidence of the Effectiveness of Employment Strategies for People with Mental Disorders in Europe: A Systematic Review *International Journal of Environmental Research and Public Health* 2018, 15, 838.

⁸⁷ Schandelmaier, V N et al., (2017) *Return-to-work coordination programmes for improving return to work in workers on sick leave (Review)* Cochrane Database of Systematic Reviews 2017, Issue 3. Art. No.: CD011618.

⁸⁸ Nigatu, YT (2016) Interventions for enhancing return to work in individuals with a common mental illness: systematic review and meta-analysis of randomized controlled trials, *Psychological Medicine*, Page 1 of 12. doi:10.1017/S0033291716002269

⁸⁹ Ibid.

CBT plus physical therapy led to those in the intervention group having fewer sick days and that the risk for developing long term disability leave was more than five-fold higher in the control group than the intervention.⁹⁰

Some research studies have suggested that RTW interventions are overly focused on employment factors, potentially neglecting powerful clinical variables and thereby lessening the likelihood of success.⁹¹ However, given some of the evidence on the effectiveness it may be reasonably assumed that RTW interventions either come too late to be effective and/or that disabled people feel that interventions are interfering with the recovery process.

Workplace accommodation

Although individuals can use an Access to Work grant to pay for any workplace adjustments they might need, some commentators have suggested that Access to Work is becoming too exclusively focused on employment entry rather than job retention particularly given evidence of insufficient engagement of employers in publicity or referrals. Moreover, one study concluded that such initiatives overly focus on the reimbursement of direct costs whereas effective workplace accommodation subsidies should combine this with other costs such as training, on the job assistance and awareness raising measures for managers and employees.⁹²

However, research shows that introducing workplace accommodation interventions are complex due to the widely differing needs of different disabilities and health conditions. One study⁹³ (although not trialled) suggested that successful workplace accommodation strategies include: identification of rehabilitation needs, goal setting and taking appropriate action to meet these, and procedures to restore the balance between personal resources and job demands.

There is some evidence of the effectiveness of workplace accommodations. One Level I systematic review examined the effectiveness of workplace accommodations regarding employment, workability, and cost–benefit among persons with disabilities.⁹⁴ The authors found that there was moderate evidence that specific types of workplace accommodations (vocational counselling and guidance, education and self-advocacy, help of others, changes in work schedules, work organisation, and special transportation) promote employment among physically disabled persons and reduce costs, although there is a lack of evidence on cost-effectiveness. Results suggest that the early ergonomic intervention reduces sickness absence due to any musculoskeletal disorders in the long term (4- to 12-month period). The number of nurse-prescribed days in sick absence due to any musculoskeletal disorder was significantly lower in the intervention group but not the number of sickness absences

⁹⁰ Malmose Stapelford, C et al., (2019) A systematic review of interventions to retain chronically ill occupationally active employees in work: can findings be transferred to cancer survivors? *Acta Oncologica*: DOI: 10.1080/0284186X.2018.1559946

⁹¹ Munoz-Murillo (2018) opt cit.

⁹² DWP (2013) *What works for whom in helping disabled people into work?* Independent Social Research. Working Paper 120.

⁹³ Malmose Stapelfeldt, C (2019) opt cit.

⁹⁴ Nevala, Pehkonen, Koskela, Ruusuvoori, & Anttila, (2015) Workplace accommodation among persons with disabilities: A systematic review of its effectiveness and barriers or facilitators. *Journal of Occupational Rehabilitation*, 25, 432-448. doi:10.1007/s10926-014-9548-z

prescribed by physicians and nurses. Subgroup analyses showed that subjects exposed to work-related physical load factors especially benefitted from the intervention.⁹⁵

Training for managers can also be an effective way to support job retention and reduce sickness leave. Workplace mental health training for managers was successfully tested in an Australian RCT⁹⁶. 128 managers (covering 1956 staff) in a large Australian fire and rescue service were given 4 hours of management training to support staff with mental illnesses. During the 6-month follow up, the mean rate of work-related sick leave decreased by 0.28 percentage points in the intervention group and increased by 0.28 pp in the controls, corresponding to a reduction of 6.45 hours per employee per 6 months. A return on investment found a return on investment of £9.98 for each £1 spent on training.

It is likely that workplace flexibility policies are effective in supporting those with health conditions and disabilities to stay in work⁹⁷ - but this review could not find explicit trials looking at employment outcomes of disabled people through changes to workplace flexibility.

Arthritis Research UK (MSK health initiatives)⁹⁸

Arthritis Research has developed an innovative, integrated and consistent approach to championing MSK health in the workplace at multiple organisation touchpoints and is basing a current office redesign on a key industry charter. The integrated approach includes:

- My healthspan – a personalised health assessment by external trained consultants with a focus on MSK health
- A workplace assessment to identify any issues in the workplace that may lead to MSK issues, including provision of equipment
- Flex working – aimed at supporting employees who suffer from MSK conditions that fluctuate
- Internal communications campaign to promote movement in the workplace and provides information and education on MSK health
- Redesign of office space with MSK health in mind including features to provide movement, a range of working spaces and furniture to support MSK health

⁹⁵ Sabariego, C et al., (2018) opt cit.

⁹⁶ Milligan-Saville, JS et al., (2017) Workplace mental health training for managers and its effect on sick leave in employees: a cluster randomized controlled trial, *The Lancet Psychiatry* · October 2017 DOI: 10.1016/S2215-0366(17)30372-3

⁹⁷ Oakman, S (2016) opt cit; Sainsbury, R and Coleman- Fountain, E (2015) How to enhance Active Citizenship for persons with disabilities in Europe through Labour market participation? DISCIT/EU.

⁹⁸ Whitmore M et al., (2018) Promising practices for health and wellbeing at work A review of the evidence landscape RAND Europe.

Key Evidence

Frederick, D. E. and Vanderweele, T. J. (2019), “Supported employment: meta-analysis and review of randomised controlled trials of individual placement and support”

- A meta-analysis and review of RCTs testing the impact of individual placement and support (IPS) treatments on vocational and non-vocational outcomes.
- The study identified 30 articles analysing RCT's which compared supported employment (SE) as implemented via IPS to a control condition.
- The study found that IPS treatments perform significantly better than traditional vocational rehabilitation services (TVR) on all vocational outcomes. Those in IPS conditions were 1.6 times more likely to have found any competitive employment during the intervention compared to those in TVR conditions.
- The study also found that IPS can be effective with groups other than those with severe mental illness.
- Some evidence was found to suggest that the cost-benefit of IPS is not necessarily higher than TVR, however these studies did not take account of improvements of quality of life.
- In one RCT studied, individuals with severe mental illness (schizophrenia or schizoaffective disorder) on an IPS treatment were 3.24 times more likely to find competitive employment than those receiving TVR.
- Another RCT studied tested the effect of an enhanced IPS treatment which included cognitive training for those not responding to standard IPS. Those receiving the enhanced IPS treatment had higher employment (60% vs. 36%), worked longer (23.9 vs. 9.2 weeks) and earned more (\$3,421 vs. \$1,728) than the control group that had an enhanced version of SE.

Malmose et al. (2019), “A systematic review of interventions to retain chronically ill occupationally active employees in work: can findings be transferred to cancer survivors”

- A systematic review of RCTs on interventions aiming to support employees with chronic diseases to sustain employment with a view to assessing whether this evidence could translate to cancer-survivors.
- The review covered a variety of intervention types including (psycho-)educational, physical, vocational and multi-disciplinary approaches.
- The study found that vocational and multidisciplinary interventions were the most impactful, although no effects were found for multidisciplinary interventions with more than two components.
- The study found that guidance, vocational counselling and job accommodation can help prevent job loss (and potentially be cost effective). In one RCT study, participants had two 1.5 hour sessions which were found to be protective against job loss (OR 0.58; 95% CI 0.34–0.99).
- One RCT found that CBT plus physical therapy resulted in fewer sick days. The risk for developing long term disability leave was found more than five-fold higher in the control group than the intervention (OR 5.33; 95% CI 1.53–17.98).
- One study (although not trialled) suggested that successful workplace accommodation strategies include the identification of rehabilitation needs, goal setting and taking appropriate action to restore the balance between personal resources and job demands.

Smith, M. J. et al. (2019), “Enhancing individual placement and support (IPS) - Supported employment: A Type 1 hybrid design randomized controlled trial to evaluate virtual reality job interview training among adults with severe mental illness”

- The protocol for an RCT evaluating the effect of Virtual Reality Job Interview Training (VR-JIT) for individuals with severe mental health conditions as part of an IPS intervention.
- The protocol cites five previous lab-based RCTs that tested this intervention with participants with severe mental illnesses or other disabilities
- The studies found that being able to undertake job interviews in a safe and controlled manner was effective in improving interviewing self-efficacy and interviewing skills.
- By six months the intervention group had an increased likelihood of receiving job offers when compared to the control group.
- In addition, more training was found to be associated with a shorter period of time before receiving a job offer.

Lori, L. D. et al. (2018), “Effect of Evidence-Based Supported Employment vs Transitional Work on Achieving Steady Work Among Veterans with Posttraumatic Stress Disorder A Randomized Clinical Trial”

- An RCT in the US compared IPS to TVR for veterans with Post Traumatic Stress Disorder (PTSD), focusing on the achievement of steady and competitive employment.
- The study involved 541 unemployed veterans with PTSD at 12 different medical centers in the US. Veterans in the control group received vocational assessment followed by an assignment in a minimum-wage activity, while veterans in the intervention group received IPS aiming to rapidly lead to the attainment of competitive work.
- The trial found that more participants in the IPS group achieved steady employment than in the transitional work group (105 [38.7%] vs 63 [23.3%]; odds ratio, 2.14; 95% CI, 1.46-3.14).
- A higher proportion of IPS participants attained any competitive job (186 [68.6%] vs 154[57.0%]; $P = .005$) and had higher cumulative earnings from competitive jobs (median [interquartile range] \$7290 [\$23 174] in IPS vs \$1886 [\$17 167] in transitional work; $P = .004$).

Pinto, A. D. (2018), “Employment Interventions in Health Settings: A Systematic Review and Synthesis”

- A systematic review and knowledge synthesis of studies of employment interventions in health-care settings in high-income countries.
- The majority of interventions reported focused on Supported Employment interventions. Studies analysed included RCTs and observational studies.
- 77% of the RCTs reported significantly better employment outcomes compared to control groups receiving TVR. 70% of observational studies demonstrated positive employment outcomes for participants.
- Two interventions in the UK were not successful and this was attributed to the fact that IPS is not generally integrated into the mental health system in the UK unlike the US and employment support is often provided externally.
- The average increase of employment in studies with a control group was 28%.
- The following features were identified as key to successful interventions:
 - 1) A multidisciplinary intervention team with open communication to address patient needs;

- 2) A package of services including expert advice, a job search, feedback, networking, education and training and peer mentorship;
- 3) One on One, tailored services;
- 4) Holistic services taking a comprehensive view of social needs;
- 5) Intervention team engages with employers.

Metcalfe, J. D. (2017), “Economic, Labor, and Regulatory Moderators of the Effect of Individual Placement and Support Among People With Severe Mental Illness: A Systematic Review and Meta-analysis”

- A meta-analysis assessing the impact of site-level moderators on the likelihood that IPS recipients will achieve competitive employment.
- Moderators considered included changes in GDP, local unemployment and unionisation rates, employment protection regulations, levels of disability benefit compensation and efforts to integrate disabled people in to the workforce.
- Based on evidence from 21 RCTs from 12 high-income countries, IPS recipients were found to be twice as likely to find competitive employment when compared to recipients of alternative vocational services.
- IPS was found to be even more effective in the context of less interventionist employment protection legislation, weaker integration efforts and less generous disability benefits.
- The study did not find any significant association between the effectiveness of IPS and unionisation, unemployment or GDP change.

Schandelmaier, V. N. et al. (2017), “Return-to-work coordination programmes for improving return to work in workers on sick leave”

- A systematic review of studies comparing the effectiveness of return-to-work co-ordination programmes to practice as usual for workers on sick leave.
- Return-to-work co-ordination programmes involve a group of health professional collaborating with workers to help them identify and address barriers to work. Components may include counselling, physical or occupational therapy and specialist treatment.
- The review encompassed 14 RCTs from nine countries, involving 12,568 workers with musculoskeletal problems and mental health conditions who have been on sick leave for at least four weeks.
- The review found that return to work co-ordination programmes had no effect on return-to-work outcomes such as time to return to work, cumulative sickness absence and the proportion of workers at work at the end of the follow-up period.
- The review did find small benefits in patient-reported outcomes including pain, ability to function, depression and anxiety, although these effects were smaller than the minimal clinically important difference.

Smith, D. L. et al. (2017), “Evidence-Based Interventions for Increasing Work Participation for Persons With Various Disabilities: A Systematic Review”

- A systematic review of interventions aimed at increasing work participation for people with disabilities.
- For those with mental health conditions, interventions including support and training before, during and after the placement, accountability, structure and choice of employment were found to be the most effective in attaining sustained employment.

- For those with neurological disabilities, one-on-one (as opposed to group) intervention was found to be the most effective approaches and two programmes similar to IPS were demonstrated to be successful.
- Employment gains for those with severe mental health were also likely to be sustained. Two RCTs reviewed in the study found that IPS interventions achieved a mean level of 48.2% competitive employment compared to 18.5% for TVR and that this was maintained in a five year follow up.
- One study within the review found that Integrated Support Employment (ISE), an intervention combining IPS with work-related social skills training, increases participant knowledge of fundamental workplace concepts (e.g. job performance) and improves employment rates sustained over 39 months.
- The review also found that young people with physical disabilities, can benefit from peer mentoring with 'role models' that include young adults with a physical disability.

Suijkerbuijk Y. B. et al. (2017), “Interventions for obtaining and maintaining employment in adults with severe mental illness, a network meta-analysis (Review)”

- A meta-analysis of RCTs evaluating the effectiveness of interventions on achieving competitive employment for adults with severe mental illness.
- The analysis included 48 RCTs involving 8,743 participants.
- The interventions analysed included pre-vocational training programmes, transitional employment interventions, IPS and augmented IPS.
- Augmented IPS was found to be more effective than IPS (or supported employment) (RR 1.94, 95% CI 1.03 to 3.65) in obtaining competitive employment. Both augmented and standard IPS were found to be more effective than both pre-vocational training programmes and transitional employment interventions.
- In the long-term follow-up direct meta-analysis, augmented IPS was also found to be more effective than standard IPS (MD 10.09, 95% CI 0.32 to 19.85) in maintaining competitive employment.
- Within augmented supported employment interventions, those including symptom-related skills training were shown to be more effective than those including cognitive training across a range of clinical outcomes.

Modini et al. (2016), “Supported employment for people with severe mental illness: systematic review and meta-analysis of the international evidence”

- A systematic review and meta-analysis of the international evidence on IPS for people with severe mental illness.
- The review and analysis included 17 RCTs comparing IPS with TVR as well as two follow-up studies.
- Meta-regressions were carried out to examine whether the effectiveness of IPS varied according to geographic location, unemployment or GDP growth.
- The study found that IPS performs well internationally in a variety of economic contexts and is more than twice as likely to lead to competitive employment when compared to TVR.
- Analysis demonstrated that neither geographic nor unemployment rates affected the overall efficacy of IPS and even where GDP growth was less than 2%, IPS was significantly more effective than TVR. These benefits were still evident 2 years after the interventions.

Nigatu, Y. T. (2016), “Interventions for enhancing return to work in individuals with a common mental illness: systematic review and meta-analysis of randomized controlled trials”

- A systematic review and meta-analysis of interventions aimed at improving the return-to-work for individuals with a common mental illness.
- The review covered clinical and work-focused interventions using traditional CBT, stress-reduction treatments, problem-solving training and psychoeducation, analysing the results of 16 RCTs.
- The review found that overall the interventions had no significant impact on the success of the return-to-work.
- There was however some evidence to show that sick leave duration could be reduced. Interventions reduced sickness leave by an average of 13 days with an effect size of 0.14.

Hoffmann, H. et al. (2014), “Long-Term Effectiveness of Supported Employment: 5-Year Follow-Up of a Randomized Controlled Trial”

- A five-year follow up of an RCT testing the long-term effectiveness of IPS.
- The trial compared IPS to TVR, with 100 participants who had severe mental illness and were unemployed.
- Entry into competitive employment and hospital admissions were tracked for 5 years and interviews were conducted 2 and 5 years after the intervention to assess recovery attitudes and quality of life.
- A cost-benefit analysis compared and total treatment costs to earnings from competitive employment.
- The study found that the beneficial effects of IPS at 2 years were sustain at 5 years.
- Participants in the intervention group were more likely to obtain competitive work (65% compared to 33% of the control group), worked more hours and weeks, earned more, had longer job tenures and were less reliant on supported employment services.
- The IPS group were also significantly less likely to be hospitalised, had fewer psychiatric admissions and spent fewer days in the hospital.
- The social return on investment was higher for the intervention group whether calculated as the ratio of work earnings to programme costs or of work earnings to programme *and* mental health treatment costs.

Mavranzouli, I. et al. (2014), “The cost-effectiveness of supported employment for adults with autism in the United Kingdom”

- A study assessing the cost-effectiveness of IPS compared to standard care (or day services) for adults with autism in the UK.
- A decision-analytic economic model was developed using the outcome data from the only available and relevant trial.
- The main analysis considered the costs of the intervention and secondary analyses considered the cost savings associated with changes in accommodation status as well as NHS and personal social service resource costs.
- The outcome measures used were the number of weeks in employment and the quality-adjusted life year.
- The study found that IPS was more successful than standard care at an extra cost of £18 per additional week in employment or £5,600 per quality adjusted life year.
- In the secondary analyses which incorporated additional measures, IPS produced better outcomes at a lower total cost.

Ottomanelli et al. (2014), “Effectiveness of supported employment for veterans with spinal cord injuries: results from a randomized multisite study”

- A randomised controlled multisite trial tested the effectiveness of IPS as compared to treatment as usual for veterans with spinal cord injuries across six sites specialist rehabilitation centres in the US.
- The intervention consisted of a vocational rehabilitation programme, the Spinal Cord Injury Vocational Integration Program, which adhered as closely as possible to the IPS model.
- The study included three groups: the IPS group, the TAU-IS (treatment as usual on an intervention site) and TAU-OS (treatment as usual on an observational site) groups.
- Treatment as usual took the form of referrals to external vocational rehabilitation.
- The study found that participants in the IPS groups were 2.5 times more likely to obtain competitive employment than the TAU-IS group and over 10 times more likely than the TAU-OS group.
- Researchers observed that the presence of IPS in the treatment setting increased awareness and attention to vocation issues and outcomes.

Kinsoshita, Y. et al. (2013), “Supported employment for adults with severe mental illness (Review)”

- A review of the effectiveness of IPS compared to other approaches to vocational rehabilitation and treatment as usual.
- The review also aimed to establish the degree to which fidelity to the IPS model impacts its effectiveness and whether the effectiveness of IPS can be enhanced by the additional of other interventions.
- Results from 14 RCTs involving 2,265 people were reviewed.
- The review found that IPS appears to significantly increase levels of any employment obtained as well as increasing the length of competitive employment.
- In addition, one study indicated that IPS lead to decreased time before the competitive employment was first obtained.
- The quality of this evidence was however assessed to be ‘*very low*’ due to the risk of bias within individual studies.

Knapp et al. (2013), “Supported employment: cost-effectiveness across six European sites”

- The EQOLISE trial tested the effectiveness of IPS as compared to standard vocational services for individuals with several mental illness PS as compared to TVR for individuals with several mental illness such as schizophrenia, bipolar disorder or depression with psychotic features.
- 312 individuals participated from six European cities: Groningen (Netherlands), London (UK), Rimini (Italy), Sofia (Bulgaria), Ulm-Günzberg (Germany), and Zurich (Switzerland).
- The trial found that IPS was more effective than TVR for every vocational outcome studied. Participants assigned to the control group were significantly more likely to drop out of the service and to be readmitted to hospital.
- The trial also found that local unemployment were important, explaining a substantial proportion of the variation in IPS effectiveness across sites.
- The study of cost effectiveness found variation across the different sites with no overall positive cost benefit.
- However, the study found that IPS had an average cost benefit to employment value difference of -£9,440 per individual for IPS compared to -£25,151 for those in TVR. This finding demonstrated that IPS programmes represent a more efficient use of resources than TVR.

