A multisite randomized controlled trial on time to self-support among sickness absence beneficiaries. The Danish national return-to-work programme

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Background: In 2010, the Danish Government launched the Danish national return-to-work (RTW) programme to reduce sickness absence and promote labour market attainment. Multidisciplinary teams delivered the RTW programme, which comprised a coordinated, tailored and multidisciplinary effort (CTM) for sickness absence beneficiaries at high risk for exclusion from the labour market. The aim of this article was to evaluate the effectiveness of the RTW programme on self-support. Methods: Beneficiaries from three municipalities (denoted M1, M2 and M3) participated in a randomized controlled trial. We randomly assigned beneficiaries to CTM (M1: n = 598; M2: n = 459; M3: n = 331) or to ordinary sickness absence management (OSM) (M1: n = 393; M2: n = 324; M3: n = 95). We used the Cox proportional hazards model to estimate hazard ratios (HR) comparing rates of becoming self-supporting between beneficiaries receiving CTM and OSM. Results: In M2, beneficiaries from employment receiving CTM became self-supporting faster compared with beneficiaries receiving OSM (HR = 1.32, 95% CI: 1.08–1.61). In M3, beneficiaries receiving CTM became self-supporting slower than beneficiaries receiving OSM (HR = 0.72, 95% CI: 0.54–0.95). In M1, we found no difference between the two groups (HR = 0.99, 95% CI: 0.84–1.17). Conclusion: The effect of the CTM programme on return to self-support differed substantially across the three participating municipalities. Thus, generalizing the study results to other Danish municipalities is not warranted. Trial registration: ISRCTN43004323

Introduction

Employees on long-term sickness absence are at high risk of becoming permanently disabled and excluded from the labour market. For the sick-listed employees, the loss of work and ability to support oneself often has adverse financial and personal consequences. In most countries, being out of work also means being
more isolated from close relationships with colleagues. Losing an identity as a valued employee can have detrimental consequences for one’s self-esteem. Knowledge about effective interventions to prevent exclusion from the labour market and long-term disability is therefore an important public health concern.

Employers, policymakers and health and rehabilitation professionals all play an important role in facilitating return to work (RTW), because a lack of cooperation often complicates and prolongs the sickness absence process. Based on a systematic literature review, which included nine randomized controlled trials (RCTs), Schandelmaier et al. found moderate evidence that RTW coordination increases the proportion of sickness absence beneficiaries who RTW. Effects, however, were usually small. Likewise, in a systematic review of the effectiveness of community- and workplace-based interventions for employees with musculoskeletal problems, Palmer et al. showed that these interventions reduce sickness absence and job loss, but that most studies were of limited quality. Both reviews conclude that more high-quality studies are needed to assess the effectiveness of RTW interventions aiming to help sick-listed employees RTW and become self-supporting again. Moreover, Loisel et al. have warned against generalizing results to other countries, because of differences in the sickness absence and labour market legislation.

In 1973, the Danish municipalities overtook payments of social transfers, including sickness absence benefits, and the responsibility of sickness absence management and work rehabilitation. To provide the municipalities with incentives for activating sick-listed citizens, in recent years, the Danish Government has increased the costs of awarding disability pensions, made vocational rehabilitation more attractive and expanded the municipalities’ responsibility for monitoring and assessing sickness benefit recipients. Today, the municipalities bear the main financial burden of sickness absence and play a key role in the RTW process. Compared with other European countries, employers in Denmark have little responsibility for financing social security and few obligations for reintegrating disabled workers. Thus, Danish employers might have a lower motivation for engaging in RTW efforts, but might, on the other hand, be less reluctant to hire people with disabilities.

In 2010, the Danish Government launched the national RTW programme to reduce sickness absence and promote labour market attainment among sickness absence beneficiaries. The RTW programme entailed a coordinated, tailored and multidisciplinary (CTM) effort, which was delivered by multidisciplinary teams located at the municipal sickness benefit offices. The National Research Centre for the Working Environment (NRCWE) designed and evaluated the RTW programme, which encompassed 21 municipalities. An RCT was carried out in three municipalities (denoted M1, M2 and M3) to examine the effects on self-support and sickness absence. In this article, we present the results on self-support for these three municipalities. We refer to self-support as being economically self-supporting, equivalent to receiving no social transfer payments other than payments related to education. We hypothesized that beneficiaries receiving CTM become self-supporting faster than beneficiaries receiving ordinary sickness absence management (OSM).

Methods

Setting and participants

Full details of the RTW programme are described elsewhere. Briefly, the RTW programme was carried out in 21 Danish municipalities and lasted from 1 April 2010 to 31 March 2012. In Denmark, the municipal sickness benefit offices play a key role in the RTW process of all cases of sickness absences exceeding 30 days (before January 2012: 21 days). The sickness benefit offices are, by law, responsible for monitoring the sickness absence process, for paying the benefits and for helping sickness absence beneficiaries RTW.

Three municipalities were selected for the RCT because of the following reasons: (i) the municipalities had more than one sickness benefit office permitting the randomization of beneficiaries to either an office providing CTM or an office providing OSM; (ii) the sickness benefit offices were geographically separated (while serving the same population), thereby reducing the risk of contamination between CTM and OSM; and (iii) there were enough beneficiaries in OSM to establish a control group. The RTW programme included beneficiaries at risk for prolonged absence from work regardless of their reason for absence. According to the Danish sickness benefit law, the municipal social insurance officers (SIOs) are obliged to conduct an interview with all beneficiaries by the end of the eighth week of sickness absence. At this interview, the SIOs must categorize beneficiaries into three categories: Category 1, likely to RTW within 3 months; Category 2, not likely to RTW within 3 months, but able to participate in RTW efforts, like graded RTW; and Category 3, not able to RTW within 3 months and not able to participate in RTW efforts. All beneficiaries of Category 2 were included in the trial.

From 1 April 2010 to 31 December 2011, 5189 beneficiaries were categorized to Category 2, and therefore eligible for participation in the RTW programme. If a beneficiary entered the study more than once (n = 172 cases), only the first sickness absence spell was used in the analyses. We applied the following exclusion criteria: (i) enrolled during the first 3 months of the programme, because the programme was not fully implemented in this period (n = 1113); (ii) sick-listed for more than 120 days at the time of the assessment, because an early intervention was no longer possible (n = 65); (iii) missing data on randomization (n = 1); and (iv) the information on first day of sickness absence registered by the SIOs did not match the information in the national sickness absence register (n = 477). Next, we excluded beneficiaries who were on maternity leave or did not reside in Denmark the week before they began receiving sickness absence benefits and/or who had received disability-related benefits 6 months before their sickness absence spell (n = 239). Finally, we excluded beneficiaries who had reached the sickness benefit compensation limit when included in this study (n = 17). The total study population therefore consisted of 3105 beneficiaries. We analysed the results for the employed and unemployed beneficiaries combined and separately for beneficiaries who were employed at the time of randomization (n = 2200). Because the purpose of this article is to analyse effects on time to self-support, we primarily focus on the employed beneficiaries, who had a workplace to return to (figure 1).

Randomization

A designated SIO or a designated administrative employee administered the randomization using a Web-survey programme, which automatically allocated all eligible beneficiaries to a sickness benefit office providing CTM or OSM. The result of the randomization was instantly available and registered in a central database at the NRCWE. The percentage randomized to CTM was based on a calculation of the expected number of beneficiaries in Category 2. During the project, the percentage of participants randomized to CTM was adjusted to ensure the prescribed target number of beneficiaries in the RTW programme. Thus, the percentage of beneficiaries randomized to CTM differed between the municipalities.

The CTM

The RTW programme comprised three core elements to change the organization of sickness absence management in the sickness benefit offices: (i) multidisciplinary teams consisting of municipal SIOs, physicians and rehabilitation professionals, e.g. physiotherapists and psychologists; (ii) standardized workability assessments and multidisciplinary sickness absence management procedures, e.g.
weekly team meetings; and (iii) comprehensive RTW training for the multidisciplinary teams provided by the NRCWE prior to delivering CTM. The multidisciplinary teams were responsible for planning and delivering activities, like contact with the workplace, gradual RTW or courses in stress and pain management.

The municipal SIOs conducted the first consultation with the sickness absence beneficiary. At the consultation, the SIOs decided whether it was necessary to involve the other team member. We expected that the SIOs would include the other team members in about 50% of all cases. The SIOs could, for instance, ask the other team members to conduct a work ability assessment or discuss the case with the other team members at the weekly multidisciplinary team meetings (these meetings did not include the beneficiaries). The SIOs also had to ensure that the sickness absence management procedures were conducted in accordance with the law (see also the section on OSM).

The aim of the RTW programme was to improve the quality of sickness absence management in the Danish sickness benefit offices. Thus, the main target groups were the SIOs and the health care professionals in the multidisciplinary teams. In accordance with the programme theory, we expected that the RTW programme would facilitate a faster and more comprehensive assessment of the beneficiary. This should result in tailored RTW plans addressing the health-related, the psychological and the social needs of the beneficiary in accordance with a bio–psycho–social understanding of RTW. More specifically, we expected that the RTW programme would:

(i) increase the team members’ knowledge about the bio–psycho–social model of RTW (including barriers and facilitators of RTW);
(ii) increase the team members’ abilities to plan and implement RTW activities that are tailored to the individual needs of the sickness absence beneficiaries;
(iii) improve the interdisciplinary communication and cooperation among the team members; and
(iv) improve the communication and the collaboration with the sickness absence beneficiaries and the workplace.

**Ordinary sickness absence management**

All SIOs (both in CTM and OSM) had to manage the sickness absence of the beneficiaries in accordance with the sickness absence legislation. The SIOs were obliged to conduct frequent follow-up sessions with all beneficiaries (one session every fourth week for beneficiaries in Category 2), develop RTW plans and activities and coordinate efforts with other stakeholders, such as employers and general practitioners. However, there were no requirements for the type of coordination with other RTW actors or stakeholders or for the content of the activities. Furthermore, activities could be developed by the SIOs themselves or could be outsourced to private companies, and therefore, activities varied between municipalities. No specific activities were developed for CTM or OSM, unless initiated by the team members themselves. Beneficiaries in OSM and CTM were covered by the sickness absence law and were obliged to participate in follow-up sessions and activities; if not, they risked to forfeit their right to benefits.

The main difference between OSM and CTM related to the organization of the sickness absence management, i.e. the establishment of multidisciplinary teams that participated in the RTW course prior to the RTW programme and the introduction of the standardized sickness absence management procedures, including procedures for work ability assessment, weekly team meetings and communication tools. A more detailed description of both CTM and OSM is published elsewhere.

**Ethics**

This RCT has been registered as a trial (ISRCTN430004323) and has been notified to the Danish Data Protection Agency by the Danish Data Protection Agency (http://www.datatilsynet.dk).
We also notified the Danish National Committee on Biomedical Research Ethics, who informed us that the programme does not need approval because it does not include the collection and analysis of biomedical material.

**Outcome**

We retrieved data on self-support from the Danish Register for Evaluation of Marginalization (DREAM). DREAM contains information on all social transfer payments in Denmark, including sickness absence benefits, for each week since 1982. The analyses in this article are based on data from DREAM until 29 April 2012. We measured time to self-support in weeks starting from the first day of absence until becoming self-supporting equivalent to receiving no social transfer payments other than payments related to education.

During the time of the study, Danish employers were obliged to finance sickness absence benefits for the first 21 days of absence. When the absence spell exceeds 21 days, the employers are eligible for sickness benefit compensation from the municipality. If the sick-listed employee is registered with a chronic disease or if the employer has contracted an insurance policy, the municipality pays sickness benefit compensation from the first day of absence. According to the sickness benefit legislation, sickness benefits are paid for a maximum of 52 weeks within a period of 78 weeks. But this period can be further prolonged, for instance if the beneficiary’s work ability has not been clarified.

**Background variables**

From Statistics Denmark we retrieved information on the beneficiaries’ age, gender, education and employment and health status (hospitalization, purchase of prescription drugs and contact with the general practitioner the year before their sickness absence spell). Contacts with the general practitioner were measured as the number of consultations, whereas hospitalization, purchase of prescribed drugs and employment at randomization were dichotomized into yes vs. no. The primary reason for sickness absence was registered by the SIOs based on information from the beneficiaries (self-report) and was dichotomized into mental health problems vs. somatic health problems. Finally, we retrieved information on previous sickness absence from DREAM, which we categorized into no prior sickness absence of 3 weeks or more vs. prior sickness absence.

**Table 1 Characteristics of the study population (beneficiaries sick-listed from employment)**

<table>
<thead>
<tr>
<th>Age, average (SD)</th>
<th>M1 (n = 991)</th>
<th>M2 (n = 783)</th>
<th>M3 (n = 426)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>150 (38.2)</td>
<td>165 (50.9)</td>
<td>33 (34.7)</td>
</tr>
<tr>
<td>Women</td>
<td>243 (61.8)</td>
<td>159 (49.1)</td>
<td>62 (65.3)</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short</td>
<td>120 (30.5)</td>
<td>86 (26.5)</td>
<td>21 (22.1)</td>
</tr>
<tr>
<td>Medium</td>
<td>185 (47.1)</td>
<td>146 (45.6)</td>
<td>60 (63.2)</td>
</tr>
<tr>
<td>Long</td>
<td>75 (19.1)</td>
<td>67 (20.7)</td>
<td>13 (13.7)</td>
</tr>
<tr>
<td>Missing</td>
<td>13 (3.3)</td>
<td>25 (7.7)</td>
<td>1 (1.1)</td>
</tr>
<tr>
<td>Employment status at randomization</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>313 (79.6)</td>
<td>188 (58.0)</td>
<td>75 (78.4)</td>
</tr>
<tr>
<td>Unemployed</td>
<td>80 (20.4)</td>
<td>136 (42.0)</td>
<td>20 (21.1)</td>
</tr>
<tr>
<td>Previous long-term sickness absence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>74 (18.8)</td>
<td>115 (35.5)</td>
<td>26 (27.4)</td>
</tr>
<tr>
<td>No</td>
<td>319 (81.2)</td>
<td>209 (64.5)</td>
<td>69 (72.6)</td>
</tr>
<tr>
<td>Reason for sickness absence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental health problems</td>
<td>153 (38.9)</td>
<td>149 (46.0)</td>
<td>57 (60.0)</td>
</tr>
<tr>
<td>Somatic health problems</td>
<td>232 (59.0)</td>
<td>156 (48.1)</td>
<td>35 (37.8)</td>
</tr>
<tr>
<td>Missing</td>
<td>8 (2.0)</td>
<td>19 (5.9)</td>
<td>3 (3.2)</td>
</tr>
<tr>
<td>Contact with GP (before current sickness absence spell)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No contact</td>
<td>27 (6.9)</td>
<td>31 (9.6)</td>
<td>6 (6.3)</td>
</tr>
<tr>
<td>1–6 contacts</td>
<td>115 (29.3)</td>
<td>100 (30.9)</td>
<td>24 (25.3)</td>
</tr>
<tr>
<td>7–12 contacts</td>
<td>94 (23.9)</td>
<td>83 (25.6)</td>
<td>27 (28.4)</td>
</tr>
<tr>
<td>13–24 contacts</td>
<td>96 (24.4)</td>
<td>76 (23.5)</td>
<td>17 (17.9)</td>
</tr>
<tr>
<td>More than 25 contacts</td>
<td>61 (15.5)</td>
<td>34 (10.5)</td>
<td>21 (22.1)</td>
</tr>
<tr>
<td>Purchase of prescription drugs (before current sickness absence spell)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>133 (33.9)</td>
<td>131 (40.4)</td>
<td>29 (30.5)</td>
</tr>
<tr>
<td>No</td>
<td>260 (66.2)</td>
<td>193 (59.6)</td>
<td>66 (69.5)</td>
</tr>
<tr>
<td>Hospitalization (1 year before current sickness absence spell)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>220 (56.0)</td>
<td>162 (50.0)</td>
<td>49 (51.6)</td>
</tr>
<tr>
<td>No</td>
<td>173 (44.0)</td>
<td>162 (50.0)</td>
<td>193 (58.3)</td>
</tr>
</tbody>
</table>

We used Cox proportional hazards model to estimate hazard ratios (HR) and 95% confidence intervals (CI) for the rate of return to self-support for each municipality separately. The week of reporting sick was used as the origin of the time scale on which return to self-support was defined as the first week of no longer receiving any social transfer payments (except support for education). We used delayed entry at the week of randomization, because beneficiaries were only included in the trial, if they were receiving sickness absence benefits at randomization. Beneficiaries who reached the limit for receiving sickness benefits were censored the week they reached 52 weeks of municipality-paid sickness absence benefits within a period of 77 weeks. Beneficiaries who retired, died, emigrated or left the labour market due to maternity/paternity reasons were censored the week before the event. Finally, beneficiaries still receiving social transfer payments by 29 April 2012 were censored at this time point. We used the PHREG procedure of SAS version 9.2 for the analyses.

The Cox model assumes that the HR remains constant over time. If not, the proportional hazard assumption is violated. The
proportional hazard assumption was investigated in a more general model allowing different proportionality factors in four time intervals: (i) the first 16 weeks, (ii) 17th to 29th week, (iii) 30th to 42nd week and (iv) 43rd to 55th week of receiving social transfer payments. We tested if the proportionality factors were identical in all intervals and found that the proportionality assumption was acceptably fulfilled in all three municipalities.

In this article, we focus on the site effects in the three municipalities. Originally, we planned to estimate the shared effect assuming an identical effect of the RTW programme in all municipalities, while allowing some random variability between the municipalities in the rate of return to self-support in OSM. However, the statistical analyses showed that the assumption of identical effect was strongly violated. Therefore, we allowed a random variability between the municipalities in the effect of the RTW programme by adding unit of sickness benefit office as a second random variable. All random effects were assumed to be additive and normally distributed on the log-rate scale. Confidence limits were calculated by evaluating the Wald test statistics in a t-distribution with the number of degrees of freedom equal to the denominator degrees of freedom determined in the analogous Poisson regression. The coxme package of R 2.15.2 was used for this analysis.

Results

Characteristics of the study population

Only Category 2 beneficiaries were eligible for the RTW programme. The proportion of beneficiaries in Category 2 was 50% in M1, 26% in M2 and 24% in M3. The proportion of beneficiaries randomized before 8 weeks of sickness absence was 88% in M1, 33% in M2 and 91% in M3. After 10 weeks of sickness absence, the proportion of beneficiaries who had been randomized was 94% in M1, 79% in M2 and 94% in M3.

Characteristics of the beneficiaries differed among the three municipalities, and at the time of randomization, 19% of beneficiaries were unemployed in M1 and M3 and 39% in M2. Table 1 shows the characteristics of the beneficiaries in CTM and OSM in each of the three municipalities. The randomization procedure aimed to ensure that there were no systematic differences in allocation of the beneficiaries to CTM or OSM. However, in M2, women comprised 61% of the participants in the RTW programme and only 49% in OSM. For the other variables, only minor differences are seen between beneficiaries in CTM and those in OSM.

Effects on time to self-support

Figure 2 shows the Kaplan–Meier survival curves for time to self-support in CTM and OSM, stratified by municipality. Table 2 shows the HR for becoming self-supporting for each municipality. The effect of the RTW programme differed between the municipalities (P = 0.0049). Compared with beneficiaries in OSM, the HR of beneficiaries in CTM was 0.99 (95% CI = 0.84–1.17) in M1, 1.32 (95% CI = 1.08–1.61) and in M2 0.72 (95% CI = 0.54–0.95) in M3. Adjusting for the background characteristics of the beneficiaries changed the effect estimates only marginally [M1: HR = 0.98 (0.83–1.16), M2: HR = 1.34 (1.09–1.65) and M3: 0.71 (0.53–0.96) (data not shown in table)]. A supplementary analysis that included the unemployed beneficiaries yielded similar results [M1: HR = 1.03 (0.88–1.20), M2: HR = 1.25 (1.05–1.48) and M3: HR = 0.79 (0.61–1.03)], although the negative effect in M3 was no longer statistically significant. The analysis of the shared effect of CTM compared with OSM across the three municipalities showed that there was no statistically significant effect of the RTW programme (HR = 1.01; 95% CI: 0.71–1.43).

Discussion

This study shows that the effect of the RTW programme differed considerably among the three municipalities: the RTW programme reduced time to self-support in one municipality, but prolonged time to self-support in another municipality. This finding is in line with another result from the same RCT that showed a similar pattern on duration of sickness absence. Two studies have recently examined the effect of a coordinated and tailored effort on RTW in Denmark. Bültmann et al. reported that this type of intervention reduced time to RTW among sickness absence beneficiaries with musculoskeletal disorders. In contrast, Martin et al. found that this type of intervention prolonged RTW among sickness absence beneficiaries.
beneficiaries with common mental disorders. Both studies were conducted in just one municipality, were restricted to sickness absence with specific diagnoses and consisted of rather small study samples, with less than 100 participants in the intervention groups. In contrast, the Danish national RTW programme was conducted in several municipalities, consisted of a large study sample and included beneficiaries with different reasons for sickness absence. Our results show that effects found in one municipality cannot be generalized to other municipalities in Denmark.

As delineated in the study design article, we originally planned to estimate the shared effect of the RTW programme assuming an identical effect for all municipalities. Because this assumption was clearly violated, we estimated the shared effect using a model that allowed some random variability in the effect of the RTW programme. A major consequence of the large differences seen between the municipalities, however, is that it requires more sites to achieve sufficient statistical power. Given the wide confidence limits of the shared effect estimate (0.71–1.43), this study was clearly underpowered to detect a shared effect across the three included municipalities. This is a substantial concern in interpreting the findings of the present study, and we caution against concluding firmly about the shared effect of the RTW programme based on this study. We recommend that future multisite studies include more municipalities to obtain sufficient statistical power.

The marked differences in the effect among the three municipalities might be due to differences in the implementation of the programme. The marked differences in the content and the quality of OSM in the municipalities might also explain the differences in the effects of the RTW programme. Municipalities with similar or superior efforts in their OSM might only achieve minor or negative effects if implementing the RTW programme. Previously, Stoltenberg and Skov showed that RTW for sickness absence beneficiaries from six different Danish municipalities varied substantially—even after controlling for diagnoses, income, education and age. These differences might be attributed to variations in the sickness absence management and/or differences in the attitudes of and the number of cases per SIO. Earlier, Bloom et al. showed that effects of American work for welfare programmes for the unemployed to a large extent were determined by the social workers’ attitude towards work resumption.

During the RTW programme, unemployment rates in Denmark were relatively high due to the global financial crisis and a substantial part of the beneficiaries had lost their job early in their sickness absence spell (19–39% based on the total sample at the time of randomization in the three municipalities). The high proportion of beneficiaries without employment might have had a negative effect because the SIOs could not coordinate their efforts with the employers or initiate gradual RTW or work accommodation for beneficiaries who became unemployed. According to Carroll et al., workplace-based interventions are more effective when implemented fully and when the coordination is conducted in a structured manner. However, according to Clayton et al., interventions that require the employer to participate tend to suffer from a low degree of implementation, which hampers the feasibility of such interventions.

### Strengths and weaknesses

The main strengths of this study are the RCT design, the multisite approach and the large sample size. We ascertained self-support by information from a national register (DREAM), which eliminated recall bias and allowed us to follow-up virtually all participants. Previously, Hjollund et al. have shown that DREAM is a reliable data source for follow-up studies on social and economic consequences of disease.

We used the term self-support, instead of RTW because we do not know whether participants who no longer receive social transfer payments actually RTW. Thus, a weakness of this study is that self-support, defined by the termination of social transfer payments, does not necessarily imply that the beneficiary is gainfully employed. Some beneficiaries whose social transfer payments were terminated in the DREAM might have returned to work but were possibly supported by other sources, e.g. by their spouses. Finally, even though the sickness benefit offices providing the CTM effort were geographically separated from offices providing OSM, we cannot rule out that some contamination occurred, because the SIOs might have shared their knowledge and tools from the RTW programme.

### Conclusion

The Danish national RTW programme is, to the best of our knowledge, the largest RTW study conducted yet. The programme combined a multidisciplinary, coordinated and tailored effort delivered in municipal sickness benefit offices. The results on self-support from the multisite RCT showed that the effect differed markedly between the three municipalities. The RTW programme had no effect on time to self-support in the first municipality, statistically significantly reduced time to self-support in the second municipality and statistically significantly prolonged time to self-sufficiency in the third municipality.

### Funding

The Danish Prevention Fund has granted €32 million (240 million DKK) to finance the implementation of the Danish national RTW programme. Furthermore, the Danish Ministry of Employment granted the NRCWE €4.3 million (32.5 million DKK) for developing, planning and evaluating the programme.

Conflicts of interest: None declared.
Key points

- The Danish national RTW programme was initiated by the Danish Government to reduce sickness absence and promote labour market attainment among sickness absence beneficiaries at high risk for exclusion from the labour market. The RTW programme consisted of a CTM effort, which was implemented in 21 Danish municipalities.
- An RCT carried out in 3 of the 21 municipalities showed that effects on time to self-support differed among the municipalities. The RTW programme statistically significantly reduced time to self-support in the first municipality, had no effect on time to self-support in the second municipality and statistically significantly prolonged time to self-support in the third municipality.
- The findings from the RCT show that the effects of a CTM effort on self-support in Denmark differ substantially between municipalities. This warrants against generalizing the study findings to other Danish municipalities.

References