

Caseworkers' Attitudes – Do They Matter?

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Working Paper 2015-1



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March 3, 2015

Abstract: The caseworkers in public insurance systems possess considerable discretion in terms of making decisions. This creates scope for preferences and attitudes to reflect on initiatives taken during the sick leave and on individuals' return to work. This paper utilizes a unique caseworker-individual dataset in the public sickness insurance (SI) in Sweden to analyze the impact of caseworkers' attitudes towards SI rules and rehabilitation programs promoting individuals' return to work. We find that a positive attitude towards SI rules increased return to work by 3 percent, or 3.5 days, after comparing the 25 percent most positive caseworkers with the 25 percent least positive. Also, a positive attitude towards existing rehabilitation methods reduced return to work by about 2.5 percent, or 3 days.

JEL Classification: C31, H51, I18, J68

Keywords: Public sickness insurance, treatment effects

* The paper has benefited from comments by Daniel Hallberg, Per Johansson, Per Molander and Stefan Eriksson.

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1 Introduction

The caseworkers in public insurance systems have a key role in deciding on both benefit entitlement and the need for any support measures. Although much of the caseworker's job is regulated by law and process documents, they still have considerable discretion in terms of making decisions. Although the impact of different policies regulating the generosity of public insurance, as well as the effect of various support programs, has received much attention in the empirical literature, the role of the caseworker is a field which has seen very little research. The few studies that exist are restricted to unemployment insurance (UI). Behncke et al (2010a) studied the effect of the relationship between caseworkers and unemployed individuals on unemployment duration. Using Swiss data, they concluded that a more demanding and less cooperative relationship with the individual increased return to work. With the same data, Behncke et al (2010b) found that similarities between caseworkers and individuals regarding gender, age, education, and nationality increased return to work. Using Swedish data, Lagerström (2011) found that the probability of being employed one year after becoming unemployed was 13 percent higher for an individual assigned a caseworker among the 30 percent most successful caseworkers than it was for one assigned a caseworker among the 30 percent least successful .

This paper focuses on caseworkers in the public sickness insurance (SI) system in Sweden. Making assessments of working ability and benefit entitlement is sometimes a complicated process and considerable caseworker autonomy is necessary. As in many countries, the caseworker's role in Sweden is a dual one, involving both a help component and a monitoring component. The help component is represented by the opportunity to assess the need for rehabilitation and to coordinate any rehabilitation measures needed, and the monitoring component by legally regulated eligibility checks. With the discretion allowed them, caseworkers can weigh these two potentially conflicting roles differently, which in turn may affect the individual's chances of returning to work.

From research on SI we know that the benefit level (Johansson & Palme, 2005; Hesselius & Persson, 2007), and the degree of control (Hägglund, 2012; Hesselius et al, 2013; Johansson & Lindahl, 2012) affect the sickness absence level. In correspondence with the findings for UI, results show that the more generous the terms of the insurance are, that is, higher benefit levels and less control, the higher the sickness absence level becomes, and vice versa. Furthermore, studies of various active programs designed to help those on sick leave get back to work, for instance, rehabilitation or multi-sectoral co-operation, are discouraging. In an overview, Johansson et al (2010) conclude that there is only limited evidence of vocational rehabilitation and multi-sectoral co-operation increasing return to work. In a recent evaluation of a large-scale rehabilitation program in Sweden (the Rehabilitation Guarantee), Hägglund et al (2012) found that multimodal rehabilitation among patients with pain in the shoulders, back, and neck increased sickness absence in the years following the program. Also, cognitive behavioral therapy among patients with psychiatric disorders had no impact on subsequent sickness absence.

This paper analyzes the effect of caseworkers' attitudes towards the current SI rules and existing rehabilitation programs on the individual's return to work. A unique dataset is utilized, combining the answers from almost 1,000 caseworkers who participated in a nationwide survey of the sick-leave process, with administrative register data from 65,000 individuals on sick leave. Taking advantage of the fact that the caseworkers' attitudes should be practically unknown to anyone but themselves, thereby reducing the risk of systematic matching between individuals and caseworkers with certain sets of attitudes, we analyze the probability of returning to work after 3, 6 and 9 months. We also analyze the impact of the caseworkers' attitudes on intermediate outcomes; assessments of the need for rehabilitation and eligibility checks. In this way we can learn more about the mechanisms behind the impact on return to work.

The paper is organized as follows. Section 2 presents the essentials of the Swedish public sickness insurance and the sick-leave process, and also provides some idea of the discretion available to caseworkers. Section 3 describes the survey and the individual register data, as well as the caseworkers and the individuals in the study. Section 4 presents the analytical strategy, the statistical model used, and also the results. Section 5 summarizes the most important findings.

2 The sick-leave process in Sweden

All workers (employed and unemployed) are covered by public sickness and disability insurance schemes. Sickness insurance covers the loss of income owed to work absence because of illness. For the employed, the employer compensates absence during the first 14 days (the first day is not compensated). After two weeks, the SIA is responsible for benefit payments. For the unemployed, the SIA steps in from day two of the sick-leave spell. The benefit level is 80 percent of foregone earnings. In 2010, the cap was set at SEK 26,500 (≈€ 2,790) per month, and the maximum benefit period was 2.5 years.

During the first seven days of sick leave, it is in practice up to the individual to decide how ill (s)he is and the extent to which this warrants absence from work. The individual merely has to inform the employer or the SIA that he or she is ill. From the eighth day, a medical certificate is required. Depending on the information in the medical certificate, the SIA decides whether the illness has reduced the applicant's capacity for work, i.e., inability to work. After the first payment, if the case is not expected to be finished within the next few weeks, it is handed over to a personal caseworker who takes charge of the case from that point. The sample in this study contains individuals assigned to a caseworker.

The employer is responsible for any rehabilitation of the individual, unless the individual is unemployed, when instead the employment agency is responsible for her or his rehabilitation. The SIA is obliged to assess the need for rehabilitation and to coordinate all resources to assist the sick-reported person in getting back to work as soon as possible. The two most common instruments for assessing the need for rehabilitation are *Sassam* and assessment meetings (AM).¹ Both have the main purpose of making possible a rapid and sustainable return to work. *Sassam* is a face-to-face meeting where the sick-reported individual and the caseworker have a structured discussion about questions dealing with benefit eligibility, i.e., medical diagnoses, ability to work, and working tasks. The result of the assessment determines how the sick leave will progress.

AM is a formalized meeting between the sick-reported individual, the caseworker, and at least one additional party, usually the doctor or the employer. At the meeting, the person's working capacity and the possibility of returning to the current or another temporary position at the workplace are discussed. Appropriate vocational rehabilitation programs are also discussed.²

The sick-leave process in Sweden contains time-set assessments, or eligibility checks, of the individual's working ability and entitlement to benefits. During the first 90 days of the sick spell, the working capacity

¹ *Sassam* is a Swedish abbreviation for "A formalized method for sick-leave investigation and rehabilitation."

² In contrast to *Sassam*, AM is stipulated by law (Social Insurance Code, ch. 110, 14 §). Both *Sassam* and AM are mandatory and failure to participate can lead to the withdrawal of benefits.

is assessed against the ability to perform the current working tasks, or other temporary working tasks, at work. Between days 91 and 180, the workers are entitled to benefits if they cannot perform any tasks at their current workplace (the 90-day eligibility check). From the 181st day, the working capacity is finally evaluated against all the jobs on the regular labor market (the 180-day eligibility check).³ The eligibility checks are supposed to be performed at the 90th and the 180th day at the latest, but can be performed at any time beforehand. Although the eligibility checks are regulated by law and therefore less optional than the assessments of the need for rehabilitation, they are not performed in 100 percent of cases, and even less so within the specified time limits. In the study period of 2010, the SIA administrative records show that only about 60-70 percent of the eligibility checks were performed on time. The same administrative records show that the eligibility checks, together with Sassam and AM, are the most common initiatives taken by the caseworker in the sick-leave process (The Swedish Social Insurance Inspectorate (ISF), 2014).

Besides the law, the caseworker's initiatives are also regulated by internal process documents and operative goals at the SIA. The internal process documents are continuously updated and consist of detailed descriptions of the most common initiatives of the sick-leave process. Also, operative production goals are set for the caseworkers. The goals at the time varied between the local offices but could typically be specified as percentages of the number of cases in which the entitlement to benefits, or the need for rehabilitation, had been investigated within a certain sick-spell length (ISF, 2011).

In sum, although much of the caseworker's opportunities to take initiatives in a case are regulated by laws, internal documents and operative goals, these can never fully cover all possible circumstances of a case. The caseworker's discretion is therefore considerable: for instance, regarding if and when assessments of the need for rehabilitation are warranted, and also when eligibility checks should be performed.

³ See the Social Insurance Code. Exceptions to this rule could be made if, for instance, the individual were likely to return to work for the existing employer by day 365 at the latest.

3 Sampling and description

3.1 The survey

In the spring of 2012, a nationwide survey among caseworkers in the sick-leave process was conducted.⁴ The caseworkers were anonymously asked about their attitudes towards various aspects of the SI system and the sick-leave process. Information about the caseworker's age, education, and tenure was also collected. In total, 1,048 out of almost 1,900 caseworkers ($\approx 56\%$) answered all or some of the questions.⁵

In this study, we focus on the impact of the caseworkers' attitudes towards existing rehabilitation programs and the current SI rules. The caseworkers' attitudes towards rehabilitation programs were captured through questions about the effectiveness of five different vocational rehabilitation programs. The question was, "How efficient do you think the following rehabilitation method is in getting the individual back to work?". The rehabilitation methods were: work testing, work training, assisted devices, rehabilitation compensation for vocational training, and reassignment at the workplace. The response scale was seventh-graded from "very low-efficient" to "very high-efficient". From the responses, a standardized index was created in which a high value indicates a positive attitude towards these methods.⁶ In the same way, the caseworkers' attitudes towards the rules of the SI system were measured through three questions about the legitimacy and efficiency of the system. The questions were, "To what extent do you think the SI-rules are legitimate?" "To what extent do you think the SI rules are efficient in getting the individual back to work?" "To what extent do you think the SI rules are legally fixed?" The response scale was tenth-graded from "To a very little extent" to "To a very large extent." A high index value signals a positive attitude towards the SI system.⁷

Tables 1 and 2 report caseworker characteristics and the distributions of the standardized index values respectively. The vast majority (86%) of the caseworkers are women and three out of four are at least 40 years of age (Table 1). Sixty percent of the caseworkers have worked at the SIA for more than 10 years and their average time in the current position is 2.7 years. Almost 80 percent of the caseworkers have a university degree and the most common subjects are social science and social work. The caseworkers are relatively positive about both the rehabilitation programs and the SI rules (Table 2). Most positive is the attitude of caseworkers towards the rehabilitation programs, where the average index value is 0.72 (median: 0.73). The index value of the attitude towards the SI rules is 0.61 on average (median: 0.63).

⁴ The survey is described in detail in ISF (2013b).

⁵ In ISF (2013a), the difference between responders and non-responders was found to be small in general. The responders were somewhat older and had somewhat more tenure than the non-responders.

⁶ ISF (2013a) describes how the index was created.

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Table 1. Caseworker characteristics

	<i>No. obs.</i>	<i>Mean</i>
Man	1 048	0.14
<i>Age</i>		
25-39	1 045	0.24
40-54	1 045	0.39
55-69	1 045	0.37
<i>Tenure at the SIA</i>		
<5	1 044	0.10
5-10	1 044	0.29
>10	1 044	0.60
Time at current position	1 039	2.7 (1.4)
University level	1 043	0.78
<i>Education</i>		
Law	1 014	0.05
Social science	1 014	0.48
Social work	1 014	0.35
Health	1 014	0.06
Other	1 014	0.07

Note: Standard deviation within parentheses.

Table 2. Distribution of caseworkers' attitudes towards rehabilitation and SI rules

	<i>Rehabilitation</i>	<i>SI rules</i>
Average (standard-deviation)	0.72 (0.18)	0.61 (0.21)
<i>Percentile</i>		
100 %	1.00	1.00
95 %	1.00	0.93
90 %	0.94	0.87
75 %	0.83	0.77
50 % (Median)	0.73	0.63
25 %	0.61	0.47
10 %	0.50	0.33
5 %	0.37	0.25
Number of observations	885	931

The caseworkers' attitudes could be driven by many factors. For instance, they could be correlated with the caseworker's age, gender, or experience as a caseworker. They could also to some extent be owed to the local labor market, with variations in the type of workers, sectors, and employees represented, and colleagues' attitudes. Attitudes are also likely to be

correlated with each other. ISF (2013b) found that a positive attitude towards the rehabilitation programs was correlated with a positive attitude towards the assessment instruments, Sassam and AM. Also, attitude towards the SI rules was correlated with attitude towards fulfilling the operational goals of the SIA, and also with greater confidence about the definition of some key concepts of the sick-leave process. The correlation between attitudes towards the rehabilitation programs and the SI rules was relatively low. This may be because of the dual and perhaps contradictory roles of the caseworkers, who are responsible for both investigating the need for and coordinating any rehabilitation, and also monitoring working ability and benefit entitlement. With the autonomy given, the caseworkers could emphasize these two roles differently. A positive attitude towards rehabilitation programs suggests that the caseworkers put more emphasis on their role as a counselor with the aim of establishing a cooperative relationship with the employee and the employer. On the other hand, a positive attitude towards the SI rules signals that the caseworker emphasizes a more demanding and less cooperative relationship with the employee and the employer, and is more focused on maintaining the integrity of the SI.⁸

The empirical literature suggests that the attitude of the caseworker could have implications for the expected return to work. Studies of the impact of various rehabilitation programs offer no strong support for them increasing return to work (Johansson et al, 2010; Hägglund et al, 2012). Also, Engström et al (2012) showed that placing the assessment of the need for rehabilitation by Sassam and AM earlier in the sick-leave process extended sickness absence duration and the uptake of disability benefits. Furthermore, research has shown that control and eligibility checks reduce sickness absence (Hesselius et al, 2013; Johansson & Lindahl, 2012). Hägglund (2012) concluded that eligibility checks at 90 and 180 days increase return to work.

Hence, being pro rehabilitation suggests a reduced rate of return to work because of more frequent rehabilitation and assessment initiatives. Also, being positive towards the SI rules suggests a higher rate of return to work because of more frequent eligibility checks and/or perhaps a more strict interpretation of the SI regulations. To better understand the mechanisms behind the impact on return to work, we study the impact on initiatives taken during sick leave in terms of assessment initiatives and eligibility checks.

3.2 Administrative data

Data from the survey are merged with information about the individuals who started a full-time sick-leave episode between January 1, 2010 and March 31, 2011. The SIA register database contains information about all individuals' episodes as SI recipients from 2000 and onwards. Besides information on diagnosis and percentage on sick leave (full-time/part-time), data also contain rich data on individual characteristics such as gender, age, educational level, country of origin, marital status, historical unemployment, sector, and local registration office. Data do not include information on working status at the end of a sick-leave period. However, since we restrict the analysis to those employed at the start of the sick leave, not returning to work is probably a very uncommon event. In the rest of the paper, we use the term "return to work" to refer to ending the sickness absence episode.

⁸ Behncke et al (2010a) define caseworkers as either cooperative or non-cooperative.

The sample presented in Table 3 contains employees starting a sick-leave period in 2010. They were assigned a caseworker, which means that their absence had been ongoing for a few weeks. The majority, 61 percent, was women and the most common diagnoses were mental illness and musculoskeletal disorder. Together they accounted for more than half of the individuals on sick leave. Almost 50 percent worked in the private sector. The large number of previous SI benefit days on average (336 days since 2000) is owed to the sampling of individuals still on sick leave after several weeks. In this group, individuals with relatively worse health are expected to be overrepresented.

Table 3. Individual sample characteristics

Male	0.39
Age	46.9 (11.8)
Foreign-born	0.14
University education	0.30
<i>Diagnosis</i>	
Mental illness	0.24
Musculoskeletal disorder	0.28
Injuries, poisoning	0.15
Other	0.33
<i>Sector (of work)</i>	
Municipality	0.26
County council	0.08
Private sector	0.46
Other	0.20
<i>Absence since 2000</i>	
SI benefit days	336 (509)
Unemployment days	457 (813)
Number of observations	65,162

Note: Standard deviation within parentheses.

4 Analysis

To analyze the relationship between the caseworkers' attitudes and whether or not the individuals returned to work after different durations, we estimate a linear probability model:

$$Y_{ijt} = \alpha_t + Index_j \gamma + LO_{ij} \delta + Ind_i \beta + CW_j \lambda + \varepsilon_t, \quad (1)$$

where Y_{ijt} is the binary outcome for individual i assigned caseworker j of having returned to work at time t , represented by 3, 6, and 9 months respectively. $Index_j$ corresponds to the standardized index values of the caseworker's attitudes towards rehabilitation programs and SI rules. LO_{ij} is the local office at which the individual and the caseworker are registered, and Ind_i and CW_j are vectors of individual and caseworker characteristics. γ , δ , β , and λ are coefficients capturing the relationship between the variables and the marginal probability of having returned to work.

For γ to capture the causal relationship between the caseworker's attitudes and the individual's return to work, the assignment of individuals with different expected sickness absence duration must be independent of the caseworker's attitudes after conditioning on Ind . If, for instance, individuals with worse health and/or lower work motivation systematically are assigned caseworkers positive to rehabilitation programs, the estimate will be biased downwards if available data do not fully capture health status and work motivation. However, since the caseworkers' attitudes should be unknown to anyone but themselves, there is no obvious process in which individuals with different expected sickness absence duration could be matched with caseworkers with particular sets of attitudes. This is especially expected to be true regarding unobserved individual characteristics.

Systematic matching between caseworker and individual characteristics could, however, arise if caseworkers are exposed to different types of workers. To find out more about the assignment routines, a survey among representatives at all SIA local offices was performed in 2010 (ISF, 2014). In general, three criteria were applied in the allocation of individuals to caseworkers: employment status (employed/not employed), employer (sector), and caseload. Also, more than half of the local offices allocated individuals according to which day of the month they were born, at least among subgroups. None of the offices reported allocation based on the individual's expected sick-leave length.

From the data, we get an idea of the matching between caseworkers and individuals in practice. In Table A1, we compare the individuals assigned a caseworker above and below the median caseworker regarding attitude

towards rehabilitation programs and SI rules respectively. If not entirely random, matching seems close to random, displaying significant differences in about half of the parameters presented. The differences are small throughout, showing only weak signs of systematic matching between individuals and caseworkers.

In the analysis, covariates are introduced in steps. The first model (Model 1) analyzes the simple relationship between caseworker attitudes and return to work without any controls. The second model (Model 2) introduces local office (LO) fixed effects, taking into account any heterogeneity owed to the local labor market or the local office. In Model 3 we add rich information on each individual on sick leave. As argued above, matching between caseworker and individual seems non-systematic overall, which means that adding this information should have little impact on the attitude estimates.⁹ Model 4 includes caseworker characteristics. This enables us to learn to what extent the attitudes are related to caseworkers' gender, age, tenure, and education.

4.1 Impact on return to work

Table 4 reports the results from estimations of caseworker attitudes on the return to work at 3, 6, and 9 months. The nine-month estimation is performed on a subsample of individuals starting a sick-leave episode between January 1, 2010 and December 31, 2010 (49,676 individuals). Return to work covers either full- or part-time work and the estimates refer to the impact of a maximum difference in attitude between zero and one. Overall, the results are stable for different specifications. This suggests that the impacts of the attitudes are not sensitive to the SIA local office or the local labor market or to the caseworkers' characteristics. It also implies that unobserved heterogeneity in the matching between individual and caseworker is probably not a problem.

The results show that a positive attitude towards rehabilitation programs has no impact on return to work up to three months. However, up to six and nine months respectively, the impact is negative, corresponding to a 2-3 percent lower probability of having returned to work. To the extent that a positive attitude towards rehabilitation is associated with the caseworker taking more rehabilitation initiatives, these negative effects are expected in previous research showing no or negative effects of rehabilitation programs on return to work. Also, given the probability that participating in a rehabilitation program increases with sickness absence duration, an increasing negative effect is also expected.

Furthermore, a positive attitude towards the SI rules increases return to work for all durations. The size of the impact decreases somewhat with sickness absence duration but corresponds to more than 2 percent at nine months. If a positive attitude towards the SI rules increases monitoring and eligibility checks, previous research suggests a positive effect on return to work. Also, if the degree of moral hazard is higher among those on short-term sick leave than those on long-term sick leave, the scope of monitoring initiatives should be higher earlier in the sick-leave episode, explaining the diminishing trend of the impact.

⁹ Altonji et al (2005) argue that the selection on observables is informative about the importance of selection on unobservables. This should especially hold in this case with the rich data available containing information on both the individual's health status and the labor market position.

Studying only full-time return to work does not alter the results. Neither does allowing only more permanent (more than one month) returns to work, ignoring short-term interruptions of the sick-leave episode. Also, testing alternative model specifications, a Cox proportional hazard model produces impacts qualitatively the same as the ones generated by the linear probability model. This also holds allowing for unobserved heterogeneity in a proportional hazard model with random effects.¹⁰

Using survival analyses, the effects can be translated into sickness days. Comparing the 25 percent most positive caseworkers with the 25 percent most negative, a positive attitude towards rehabilitation corresponds to three more sickness absence days on average.¹¹ With an average sick-spell length of approximately 120 days, this translates into an impact of 2.5 percent. A positive attitude towards the SI rules corresponds to about 3.5 fewer sickness absence days on average, or a 3 percent reduction of the sick-spell length.

Table 4. Estimates of marginal impact (linear probability model) of caseworkers' attitudes on return to work at different durations

<i>Months</i>	<i>Attitude</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
3	Rehab.	-0.000 (0.010)	0.004 (0.011)	-0.001 (0.011)	-0.000 (0.011)
	SI rules	0.031*** (0.010)	0.030*** (0.010)	0.030*** (0.010)	0.030*** (0.010)
6	Rehab.	-0.022** (0.009)	-0.022** (0.009)	-0.020** (0.009)	-0.019** (0.009)
	SI rules	0.029*** (0.008)	0.026*** (0.008)	0.026*** (0.008)	0.027*** (0.008)
9 ^a	Rehab.	-0.035** (0.008)	-0.036** (0.009)	-0.033*** (0.009)	-0.033*** (0.009)
	SI rules	0.024*** (0.007)	0.022*** (0.008)	0.023*** (0.008)	0.022*** (0.008)
Controls	Local office (LO)	-	X	X	X
	Individual characteristics (IND)	-	-	X	X
	Caseworker characteristics (CW)	-	-	-	X

Note: Results from estimations of linear probability models. Model 1 is estimated without any controls. Model 2 includes local office fixed effects, and Model 3 adds information about the individual regarding gender, age, educational level, foreign birth, working sector, diagnosis, children under 18 (yes/no), quarter of sick-leave start, SI benefit, previous days of sickness absence, unemployment, and disability benefit since 2000. Finally, Model 4 adds information about the caseworker regarding gender, age, tenure at the SIA, time in the current position, education, and educational level. We used 65,162 observations. ^a: The sample only includes sick spells started in 2010 and 49,676 observations. Standard errors are in parentheses. */**/** indicates statistical significance at 10/5/1-percent level respectively.

¹⁰ See Vaida and Xu (2000) for details of the random effects model.

¹¹ The estimation was performed with the Kaplan Meier-method. We calculate the effects by summing up the area between the survival curves corresponding to the individuals assigned the 25 percent most positive and the 25 percent most negative caseworkers with regard to attitude towards rehabilitation and the SI rules respectively.

4.2 Impact on performance of assessments and eligibility checks

To understand how the caseworkers' attitudes affect the individuals' sickness absence, we need to study the initiatives taken by the caseworkers during the sick leave. As pointed out in Section 2, the most common initiatives are the 90- and 180-day eligibility checks, and assessments in the form of Sassam and AM. It is reasonable to assume that any impact on sickness absence duration would show in the use of one or more of these initiatives. Since the initiatives taken in a sick spell are a function of duration, a linear probability model would be less appropriate. Instead, we estimate a Cox proportional hazards-model where individual i 's probability to be subject to an assessment or an eligibility check at t , given that the sickness episode is still ongoing, is given by θ_{ijt} . Note that t is a continuous time variable here. The following model is estimated:

$$\log \theta_{ijt} = \alpha_i + \text{Index}_j \gamma + \text{LO}_{ij} \delta + \text{Ind}_i \beta + \text{CW}_j \lambda \quad (2)$$

where $\log \theta_{ijt}$ is a function of the baseline hazard $\alpha(t)$ and the parameters in Equation 1. The effect of being subject to Sassam, AM, and the 90- and 180-day eligibility check is estimated separately.

The results in Table 5 correspond rather well with what we would expect in terms of a cooperative and a non-cooperative role of the caseworker. For instance, if the caseworker is positive towards the rehabilitation programs, the hazard rate for a performed AM is increased by almost 20 percent. In addition, the hazard rate for performing the 90-day eligibility check is decreased by 8.4 percent. Furthermore, a positive attitude towards the SI rules increases the hazard rate for performing both Sassam and the 90-day eligibility check.

Table 5. Estimates of hazard ratio impact of caseworkers' attitudes on performing assessments and eligibility checks in the sick-leave process

<i>Attitude</i>	<i>Sassam</i>	<i>AM</i>	<i>Check – 90 days</i>	<i>Check – 180 days</i>
Rehabilitation	0.997 (0.078)	1.198** (0.079)	0.916** (0.036)	1.038 (0.053)
SI rules	1.179** (0.078)	1.080 (0.073)	1.129*** (0.034)	1.004 (0.050)

Note: Results from estimations of a Cox proportional hazards model of the impact of caseworkers' attitudes on performing Sassam, AM, and the eligibility checks respectively. The model controls for information about the individual regarding gender, age, educational level, foreign birth, working sector, diagnosis, children under 18 (yes/no), quarter of sick-leave start, SI benefit, previous days of sickness absence, unemployment, disability benefit since 2000, and local office (LO). The model also controls for information about the caseworker regarding gender, age, tenure at the SIA, time in the current position, education, and educational level. We used 65,162 observations. Standard errors are in parentheses. **/** indicates statistical significance at 10/5/1-percent level respectively.

5 Conclusions

No matter how efficient the design of public insurance and the corresponding administrative process, they will have little effect unless the frontline actors follow the regulations and the internal administrative guidelines. Caseworker discretion is necessary because it is not possible to legislate for all possible circumstances of a case. With the public sickness insurance system in Sweden amounting to about 10 percent of total government spending, the caseworkers' attitudes towards central aspects of the SI system could be of great economic importance.

On the basis of a nationwide survey among caseworkers in the sick-leave process, we analyze the impact of caseworkers' attitudes towards current SI rules and existing rehabilitation on initiatives taken during sick leave and on the individuals' sick-leave length. The attitudes are to some extent expected to capture the twofold role of the caseworker, both assisting the individuals to get back to work and monitoring benefit entitlement. We find that the more positive the caseworkers are towards rehabilitation programs, the lower the return to work is. The size of the effects, when we compare the 25 percent most positive caseworkers with the 25 percent least positive, corresponds to three days' longer sickness absence spells (2.5 percent) on average. Also, a more positive attitude towards current SI rules shortens sickness absence duration and increase return to work. The effect corresponds to 3.5 fewer sickness absence days (3 percent) when we compare the top and bottom 25 percent of the caseworkers.

The results are in accordance with findings from studies on the associated unemployment insurance, where a demanding and less cooperative attitude among caseworkers towards job-seekers has proven to increase return to work (Behncke et al, 2010a). The results also correspond well with studies within the SI, finding no strong support for rehabilitation programs increasing return to work (Johansson et al, 2010), and finding positive effects from control and checks of benefit eligibility (Hesselius et al, 2013; Hägglund, 2012; Johansson & Lindahl, 2012). Analyzing the caseworkers' initiatives during their clients' sick leave shows that caseworkers who are relatively positive towards the rehabilitation programs more often assess the individuals' need for rehabilitation and less often check the individuals' right to benefits. Caseworkers positive about the SI rules perform more rehabilitation assessments (Sassam) and eligibility checks (at 90 days).

The most important conclusion of the paper is that caseworker attitudes towards important aspects of the sickness insurance system could have considerable impact on both actions taken during the sick leave and on sickness absence. The results show that sickness absence can be reduced by increasing the legitimacy of the SI rules. This stresses the importance of establishing an organizational ethos and implementing new regulations in such a way that legitimacy is gained. The results also stress the potentially negative impact of rehabilitation assessments and rehabilitation programs during sickness absence.

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Appendix

Table A1. Characteristics of individuals' assigned caseworkers positive and negative to rehabilitation measures and SI rules respectively

	<i>Rehabilitation</i>			<i>SI rules</i>		
	Neg.	Pos.	Sign.	Neg.	Pos.	Sign.
Man	0.40	0.38	***	0.40	0.38	***
Married	0.47	0.46		0.46	0.47	
Children under 18	0.39	0.39		0.39	0.39	
Age	46.9	47.0		46.7	47.1	***
Foreign-born	0.14	0.15		0.14	0.14	
<i>Educational level</i>						
Pre high school	0.16	0.16		0.16	0.16	**
High school	0.54	0.53		0.54	0.54	
Post high school	0.30	0.31	**	0.30	0.31	***
Maximum benefits	0.17	0.16	**	0.17	0.17	
<i>Sector</i>						
Municipality	0.25	0.26		0.25	0.27	***
County council	0.08	0.09	***	0.08	0.09	***
Private	0.46	0.45	***	0.47	0.44	***
Other	0.21	0.20	***	0.21	0.20	***
<i>Diagnosis</i>						
Mental illness	0.24	0.24		0.24	0.24	**
Musculoskeletal disorder	0.28	0.27		0.27	0.28	
Injuries, poisoning	0.15	0.15	**	0.15	0.15	
Other	0.33	0.34		0.33	0.34	
Sickness benefit days since 2000	334 (504)	342 (517)	**	335 (508)	337 (510)	
Disability benefit days since 2000	8 (130)	6 (114)		8 (135)	6 (110)	**
Unemployment days since 2000	457 (813)	457 (812)		467 (820)	446 (805)	***
Number of observations	37,731	27,431		33,828	31,334	

Note: **/** indicates statistical significance at 5/1 percentage level respectively.

