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RESEARCH ARTICLE



Physicians' experience of and collaboration with return-to-work coordinators in healthcare: a cross-sectional study in Sweden

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ABSTRACT

Purpose: Return-to-work coordinators (RTWCs) give people on sick leave individualized support and coordinate between different stakeholders, including physicians. The aim of this study was to explore physicians' experience of RTWCs and investigate factors that influence how much physicians collaborate with RTWCs, or refer patients to them, in primary, orthopaedic, and psychiatric care clinics.

Materials and methods: Of the 1229 physicians responding to a questionnaire, 629 physicians who had access to a RTWC in their clinic answered to questions about collaborating with RTWCs.

Results: Among physicians who had access to a RTWC, 29.0% collaborated with a RTWC at least once a week. Physicians with a more favourable experience of RTWCs reported more frequent collaboration (adjusted OR 2.92, 95% CI 2.06–4.15). Physicians also collaborated more often with RTWCs if they reported to often deal with problematic sick-leave cases, patients with multiple diagnoses affecting work ability, and conflicts with patients over sickness certification.

Conclusions: Physicians who had more problematic sick-leave cases to handle and a favourable experience of RTWCs, also reported collaborating more often with RTWCs. The results indicate that RTWCs' facilitation of contacts with RTW stakeholders and improvements in the sickness certification process may be of importance for physicians.

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> IMPLICATIONS FOR REHABILITATION

- This study of physicians' experience of collaborating with return-to-work coordinators (RTWCs) observes that physicians reported more collaboration with or referrals to coordinators if they had a favourable experience of coordinators.
- The results indicate that physicians report more collaboration with or referrals to RTWCs if they had more problematic sick-leave cases to handle in the clinic.
- These findings imply that it might be possible to increase the collaboration between physicians and RTWCs in clinical settings by managing factors of importance.

Introduction

Physicians often experience sickness certification as difficult [1,2], primarily those working in primary, orthopaedic, and psychiatric care [3]. The main reasons for this are time constraints [4] and communication and coordination problems between stakeholders in the return-to-work (RTW) process [5]. As to improve the RTW collaboration and coordination between involved RTW stakeholders, many countries have introduced return-to-work coordinators (RTWCs), who have been described as having an important role in ensuring communication and clarifying the expectations of stakeholders [6]. In most countries, RTWCs are found in insurance companies or at workplaces of the insured, while they are most often found in the healthcare system in Sweden. Since 2020, the healthcare system is obliged to offer patients on sick leave coordination of the vocational rehabilitation, if needed [6], which has resulted in an increasing number of clinics employing an RTWC. The RTWCs, also called rehabilitation coordinators in Sweden, mediate and promote RTW for people on sick leave by coordinating stakeholders

in the rehabilitation systems and giving individualized support to the person on sick leave during the RTW process [7].

The RTWCs in Sweden collaborate regularly with physicians as well as other healthcare professionals and stakeholders such as employers, the Social Insurance Agency, or the social services. Patients are most often put in touch with a RTWC by another healthcare professional [8]. A questionnaire study in 2021 showed that the majority of physicians in Sweden did not collaborate with RTWCs on a regular basis [4], and RTWCs have expressed difficulties in establishing collaboration with physicians at their clinics [9]. There is limited research into physicians' experience of working with RTWCs, what promotes that type of collaboration, and how it differs between clinical settings. In this study, we wanted to gain more knowledge about factors that could promote collaboration between physicians and RTWCs at the clinics, from the physician's perspective. The aim of this study was to explore physicians' experience of RTWCs and their work with sick-leave cases, and investigate factors that influence how much physicians collaborate with RTWCs, or refer patients to them, in healthcare settings.

Return-to-work coordinators in the rehabilitation process

The overarching goal for RTWCs is to shorten sick leave and facilitate a rapid and sustainable RTW process that do not contribute to relapse in sick leave [10]. However, literature reviews investigating what effect RTWCs have on the RTW rates report mixed results, with both moderate [11–13], and a lack of effects [14,15]. A Norwegian study found a delay in RTW among patients who had their occupational rehabilitation programme in the healthcare provided by a RTWC, compared to those who had no contact with a RTWC when attending the programme [16]. The authors discuss whether this could be due to the fact that the RTWC was located in the healthcare, thus focusing on coordination with physicians and other healthcare staff, and having less possibilities to collaborate with the patient's employer and to accommodate at their workplace [16]. In Sweden, one report showed a decrease in sick-leave days and a more rapid RTW process among patients having contact with a RTWC in primary healthcare [17].

Effect studies are complicated by the fact that RTWC practices and contexts differ, and that the concept of RTW coordination can be understood in different ways [18]. A scoping review by Corbière et al. [10], that disentangles various stakeholders' role and actions in the RTW process of people on sick leave due to common mental disorders outlines some characteristics of the RTWC role. The authors describe the RTWC being responsible for involving all RTW stakeholders, and support them in identifying the needed resources and procedures for the sick-listed person's RTW. The RTWC is also suggested to encourage communication with stakeholders in order to establish a common vision of sustainable RTW for the worker, and sometimes play the role of a mediator in workplace conflicts [10].

In line with the role description by Corbière et al. [10], most of the Swedish RTWCs can be described as a form of case managers who support people in their RTW process [19]. They are mainly found in healthcare and their main assignments are to give individual support to sick-listed people and to collaborate with healthcare professionals and other stakeholders [6]. The RTWC role description is vague and lacks specific competence description or requirements for any particular vocational training [20]. RTWCs have a variety of background and training, with the most common professional backgrounds being social workers, occupational therapists, physiotherapists, and nurses. A majority of RTWCs complete a basic course in RTW coordination [19].

Both RTWCs and physicians need to consider the so-called "rehabilitation chain" in their work, which means that sick-listed peoples' work ability is assessed in increasingly broader terms as time passes, which affects their eligibility for sick-leave benefits [21]. When the study's data collection took place, the Swedish Social Insurance Agency assessed the work ability in relation to any job on the labour market after 180 sick-leave days, and after 365 days, sick-leave benefits were only granted in cases of severe illness [21]. In Sweden, sick-leave benefits are not exclusively granted for work injuries; they can be granted for any medical condition that decreases work ability.

Methods

Study population and data collection

This study was conducted as a cross-sectional study of physicians in Region Stockholm's primary, orthopaedic, and psychiatric care (including addiction care). The data collection started with lists of physicians provided by clinic managers. All physicians were given a personal code on the questionnaire that was sent to their

workplaces. In total, 1939 physicians in primary care, 237 physicians in orthopaedic care, and 579 physicians in psychiatric care received the questionnaire. The data collection took place between February and June 2020 and non-responders received up to three reminders. In total, 1229 out of 2755 physicians responded to the questionnaire, making the response rate 44.6%. Of the responding physicians, 51.2% (629 out of 1229) stated that they had a RTWC at their clinic, and those formed the primary study group of this study.

The questionnaire

We developed a questionnaire about physicians' work with patients on sick leave. The questionnaire was partly based on a previous questionnaire used for assessing physicians' work with sickness certification and with patients on sick leave [4,22]. We also used discussions in a reference group of physicians and RTWCs. The questionnaire included 17 questions (which had up to 21 sub-questions) about work in relation to sick-leave cases, the severity and frequency of their problems with sick-leave cases, and organizational prerequisites. Physicians who stated that they had a RTWC at their clinic answered to a total of 21 additional sub-questions regarding their experience of collaborating with their RTWC. The specific questions, items, and variables used for this study are described in the following sections.

Explanatory variables

Physicians' experience of RTWC

An index of 12 items was developed for exploring physicians' experience of RTWCs as facilitators in clinical practice. The first six items covered the RTWCs' role as facilitator in contacts with patients and other stakeholders, using the following statements: "The RTWC facilitates my contacts with...": "...the patient", "...colleagues at the clinic", "...the Swedish Social Insurance Agency", "...the employer or Swedish Public Employment Service", "...the municipal services", and "...other stakeholders". The remaining six items in the index covered RTWCs as facilitators in dealing with the sickness certification process. The following statements were used: "The RTWC helps to reduce patients' length/degree of sick leave", "The RTWC improves the quality of the work with sickness certification", "The RTWC helps me to get a better overview of my work with sick leave", "The RTWC increases my competence in insurance medicine", "The RTWC facilitates my work with patients on sick leave who have multiple illnesses", and "The RTWC saves me time". Answers were collected on a four-point scale, from "Completely true" to "Not true at all". There was also a "Do not know" option. The first four options were used to create a four-point Likert scale, ranging from 1 = "Not at all true" to 4 = "Completely true", for each item. Cronbach's alpha was calculated to assess internal consistency of the index [23] (see Table 1). After calculating Cronbach's alpha, the index was reconstructed using a threshold of two-thirds. In other words, if participants answered at least eight items with 1–4 answers in the index, we reconstructed that scale by imputing the mean of the scale for the missing items and "Do not know" answers. The values in the index were calculated so that a higher score indicated a more favourable experience of the RTWC as a facilitator in clinical practice.

Amount of patients on sick leave and healthcare setting

The physicians were asked how often they meet patients on sick leave. Their answers were categorized as: "Almost never to some patient each month", "Between 1 and 10 patients each week", and

Table 1. Cronbach's alpha of physicians' experience of return-to-work coordinators (RTWC) index.

Item	Scale mean if item deleted	Scale variance if item deleted	Corrected item total correlation	Cronbach's alpha if item deleted
The RTWC facilitates my contacts with:				
...the patient	35.49	63.801	0.748	0.943
...colleagues in the clinic	35.90	62.678	0.608	0.949
...the Swedish Social Insurance Agency	35.45	64.248	0.763	0.943
...the employer or Swedish Public Employment Service	35.40	64.616	0.735	0.944
...the municipal services	35.61	62.164	0.772	0.942
...other stakeholders	35.62	61.903	0.773	0.942
The RTWC helps to reduce patients' length/degree of sick leave	35.69	63.072	0.803	0.942
The RTWC improves the quality of the work with sickness certification	35.89	61.517	0.751	0.943
The RTWC helps me to get a better overview of my work with sick leave	35.78	61.839	0.783	0.942
The RTWC increases my competence in insurance medicine	35.85	61.347	0.800	0.941
The RTWC facilitates my work with patients on sick leave who have multiple illnesses	35.63	62.849	0.791	0.942
The RTWC saves me time	35.63	62.093	0.785	0.942
Total	Cronbach's alpha 0.947		Number of items 12	

"More than 10 patients each week". A question was asked about whether the clinical unit had routines/a common policy for dealing with sick-leave cases. The answer options were: "Yes, and they are well-established", "Yes, but they are not well-established", "No", or "I don't know". This variable was dichotomized to "Yes" (Yes, and they are well-established/Yes, but they are not well-established) and "No" (No/I don't know). Years at the clinic were dichotomized into those who had worked up to four years, and those who had worked five years or more. Type of healthcare clinic (primary care, orthopaedic, and psychiatric) was also used in the analyses.

Clinical experience of dealing with sick-leave cases

Experience of dealing with sick-leave cases was explored by the amount of problematic sick-leave cases physicians encountered in their daily work. Questions about how often physicians dealt with problematic sick-leave cases, patients with multiple diagnoses

affecting work ability, and physicians' experience of conflicts with patients over sickness certification, were used. The answer options were: "More than 10 times a week", "6–10 times a week", "1–5 times a week", "A few times a month", "A few times a year", and "Never or almost never". Each variable was dichotomized to "less than one case a week" and "at least one case a week".

Outcome variable

How much physicians collaborated with RTWCs was collected by the question: "How often in your clinical work do you collaborate with, or refer patients on sick leave to, a RTWC?". The answer options were: "More than 10 times a week", "6–10 times a week", "1–5 times a week", "A few times a month", "A few times a year", and "Never or almost never". The amount of collaboration with RTWCs was dichotomized to "less than once a week" and "at least once a week".

Analyses

The data were analysed using Chi-square tests to compare differences in distributions and the Kruskal–Wallis test for differences in median values. Binary logistic regression models were used to compute odds ratios (ORs) and 95% confidence intervals (CI) for associations between the index of physicians' experiences of RTWC, type of healthcare clinic, amount of patients on sick leave, common routines or policies for dealing with sick-leave cases at the clinic, years at the clinic, dealing with problematic sick-leave cases, dealing with patients with multiple diagnoses affecting work ability, experiencing conflicts with patients over sickness certification, and physician–RTWC collaboration. Both crude and adjusted logistic regression analyses were carried out. The adjusted models included index of physicians' experience of RTWC, type of healthcare clinic, amount of patients with sick leave, common routines/policy at the clinic for dealing with sick-leave cases, years working at the clinic, occurrence of problematic sick-leave cases, dealing with patients with multiple diagnoses affecting work ability, and experiencing conflicts with patients over sickness certification. Comparative analyses were also performed between physicians who stated that they had a RTWC at their clinic and those who did not have a RTWC, by comparing shared questions, including amount of patients on sick leave, common routines or policies for dealing with sick-leave cases at the clinic, years at the clinic, occurrence of with problematic sick-leave cases, dealing with patients with multiple diagnoses affecting work ability, and experiencing conflicts with patients over sickness certification. All tests were two-sided and a level of $p < 0.05$ was considered statistically significant. The statistical analyses were performed using SPSS statistics (IBM Corp., Armonk, NY), version 28.0.

Ethical consideration

The project was approved by the Swedish Ethical Review Authority (Dnr 2020-00403).

Results

The respondents consisted of 71.5% physicians working in primary care clinics, 15.9% working in orthopaedic clinics, and 12.6% in psychiatric clinics (see Table 2). A majority of physicians (76.8%) dealt with between 1 and 10 sick-leave cases every week. There

Table 2. Characteristics of study participants distributed by type of healthcare clinic.

		Primary care clinic, <i>n</i> = 450 (71.5)	Orthopaedic clinic, <i>n</i> = 100 (15.9)	Psychiatric clinic, <i>n</i> = 79 (12.6)	Total, <i>n</i> = 629 (100)
Amount of patients with sick leave	Almost never to some patient each month, <i>n</i> (%)	32 (7.1)**	2 (2.0)**	5 (6.4)**	39 (6.3)
	Between 1 and 10 patients each week, <i>n</i> (%)	376 (83.9)**	51 (52.0)**	52 (66.7)**	479 (76.8)
	More than 10 patients each week, <i>n</i> (%)	40 (8.9)**	45 (45.9)**	21 (26.9)**	106 (17.0)
The clinic has common routines/policy for dealing with sick-leave cases	No, <i>n</i> (%)	148 (33.3)**	49 (50.0)**	50 (64.9)**	247 (39.8)
	Yes, <i>n</i> (%)	297 (66.7)**	49 (50.0)**	27 (35.1)**	373 (60.2)
Years at the current clinic	Up to four years, <i>n</i> (%)	261 (58.4)**	27 (27.6)**	29 (36.7)**	317 (50.8)
	Five years or more, <i>n</i> (%)	186 (41.6)**	71 (72.4)**	50 (63.3)**	307 (49.2)
Occurrence of problematic sick-leave cases	Less than once a week, <i>n</i> (%)	216 (48.0)**	67 (67.0)**	28 (35.9)**	311 (49.5)
	At least once a week, <i>n</i> (%)	234 (52.0)**	33 (33.0)**	50 (64.1)**	317 (50.5)
Dealing with patients with multiple diagnoses affecting work ability	Less than once a week, <i>n</i> (%)	199 (44.3)**	68 (68.0)**	14 (17.9)**	281 (44.8)
	At least once a week, <i>n</i> (%)	250 (55.7)**	32 (32.0)**	64 (82.1)**	346 (55.2)
Experiencing conflicts with patients over sickness certification	Less than once a week, <i>n</i> (%)	380 (84.4)**	96 (96.0)**	66 (84.6)**	542 (86.3)
	At least once a week, <i>n</i> (%)	70 (15.6)**	4 (4.0)**	12 (15.4)**	86 (13.7)
Index of experience of RTWC	Md, Mean (\pm SD) ^a	3.2, 3.13 (0.7)*	3.5, 3.29 (0.7)*	3.0, 2.97 (0.7)*	3.2, 3.13 (0.7)
Frequency of collaboration with or referring patients to RTWC	Less than once a week, <i>n</i> (%)	313 (70.0)*	81 (81.0)*	50 (64.1)*	444 (71.0)
	At least once a week, <i>n</i> (%)	134 (30.0)*	19 (19.0)*	28 (35.9)*	181 (29.0)

Figures as count numbers and percentages if not stated otherwise. Pearson's Chi-square test was used for differences in distributions and the Kruskal–Wallis test for differences in median value.

* $p < 0.05$.

** $p < 0.01$.

^aIndex of physicians' experience of return-to-work coordinator (RTWC) ranged from 1 to 4.

were common routines/policies for dealing with sick-leave cases at 60.2% of the clinics in which the physicians were working. 49.2% of the physicians had worked for five years or more at their current clinic.

Physicians' clinical experience of dealing with sick-leave cases

About half (50.5%) of the physicians reported having dealing with problematic sick-leave cases at least once a week. Dealing at least once a week with patients with multiple diagnoses affecting their work ability was reported by 55.2% of the physicians. 13.7% of the physicians experienced conflicts with patients over sickness certification at least once a week (see Table 2).

Differences were investigated between physicians who stated that they had a RTWC at their clinic and those who did not had a RTWC at their clinic, and statistically significant differences ($p < 0.05$) were found in: amount of patients with sick leave, common routines/policy for dealing with sick-leave cases at the clinic and in occurrence of problematic sick-leave cases (see Table 3).

Physicians' collaboration with and experience of return to work coordinators

In total, 29.0% the physicians collaborated with or referred patients to RTWCs at least once a week (see Table 2). Among the physicians in psychiatric clinics, 35.9% collaborated with a RTWC at least once a week. Corresponding numbers were 30.0% in primary care and 19.0% in the orthopaedic clinics. 6.9% of physicians never or almost never collaborated with a RTWC.

In Table 4, the distribution of answers about physicians' experience of RTWCs is outlined for each item. A majority of physicians answered that it was true or completely true that RTWCs facilitate contacts with the patient (80.3%), the employer/Swedish Public Employment Service (78.5%) and the municipality (58.2%), the Swedish Social Insurance Agency (77.6%) and other stakeholders (51.4%). A minority answered that RTWCs facilitate contacts with their colleagues at the clinic (47.3%). Where helping physicians

deal with sickness-certification tasks is concerned, 60.3% of the physicians agreed that it was true or completely true that RTWCs helped to reduce the length/degree of sick leave, while 69.4% answered that RTWCs helped them with sick-leave patients who have multiple illnesses. 72.6% of the physicians answered that it was true or completely true that RTWCs saved them time.

On average in the study sample, physicians' experience of RTWCs index was 3.13 (SD = 0.7) and the median value was 3.2 (Table 2). The average experiences of the RTWC index among physicians in primary healthcare was 3.13. The corresponding number in orthopaedic clinics was 3.29, and in psychiatric clinics 2.97, indicating that orthopaedics had most favourable experiences of RTWCs. Cronbach's alpha for the items used in the physicians' experience of RTWCs index was 0.95 (Table 1), suggesting that the items had relatively high internal consistency.

The ORs presented in Table 5 show a statistically significant association between physicians having more favourable experience of RTWCs and collaborating with an RTWC at least once a week. These results were seen in the crude model (OR 2.31, 95% CI 1.69–3.14), as well as in the adjusted model (adjusted OR 2.92, 95% CI 2.06–4.15). Meeting more than 10 patients on sick leave each week was associated with a more frequent collaboration with RTWCs (adjusted OR 5.58, 95% CI 1.34–23.16). The existence of common routines/policies at clinics for dealing with sick-leave cases was associated with more frequent collaboration with RTWCs (adjusted OR 1.79, 95% CI 1.12–2.85). More frequent collaboration with RTWCs was also associated with dealing with more complex sick-leave cases (adjusted OR 1.68, 95% CI 1.03–2.74), dealing with more patients with multiple diagnoses affecting work ability (adjusted OR 2.31, 95% CI 1.41–3.80), and experiencing conflicts with patients about sickness certification (adjusted OR 2.49, 95% CI 1.37–4.55). In the crude model, there was an association between orthopaedic clinics and less collaboration with RTWCs (OR 0.55, 95% CI 0.32–0.94). However, this association was not statistically significant in the adjusted model (adjusted OR 0.60, 95% CI 0.28–1.28). Years at the clinic were not associated with the frequency of collaboration with RTWCs. Nagelkerke r^2 in the adjusted logistic regression model was 0.27.

Table 3. Comparisons between participants who stated that they had, or had not, a return-to-work coordinator (RTWC) at their clinic.

		Physicians with access to a RTWC at their clinic, <i>n</i> = 629 (54.7)	Physicians with no access to a RTWC at their clinic, <i>n</i> = 521 (42.4)	Total, <i>n</i> = 1150 (100)
Amount of patients with sick leave	Almost never to some patient each month, <i>n</i> (%)	39 (6.3)**	49 (9.5)**	88 (7.7)
	Between 1 and 10 patients each week, <i>n</i> (%)	479 (76.8)**	407 (79.0)**	886 (77.8)
	More than 10 patients each week, <i>n</i> (%)	106 (17.0)**	59 (11.5)**	165 (14.5)
The clinic has common routines/policy for dealing with sick-leave cases	No, <i>n</i> (%)	247 (39.8)**	328 (63.8)**	575 (50.7)
	Yes, <i>n</i> (%)	373 (60.2)**	186 (36.2)**	559 (49.3)
Years at the current clinic	Up to four years, <i>n</i> (%)	317 (50.8)	287 (55.5)	604 (52.9)
	Five years or more, <i>n</i> (%)	307 (49.2)	230 (44.5)	537 (47.1)
Occurrence of problematic sick-leave cases	Less than once a week, <i>n</i> (%)	311 (49.5)**	301 (57.9)**	612 (53.3)
	At least once a week, <i>n</i> (%)	317 (50.5)**	219 (42.1)**	536 (46.7)
Dealing with patients with multiple diagnoses affecting work ability	Less than once a week, <i>n</i> (%)	281 (44.8)	258 (49.6)	539 (47.0)
	At least once a week, <i>n</i> (%)	346 (55.2)	262 (50.4)	608 (53.0)
Experiencing conflicts with patients over sickness certification	Less than once a week, <i>n</i> (%)	542 (86.3)	452 (87.3)	994 (86.7)
	At least once a week, <i>n</i> (%)	86 (13.7)	66 (12.7)	152 (13.3)

Figures as count numbers and percentages. Pearson's Chi-square test was used for differences in distributions.

***p* < 0.01.

Table 4. Distribution of answers about physicians' experience of return-to-work coordinators (RTWC) in primary care, orthopaedic and psychiatric clinics (%).

	The RTWC facilitates my contacts with...						The RTWC...					
	the patient	colleagues in the clinic	the SSIA	the employer/ SPES	the municipal services	other stakeholders	helps to reduce the patients' length/degree of sick leave	improves the quality of the work with sickness certification	helps me to get a better overview of my work with sick leave	increases my competence in insurance medicine	facilitates my work with patients on sick leave who have multiple illnesses	saves me time
Primary care clinic												
Completely true	41.2	23.4	41.7	49.5	34.2	32.0	27.9	23.9	25.3	24.1	31.5	36.9
True	38.5	25.5	33.9	32.4	26.8	22.0	35.5	29.6	40.1	35.1	40.2	35.8
Not true	6.2	8.7	7.3	5.0	6.2	5.8	7.1	11.8	9.3	12.4	6.4	7.1
Not true at all	5.2	16.7	3.4	2.3	5.7	5.1	2.7	11.2	8.9	10.3	6.6	6.6
Do not know	8.9	25.7	13.7	10.7	27.1	35.0	26.8	23.5	16.4	18.1	15.3	13.7
Orthopaedic clinic												
Completely true	49.5	25.5	50.5	37.8	29.6	30.3	23.2	31.3	24.2	24.2	29.3	41.4
True	37.4	18.4	35.4	21.4	12.2	10.1	29.3	31.3	30.3	32.3	30.3	33.3
Not true	2.0	2.0	2.0	1.0	1.0	1.0	5.1	11.1	9.1	12.1	5.1	5.1
Not true at all	2.0	15.3	1.0	5.1	5.1	4.0	3.0	10.1	16.2	13.1	6.1	6.1
Do not know	9.1	38.8	11.1	34.7	52.0	54.5	39.4	16.2	20.2	18.2	29.3	14.1
Psychiatric clinic												
Completely true	44.2	21.9	46.1	44.7	31.6	25.7	21.3	15.8	18.2	22.4	39.0	36.8
True	31.2	20.5	32.9	38.2	31.6	24.3	30.7	21.1	32.5	23.7	29.9	32.9
Not true	11.7	20.5	13.2	6.6	9.2	10.8	12.0	14.5	16.9	19.7	13.0	11.8
Not true at all	5.2	16.4	1.3	2.6	7.9	5.4	2.7	28.9	19.5	15.8	7.8	7.9
Do not know	7.8	20.5	6.6	7.9	19.7	33.8	33.3	19.7	13.0	18.4	10.4	10.5
Total												
Completely true	42.9	23.6	43.6	47.1	33.1	31.0	26.4	24.1	24.2	23.9	32.1	37.6
True	37.4	23.7	34.0	31.4	25.1	20.4	33.9	28.8	37.6	33.2	37.3	35.0
Not true	6.2	9.1	7.2	4.6	5.7	5.6	7.4	12.1	10.2	13.3	7.0	7.3
Not true at all	4.7	16.5	2.8	2.8	5.9	5.0	2.8	13.2	11.4	11.5	6.7	6.7
Do not know	8.8	27.2	12.4	14.2	30.2	38.1	29.6	21.8	16.6	18.2	16.9	13.4

SSIA: Swedish Social Insurance Agency. SPES: Swedish Public Employment Service.

Discussion

This study explored physicians' experience of RTWCs and their work with sick-leave cases, and investigated factors that influence

how much physicians collaborated with RTWCs, or referred patients to them, in healthcare settings. The results showed that a number of factors were associated with a more frequent collaboration with RTWCs. These were: a favourable experience of

Table 5. Binary logistic regressions presenting odds ratios explaining how much physicians collaborate with or refer patients to return-to-work coordinators.

	Crude OR (95% CI)	Adjusted model OR (95% CI)
Index of experience of RTWC	2.31** (1.69–3.14)	2.92** (2.06–4.15)
Type of healthcare clinic		
Primary care clinic	Ref.	Ref.
Orthopaedic clinic	0.55* (0.32–0.94)	0.60 (0.28–1.28)
Psychiatric clinic	1.31 (0.79–2.17)	1.16 (0.61–2.22)
Amount of patients with sick leave		
Almost never to some patient each month	Ref.	Ref.
Between 1 and 10 patients each week	4.57* (1.38–15.11)	2.81 (0.75–10.55)
More than 10 patients each week	8.28** (2.39–28.63)	5.58* (1.34–23.16)
The clinic has common routines/policy for dealing with sick-leave cases		
No	Ref.	Ref.
Yes	1.79** (1.24–2.59)	1.79* (1.12–2.85)
Years at the clinic		
Up to four years	Ref.	Ref.
Five years or more	0.87 (0.61–1.22)	1.12 (0.72–1.74)
Occurrence of problematic sick-leave cases		
Less than once a week	Ref.	Ref.
At least once a week	2.96** (2.05–4.27)	1.68* (1.03–2.74)
Dealing with patients with multiple diagnoses affecting work ability		
Less than once a week	Ref.	Ref.
At least once a week	3.38** (2.30–4.97)	2.31** (1.41–3.80)
Experiencing conflicts with patients regarding sickness certification		
Less than once a week	Ref.	Ref.
At least once a week	3.25** (2.04–5.18)	2.49** (1.37–4.55)
Nagelkerke r^2		0.273

Odds ratio (OR), 95% CI: 95% confidence interval for physicians collaborating with or referring patients to return-to-work coordinators (RTWC) at least once a week. Adjusted model: index of physicians' experience of RTWC + type of healthcare clinic + amount of patients with sick leave + common routines/policy at the clinic for dealing with sick-leave cases + years working at the clinic + occurrence of problematic sick-leave cases + dealing with patients with multiple diagnoses affecting work ability + experiencing conflicts with patients over sickness certification.

* $p < 0.05$.

** $p < 0.01$.

working with RTWCs; having problematic sick-leave cases and patients with multiple diagnoses affecting work ability; and experiencing conflicts with patients over sickness certification. A further factor was the existence at the clinic of common routines/policies for dealing with sick-leave cases.

The results highlight several aspects of the interventions that RTWCs provide which seem to be of significance for how much physicians collaborate with RTWCs. One of these is the importance of RTWCs facilitating contacts with stakeholders, including patients and official agency services. Previous research has stressed the importance of communication and collaboration between stakeholders over RTW [24], and several studies have demonstrated that RTWCs play a crucial role in improving communication and collaboration between such stakeholders [25–27]. The index of physicians' experience of RTWCs also includes other aspects of the sickness certification process in which RTWCs can play an important role. These include outcomes for patients such as reduced length or degree of sick leave, higher quality sickness certification process and timesaving.

A Norwegian study shows that patients on sick leave who are provided with a RTWC may have more complex circumstances, such as multiple diseases or difficult psychosocial factors [16]. This corresponds with our own findings, that physicians who reported having many patients with multiple diseases that affect their work ability were more likely to collaborate with RTWCs. In previous research, RTWCs have been described as providing value and support in several areas of the rehabilitation process for patients with multimorbidity [26,27]. Previous studies have found that physicians in primary care clinics experience more conflicts with patients about sickness certification than physicians working elsewhere [28]. In this study similarly, physicians working in primary care and psychiatric clinics reported more such conflicts than physicians working in orthopaedic clinics. Previous research has demonstrated that the skills of RTWCs can resolve conflicts

among stakeholders in the RTW process and highlighted the importance of problem-solving skills for facilitating RTW [25,29–32]. Previous studies have also identified the importance of RTWCs' ability to manage conflicts [31]. This study adds the finding that physicians seem to collaborate more with RTWCs where there are conflicts over sickness certification.

The findings in this study suggest that clinics with established common routines/policies for dealing with sick-leave cases may encourage more RTWC–physician collaboration. A previous study showed that having common sickness certification routines/policies was associated with physician participation in stakeholder meetings as well as other contacts with the employers of patients on sick leave [4]. Working in an orthopaedic clinic was, in the crude analyses, associated with less RTWC–physician collaboration. A possible explanation is that physicians in orthopaedic clinics deal with less difficult sick-leave cases than colleagues in primary care and psychiatric clinics (see Table 2). The fact that this association was attenuated in the adjusted models where factors regarding difficult sick-leave cases were included also indicates that it was the smaller amount of difficult sick-leave cases that reduced the association between RTWC–physician collaboration and working in an orthopaedic clinic.

There are few previous studies about physicians' experience of RTWCs. An Australian study found that general practitioners consider workplace RTWCs as important for assisting injured workers in RTW [32]. A previous Swedish study found that general practitioners who regularly collaborate with healthcare RTWCs were also more likely to participate in stakeholder meetings with a social insurance officer, employer, or employment officer, and have other contacts with the patient's employers [4]. Our study cannot establish whether there is a direct link between physicians having a favourable experience of RTWCs and an increased use of their services, but the results do show that a more favourable experience was associated with more collaboration with RTWCs,

and that a majority of the physicians believe that RTWCs play an important role in facilitating contacts with stakeholders such as patients, colleagues, and authorities.

A previous Swedish study indicated that most of the patients who are in contact with an RTWC were referred to them by some other healthcare professional and only a relatively small proportion find a RTWC without being referred by someone else [8]. This indicates that physicians may play a significant role for patients' contacts with RTWCs. Being referred from some other professional could be a motivational factor for patients. Previous research shows for example that patients are more motivated to attend a rehabilitation programme if they have been referred by a physician [33]. However, it is unclear whether a referral from a physician to a RTWC could have the same effect of motivating patients to participate in interventions organized by a RTWC.

A Norwegian study reports that coordinators seems to coordinate within a services and to a very limited degree across multiple services and stakeholders, and also that supervisors in companies how provided job placements seldom collaborated with health services, and request closer cooperation between stakeholders [18]. There are several factors that may influence the collaboration between physicians and RTWCs, including management and training. Another factor could be the communication between professions and if RTWC is known as a possible resource in the clinic. More knowledge is needed about factors that could improve collaborations between RTWCs, physicians, and other stakeholder, and what type of RTWC facilitation that is perceived as helpful by physicians and other stakeholder dealing with patients on sick leave. To train and provide RTWCs with the knowledge and skills-set that is required in clinical practice, we need to further investigate decision-making around RTW interventions and what characterizes patients who are or are not referred to RTWCs. Previous studies have raised the issue of prioritizing patients with greater or lesser needs of RTWC support as a question of equality in care and an ethical dilemma [9,34]. We therefore need a better understanding of different aspects of decision-making that promotes or hinders equality in care so that patients in need of RTWC interventions actually receive them. To achieve this, good collaboration and a shared understanding of each other's roles and interventions in vocational rehabilitation are important. However, this study shows that a large proportion of the whole sample of physicians (42.4%) still did not have access to a RTWC at their clinic, and we found that a larger proportion of those did not have access to a common routine or policy for dealing with sick-leave cases, although many were experiencing problematic sick-leave cases on a weekly basis. This study took place the same year as the healthcare clinics became obliged to offer RTW coordination, which meant that healthcare was also funded to provide RTW coordination. It is therefore reasonable to believe that the number of RTWCs has increased since.

Strengths and limitations

In order to investigate physicians' experience of RTWCs, those stating that they had a RTWC at their clinic were the primary study group in the analysis. This resulted in a study sample of physicians with experience of collaborating with RTWCs in a clinical setting but it created no opportunity for dropout analysis. However, some respondents answered that they did not know whether there was a RTWC at their clinic, meaning that we might have excluded some physicians wrongly, in the main analyses. Therefore, these results only apply to physicians who knew that they had the option of collaborating with a RTWC at their clinic. Further, the results

about collaborations between physicians and RTWCs only apply to those who had access to a RTWC at their current clinic, which means that we did not collect data about physicians' possible experiences of collaborating with a RTWC at a previous workplace.

This study has a cross-sectional design, and it is not possible to determine the temporal and cause-effect relationship between the exploratory variables and the outcome. The data were self-reported; some of the respondents may therefore have underestimated or overestimated their amount of collaboration with RTWC, as well as other included variables. There is also a possibility that some important confounders were not included in the study. The rate of non-responders is a limitation with the study. Further, there is no information about non-responders, which means that we cannot know if there is an over- or under-representation of, for example, physicians with more complex sick-leave cases.

Conclusions and clinical implications

This is the first cross-sectional study of physicians' experience of collaborating with RTWCs. It is observed that physicians reported more collaboration with or referrals to RTWCs if they had more difficult sick-leave cases to handle in the clinic. These include problematic sick-leave cases, patients with multiple diagnoses affecting work ability, and experiencing conflicts with patients over sickness certification. Further, having a more favourable experience of RTWCs was associated with a higher degree of collaboration.

These findings imply that it might be possible to increase physician-RTWC collaboration in clinical settings. The results indicate that RTWCs' facilitation of contacts with RTW stakeholders and improvements in the sickness certification process appear to be of importance for physicians.

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Author contributions

All authors contributed to the design and interpretation of the study results. Research design, material preparation and data collection were performed by Veronica Svärd. Erik Berglund performed the statistical modelling and drafted the manuscript. The first draft of the manuscript was written by Erik Berglund and all authors commented on previous versions of the manuscript and read and approved the final version of the manuscript.

Consent form

Consent for publication was obtained by respondents returning the questionnaire.

Disclosure statement

The authors declare that they have no competing interests.

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Data availability statement

The datasets used and analysed during the current study are available from the corresponding author upon reasonable request.

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