

## ORIGINAL ARTICLE

## Return to work of cancer survivors: a prospective cohort study into the quality of rehabilitation by occupational physicians

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**Aims:** To describe and assess the quality of rehabilitation of cancer survivors by occupational physicians and to relate the quality of the process of occupational rehabilitation to the outcome of return to work.

**Methods:** One hundred occupational physicians of a cohort of cancer survivors were interviewed about return to work management. Quality of rehabilitation was assessed by means of four indicators that related to performance in knowledge of cancer and treatment, continuity of care, patients complaints, and relations at work. The cohort of patients was prospectively followed for 12 months to assess time to return to work and rate of return to work. Patients' and physicians' satisfaction with care was also assessed. The relation between performance and these outcome measures was studied in a multivariate analysis, taking into account the influence of other work and disease related factors that could potentially predict return to work.

**Results:** For knowledge of cancer and treatment, only 3% had optimal performance because occupational physicians did not communicate with treating physicians. For continuity of care, patient complaints, and relations at work, performance was optimal for 55%, 78%, and 60% of the physicians respectively. After adjustment for other prognostic factors, overall physician's performance (hazard ratio (HR) 0.5, 95% CI 0.3 to 0.8) and continuity of care (HR 0.5, 95% CI 0.3 to 0.9) were related to the return to work of patients. Overall optimal performance was also related to a small but significant higher level of satisfaction with care, both for patients and physicians.

**Conclusion:** Quality of occupational rehabilitation of cancer survivors can be improved substantially, especially with regard to communication between physicians and continuity of care. There is a need for the development of more effective rehabilitation procedures which should be evaluated in a randomised controlled trial.

The number of patients that survive cancer has increased substantially in recent decades. However, many cancer survivors experience problems in returning to everyday life. Work resumption is one of these problems, with a return to work rate that varies among studies from 44% to 100%.<sup>1</sup> In the literature, many factors are examined that were found to impede work resumption. Such factors are disease related, such as a burdening treatment or advanced disease stage; person related, such as fatigue, pain, or concentration problems; and work related, such as physical demands at work or difficult relationships with colleagues and superiors. To overcome these problems a number of solutions have been suggested, including gradual return to work, increase of

autonomy on the job, decrease of workload, and communication between occupational physicians and attending physicians.<sup>2,3</sup>

It is one of the main tasks of occupational physicians to facilitate return to work by means of rehabilitation procedures.<sup>4,5</sup> Usually rehabilitation encompasses all kinds of activities that facilitate return to work. In some countries, such as the UK and the Netherlands, associations of occupational physicians have constructed guidelines for the management of return to work by occupational physicians for specific disorders.<sup>6–8</sup> From these guidelines it is possible to derive indicators for quality of rehabilitation. A procedure for the assessment of quality of rehabilitation of workers with back pain and the construction of performance indicators for occupational physicians has been described in detail.<sup>9</sup> In the study where this procedure was used, a better quality of care was associated with a shorter period of sick leave and a higher satisfaction rating of patients.<sup>10</sup> Similar quality assessments are made in other sectors of health care.<sup>11,12</sup>

## Main messages

- There is a lack of research on return to work of cancer survivors.
- Physicians should pay more attention to work resumption after treatment is finished in cancer patients.
- Quality of care of return to work management of cancer survivors can be measured by means of performance indicators.
- Quality of vocational rehabilitation of cancer survivors by occupational physicians can be improved, especially with respect to the knowledge of the occupational physician of cancer and cancer treatment and better continuity of care.
- There is a need for more effective interventions in return to work management of cancer survivors.

## Policy implications

- Physicians should pay more attention to return to work in cancer survivors.
- There is a need for more effective vocational rehabilitation procedures in cancer patients.
- Occupational physicians should improve the quality of their care for cancer survivors by better communication and continuity of care.

Based on these experiences we were interested in the management of return to work of cancer survivors by occupational physicians. We assumed that general principles of occupational rehabilitation would apply to rehabilitation of cancer survivors and that interventions would be needed to overcome the most frequently mentioned problems of work resumption. This enabled us to make an instrument for assessment of the quality of occupational rehabilitation. As part of a study on factors affecting return to work among cancer survivors, we were able to interview occupational physicians about the quality of their work. We hypothesised that better quality would lead to a shorter time to return to work and a higher patient and physician satisfaction.

Therefore, the aims of the present study are: (1) to describe the activities of occupational physicians in relation to return to work of cancer survivors and to assess the quality of these activities by means of performance indicators; and (2) to assess the relation between the quality of rehabilitation on the one hand, and return to work and patient and physician satisfaction on the other hand.

## PHYSICIANS, PATIENTS, AND METHODS

Starting from earlier experiences with quality of care we assumed that a study of 100 occupational physicians and their patients would have sufficient power to detect relevant differences in return to work.<sup>10</sup> Patients who entered a cohort study on the prediction of return to work of cancer survivors were asked for permission to contact their occupational physician. The patients were interviewed and completed a first questionnaire to assess prognostic factors; they were followed for 12 months to enable the assessment of return to work measures. For further details, see paragraph on patients and measures. The occupational physicians of these patients were interviewed by telephone six months after patients completed the first questionnaire to enable the assessment of the quality of rehabilitation.

### Occupational physicians and procedure

From the 120 physicians who were named by their patients, one did not consent to participate, four physicians could not be reached after the maximum of 10 telephone calls, and 15 were already named by another patient. This resulted in the participation of 100 occupational physicians. The physicians were asked to report on the management of their patient using a structured questionnaire which was sent to them in advance. During the telephone interview they were asked to keep the medical files of the patient at hand. The data from the interview were used to calculate the following performance indicators for the quality of occupational rehabilitation.

### Performance indicators

Based on general principles of occupational rehabilitation and literature on return to work of cancer survivors, we designated the following four aspects as essential in the management of return to work of cancer patients:

- Medical knowledge of the disease process and treatment of the patient
- Continuity of care
- Interventions for cancer related complaints, such as fatigue
- Interventions to improve relations at work.<sup>1 9 13 14</sup>

We called these aspects performance indicators. For each performance indicator we formulated criteria which had to be met in case of optimal quality of care. If one or more of the criteria were not met, in case of deviant performance, the case was assigned a 0 score for that performance indicator. If all criteria were met in case of optimal performance, the resulting score for a performance indicator was 1 for that case. Scores of all cases were added to a percentage optimal performance for each indicator. The criteria are based on an if-then logic: if a

problem is present, then the occupational physician must intervene to help it being solved. Details of the structure of each performance indicator are given in the appendix.

All performance indicators were formulated before the data collection started. Both the interviews and calculations of the scores were done blindly—that is, without knowledge of the outcome in the patients.

### Satisfaction with care

Physicians' satisfaction with care was measured by 13 items derived from a longer questionnaire used in previous research to measure patient satisfaction with care by the occupational physician.<sup>10</sup> The questionnaire was reworded to fit the physicians' perspective. We rephrased questions such as "the occupational physician treated me in a very friendly manner" for the patients into "I treated this worker in a very friendly manner" for the occupational physicians. Cronbach's alpha for the questionnaire was 0.77. A total score was calculated by summarising the items and transforming them to a scale between 0 and 100. A higher score indicates a higher satisfaction rating.

### Physicians' opinions

In addition we asked the occupational physicians for their opinion on the importance of rehabilitation of workers on sick leave (five point scale), sickness certification (five point scale), and rehabilitation of cancer survivors (yes/no).

### Patients and measures

The patients had to have a reasonable chance of return to work. This implies that they had to have a favourable prognosis and that follow up should not be too soon after diagnosis because extensive treatment will in many cases prevent a rapid return to work. Therefore, patients had to meet the following inclusion criteria: a primary diagnosis of cancer, 4–6 months since reporting sick, paid work at the time of diagnosis, an expected survival of at least one year or treatment with curative intent, capable of completing a questionnaire in Dutch, and not older than 55 years of age. Patients were asked for participation by their attending physicians from the following departments of the Academic Medical Center: surgery, gynaecology, haematology, oncology, radiotherapy, and urology. At baseline, patients were interviewed at home or at any location of their preference. During the interview a questionnaire was completed, which consisted of questions about factors potentially predictive of return to work, return to work measures, and satisfaction with occupational physicians' care. The following potentially predictive factors were measured by means of validated questionnaires wherever possible (questionnaire mentioned between brackets):

- *Sociodemographic and person related factors*: age, gender, marital status, breadwinner status, working partner, children at home, education, self efficacy.<sup>15</sup>
- *Disease and treatment related complaints*: diagnosis, treatment type (operation, chemotherapy, radiation), co-morbidity, depression (CESD), pain, psychological complaints (RSCL), physical complaints (RSCL), activity restrictions (RSCL), fatigue in general, mental related, motor related, activity related, body related (MFI), sleep (PSQI), cognitive failures (CFQ).<sup>16–20</sup>
- *Work and working conditions*: discomfort by physical factors, irregular shifts, relation with superiors (VBBA), relation with co-workers (VBBA), autonomy (VBBA), variation (VBBA), physical load (VBBA), emotional burden (VBBA), work pressure (VBBA).<sup>21</sup>

At follow up, 6 and 12 months later, patients were asked to fill in a mailed questionnaire about return to work measures and satisfaction with occupational physician care.

### Return to work measures

For return to work we used both the rate of return to work and time to return to work. Rate of return to work was defined as the number of patients at latest follow up answering "no" to the question "Are you still on sick leave?", divided by the total number of patients. Time to return to work was calculated as the number of days on sick leave between the moment of reporting sick and the moment of any kind of work resumption.

### Patient satisfaction with occupational rehabilitation

With the same 13 item questionnaire as was used for the physicians, we assessed patient satisfaction with care by the occupational physician. Items referred to communication, manner, independence of the occupational physician, and satisfaction with outcome.<sup>10,22</sup> Cronbach's alpha was 0.94. Patients were asked at baseline and at follow up about their satisfaction with the occupational physician. We used the satisfaction score from the last moment of follow up.

### Statistical analysis

First, we described activities performed by the physicians. Next we calculated percentages of optimal performance for each of the four single performance indicators. A sum score of all performance indicators was calculated. We dichotomised this sum score into overall optimal performance, if performance for all indicators was optimal, and overall deviant performance, if performance was deviant for one or more indicators.

To assess a bivariate relation between performance and time to return to work, Kaplan-Meier curves were estimated and differences were tested with the log rank test. Next, we assessed the bivariate relation between other potential prognostic variables and return to work with the same method at a significance level of  $p < 0.10$ . From the list of other prognostic factors we selected factors to be included in the multivariate regression model of performance and prognostic factors on time to return to work. To this end we used Cox's proportional hazards analysis for survival data.

To assess the bivariate relation between performance and other prognostic factors with the rate of return to work we used the  $\chi^2$  test. We used logistic regression analysis to adjust for the influence of other prognostic factors.

To assess a relation between performance and satisfaction, the  $t$  test was used; if data were not distributed normally, the Mann-Whitney U test was used. If confounders were present, linear regression analysis was used to adjust the results.

## RESULTS

### Occupational physician performance

In nine cases the occupational physician had not seen the patient at all. In four of these cases there was information in the patient file on the diagnosis obtained through the work organisation. If no information was available, performance was scored as deviant. Therefore, performance scores could be calculated for all 100 physicians interviewed (table 1).

*Performance for medical knowledge of cancer and treatment* was poorest, with an optimal performance score of 3%. This was mainly due to the fact that only six physicians had communicated with the attending physician. In 95% and 66% respectively, the physicians knew the correct diagnosis and treatment.

*Continuity of care performance* did satisfy our criteria in 55% of all patients. This was mainly due to the fact that the time period between contacts was too long or a new appointment was lacking. Continuity of care in the meaning of seeing the same physician always was reasonable, with 70% of patients seeing same physician always.

*Performance for complaints related interventions* was optimal in 78%. In 84% of all cases at least one intervention was carried

**Table 1** Activities and performance of occupational physicians in occupational rehabilitation of cancer survivors (n=100) (due to missing values, percentages relate to 80–100 cases)

	Percentage
<b>Medical knowledge of cancer and treatment</b>	
Activities	
Diagnosis known and correct	95
Treatment known and correct	66
Communication with attending physician	6
Optimal performance	3
Calculation: diagnosis was correct in 95 cases, of these 6 had had contact with attending physician, and of these, 3 had treatment completely correct.	
<b>Continuity of care</b>	
Activities	
Last contact less than 6 months ago	55
More than 2 contacts	88
More than 3 contacts	72
Less than three different physicians	95
Same physician always	70
Optimal performance	55
Calculation: last contact <6 months ago; patient still on sick leave in 46 cases; 16 patients at work. All had been seen two or more times by their OP and by <3 different OPs. Of those 46, 39 did have a new appointment with the OP. Those 16 already at work and 39 with a new appointment add up to 55 cases.	
<b>Interventions and complaints</b>	
Activities	
OP mentioned more than two complaints	78
Complaints did not hamper return to work	29
At least one intervention	84
At least two interventions	69
At least consultation of general practitioner or supervisor	75
At least consultation of two other persons	45
Optimal performance	78
Calculation: in 78 cases complaints were discussed. Of these, complaints hampered return to work in 62 and in all cases one or more interventions had been carried out.	
<b>Interventions in relations at work</b>	
Activities	
Relation with co-workers, superior mentioned	70
Attitude of co-workers did not hamper return to work	87
Attitude of superior did not hamper return to work	82
Optimal performance	60
Calculation: in 63 cases attitude was discussed. In 3 of these cases it was not known if it hampered return to work. In 6 of the remaining 60 cases, attitude was hampering return to work and in all, at least one intervention was carried out.	

Criteria for optimal performance are given in the appendix.

out. The occupational physician had had some form of contact about the patient with the organisation or health care professionals in 75%.

In 60% of all cases *performance for interventions in relations at work* was optimal. In 75% the occupational physician did talk about the relation with workers or superiors. In 87% and 82% respectively this relation was assessed as not hampering return to work.

When we added all performance indicators to one overall performance sum score we left out performance for knowledge about diagnosis and treatment because there was no variability in this indicator. The overall performance was therefore based on three performance indicators only. This resulted in an *overall optimal performance* in 35% of all cases.

### Physicians' opinions

Ninety eight per cent of the occupational physicians were of the opinion that rehabilitation was an important occupational health task, and 89% thought that it enhanced return to work.

**Table 2** Characteristics of cancer survivors and factors potentially predictive for return to work, measured at baseline (n=100) (due to missing values not all percentages relate to 100 cases)

Sociodemographic and person related	
Gender, male (%)	33
Age, mean (SD)	42 (8.6)
Marital status, living alone (%)	19
Education, higher (%)	64
Working hours >32/week (%)	53
Years on the job, mean (SD)	9 (7.8)
Employed on temporary basis (%)	16
Self efficacy (ALCO) (range 0–100), mean (SD)	68 (9)
Disease and treatment related	
Cancer site (%)	
Breast	22
Cervix	23
Testis	16
Colon	5
Leukaemia	5
Miscellaneous	29
Treatment modalities (%)	
Operation	85
Chemotherapy	38
Radiotherapy	48
Other therapy	20
Physical problems (RSCL) (range 23–92), mean (SD)	34.8 (9)
Psychological problems (RSCL) (range 7–28), mean (SD)	11.9 (4)
Activity related problems (RSCL) (range 8–32), mean (SD)	11.9 (4)
Depression score (CESD) (range 0–60), mean (SD)	11.2 (9)
Fatigue inventory (range 4–20), mean (SD)	12.0 (5)
Pain, yes (%)	46
Work related	
Physical workload (range 0–100), mean (SD)	63.2 (18)
Mental workload (range 0–100), mean (SD)	20.9 (18)
Emotional workload (range 0–100), mean (SD)	20.4 (18)
Autonomy (range 0–100), mean (SD)	64.1 (24)
Job variation (range 0–100), mean (SD)	67.6 (19)
Relation co-workers (range 0–100), mean (SD)	81.6 (14)
Relation superiors (range 0–100), mean (SD)	80.3 (19)
Return to work measures at baseline	
At work (%)	25
Sick leave, median days (IRQ)	144 (48)

Sixty per cent of the physicians regarded themselves mostly as a helping professional and as having a special task for cancer patients.

### Patients

Thirteen patients were lost to follow up: seven refused further participation, four died, and from two patients the questionnaires were missing. Four were already at work at the time of the first data collection and for seven patients we could use the data of the latest moment of follow up. So, for 11 patients of those lost to follow up we could calculate return to work measures. For two patients insufficient data were available to assess the time to return to work. Finally, therefore, we could calculate a return to work measure for 98 patients.

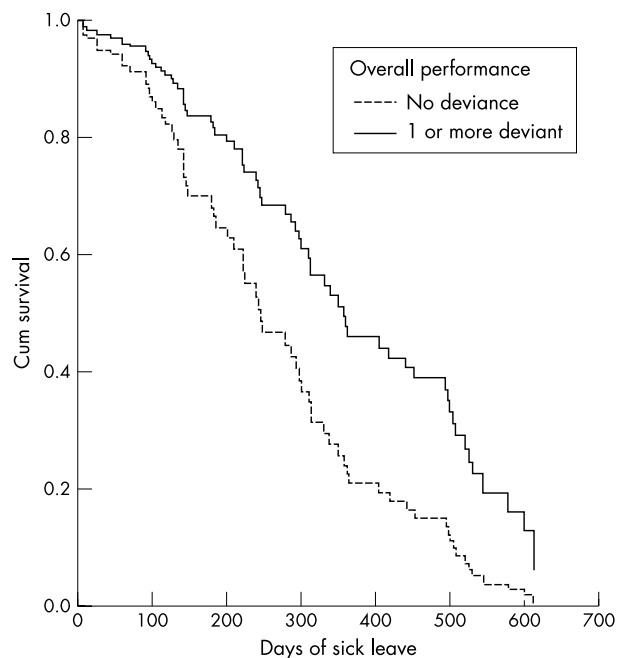
Patients had been treated for different tumours. There was a predominance of women treated for breast cancer and cervical cancer. The median (IQR) sick leave at inclusion was 144 (48) days (table 2).

### Return to work

At the end of follow up, 67% of patients had returned to work. Time to return to work ranged from 4 to 651 days with a median of 293 days. There was a steady increase of return to work from 22% at work at inclusion to 49% at 6 months, and 67% at 12 months follow up.

### Satisfaction

Physician and patient satisfaction scores were missing in 20 and 23 cases, respectively. Physicians' ratings were missing



**Figure 1** Survival curve of time to return to work of cancer survivors, with optimal rehabilitation by occupational physicians or deviant performance in one or more performance indicators after adjustment for other prognostic factors (n = 98).

because either physicians had not seen the patient at all (n = 9) or the patient was seen by another physician (n = 11). Patient data were missing because 13 were lost to follow up and 10 had not completed this part of the questionnaire. Mean patient satisfaction score was 77 (SD 16). For physicians the average satisfaction score was 83 (SD 7).

### Relation between performance and outcome

In the bivariate analyses, performance indicator scores were not significantly related to outcome. From the other prognostic factors, educational level, self efficacy, diagnosis, treatment, co-morbidity, psychological complaints, physical complaints, activity restrictions, fatigue, emotional burden at work, work pressure, and autonomy at work were related at the  $p < 0.10$  level to return to work.

To retain sufficient statistical power we included the following factors from different categories in the Cox's proportional hazards model to adjust for their influence: educational level, self efficacy, diagnosis, treatment, co-morbidity, activity restrictions, fatigue, and work pressure. After adjustment for prognostic factors, relations between overall performance and continuity of care and time to return to work were more precise and were statistically significant (fig 1). In particular, diagnosis turned out to be a confounder (table 3).

An overall optimal performance was related to a higher patient satisfaction. Overall optimal performance, optimal performance for continuity of care, and optimal performance for interventions and relations were significantly related to a higher physician satisfaction (table 4). For patient satisfaction, patients' age and marital status were confounders, but multivariate analysis did not change the results.

### DISCUSSION

Based on performance indicator scores, there is ample room to improve quality of occupational rehabilitation of cancer survivors by occupational physicians, especially with respect to medical communication. A better performance was associated with a small but significantly higher level of satisfaction of both patients and physicians. After adjustment for confounders, we

**Table 3** Cox proportional hazards analysis of occupational physician performance in occupational rehabilitation of cancer survivors and time to return to work (n=98)

Performance indicator	Unadjusted hazard ratio (95%CI)	Adjusted hazard ratio (95% CI)
Deviant performance continuity of care	0.7 (0.4 to 1.1)	0.5 (0.3 to 0.9)
Deviant performance interventions and complaints	1.5 (0.9 to 2.7)	0.9 (0.4 to 1.9)
Deviant performance interventions and relations	0.9 (0.6 to 1.5)	0.8 (0.5 to 1.6)
Deviant performance overall (sum score 3 indicators)	0.7 (0.4 to 1.0)	0.5 (0.3 to 0.8)

A hazard ratio <1 indicates the likelihood of a longer time to return to work. Hazard ratios before and after adjustment for other predictive factors: education, co-morbidity, self efficacy, work pressure, functional status, fatigue, diagnosis, and treatment.

**Table 4** Relation between performance of occupational physicians (n=83) and patient satisfaction (n=80)

Performance indicator	Patient satisfaction, median (IQR)			Physician satisfaction, mean (SD)		
	Deviant	Optimal	MW U test	Deviant	Optimal	t test
Continuity of care	75 (23)	82 (19)	0.12	80 (6)	84 (7)	0.00
Interventions and complaints	69 (34)	80 (22)	0.14	84 (11)	81 (7)	0.51
Interventions and relations at work	75 (34)	80 (20)	0.88	80 (7)	84 (7)	0.04
Overall performance	75 (24)	83 (17)	0.04	80 (7)	86 (6)	0.00

IQR, interquartile range; MW, Mann-Whitney.

found a significant relation between overall performance of occupational physicians, continuity of care, and return to work.

In comparison with other studies on the quality of occupational health, such as an audit of patient files, we were able to improve the quality of the data by interviewing the physicians. Therefore, we were not merely dependent on the interpretation of the patient files by the researchers, but we could ask the physician for clarification. We gathered a suitable cohort of patients with detailed data on the management of their occupational physicians. We followed them for a sufficiently long and appropriate period in which an additional 45% of the cohort resumed work. We had hardly any loss to follow up. Apart from data on rehabilitation management we could also make an inventory of a large number of potential prognostic factors which could be checked for potential confounding. Most of these prognostic factors were measured by means of validated questionnaires.

For measuring the quality of care we are inevitably restrained to non-randomised observational studies, which are easily subject to confounding.<sup>23, 24</sup> This was evident in our study too. Prognosis of return to work was determined by, among others, diagnosis, treatment, self efficacy, and pressure of work. In turn, performance indicators were also related to these prognostic factors. Therefore, one of the strengths of our study is that we could check the influence of more than 30 potential prognostic factors. Even though we cannot be sure that unknown confounders bias a relation between performance and outcome, this does not seem very plausible.

The finding that both patients and physicians were more satisfied with a better performance indicates that the performance indicators were related to, at least, a perception of better quality of care.

The satisfaction questionnaires had sufficient internal reliability. With average satisfaction scores around 80, they compare well with those found in patients with back pain that were around 70% of the maximum score.<sup>10</sup>

There are only few studies on the quality of rehabilitation or return to work management in cancer patients. In Germany, Cole *et al* reported that cancer patients made substantial progress during in-patient rehabilitation.<sup>25</sup> In this uncontrolled study it is, however, unclear what the impact of rehabilitation measures is. Patients in the study of Maunsell *et*

*al* complained about the lack of attention to work problems from health care professionals.<sup>26</sup> Recently, a more general lack of attention to vocational rehabilitation has also been noted.<sup>27</sup> Furthermore, in our study, half of the patients indicated that they had not discussed work with their attending physician (results not shown).

In 1992, van der Wouden *et al* found a return to work rate of 44% in a postal survey of long term cancer survivors in the Netherlands.<sup>28</sup> With a return to work rate of 67% and a shorter follow up period, the results of our study compare favourably to theirs. Many factors, such as improved treatment and improved survival, could be the cause of this difference. However, it could also be an indication that the increasing attention for vocational rehabilitation of cancer patients has had a positive impact on the problem.

We did not find a relation between all performance indicators and outcome. It is remarkable that continuity of care was a predictor of return to work. This has been found before for patients with back pain.<sup>10</sup> There could be two explanations for this finding. Patients who lose contact with the occupational physician could be especially problematic and have therefore a longer time to return to work. It is also possible that better contact with the occupational physician in terms of frequency and person leads to better return to work. It is the first time that these performance indicators were used. To better validate them, findings should be corroborated in future studies. In general, relations between processes of care and outcome are not straightforward.<sup>10, 12</sup> In future quality studies, it is recommended that more specific indicators are developed. The lack of studies on return to work of cancer survivors should also stimulate interest in conduct of randomised studies in which the efficacy of rehabilitation procedures for cancer survivors is more thoroughly evaluated. These results could be used in future quality studies.

## Conclusion

This study shows that the quality of occupational rehabilitation for cancer survivors can be improved substantially, especially with regard to communication between occupational physicians and specialists in cancer care. Improvement of quality will probably lead to higher return to work rates. In

addition, development and evaluation of more effective intervention methods for return to work management of cancer survivors is needed.

## APPENDIX: PERFORMANCE INDICATORS FOR QUALITY OF OCCUPATIONAL REHABILITATION OF CANCER SURVIVORS BY OCCUPATIONAL PHYSICIANS

### (1) Criteria for optimal performance in medical knowledge

- (a) Diagnosis had to be known by occupational physician and correct, and if so,
- (b) There had to be a written or vocal contact with the attending physician, and if so,
- (c) Treatment had to be known by the occupational physician and correct for operation, chemotherapy, and radiation or their combinations.

### (2) Criteria for optimal performance in continuity of care

- (a) The last contact should be less than half a year ago if the patient was not at work yet and if so,
- (b) There had to be at least two contacts with the patient within one episode of sick leave
- (c) The patient should have had contact with no more than two different physicians
- (d) If not yet returned to work at the moment of contact there had to be a new appointment.

### (3) Criteria for optimal performance in complaint related interventions

- (a) At least two of the following complaints should have been discussed with the patient: fatigue, problems in sleeping, problems in concentration, emotional distress, feeling depressed, other complaints due to disease or treatment
- (b) If these problems hampered return to work, at least one out of the following possible interventions had to be mentioned by the occupational physician:
  - (i) *Advice to the patients*: stay in contact with work, confer with superior about decrease of workload
  - (ii) *Referral to* attending specialist, general practitioner, social worker, occupational physiotherapist, occupational psychologist, personnel manager, superior, insurance physician
  - (iii) *Advice* about work resumption, decrease of work tasks, use of aids, own work pace, other interventions directed towards worker, other interventions directed towards work
  - (iv) *Consultation* with social team at work, attending physician, general practitioner, social worker, personnel manager, superior, insurance physician, other persons
  - (v) Workplace visit, objective information to co-workers or superiors, house visit, other interventions

### (4) Criteria for optimal performance in interventions in relations at work

- (a) Attitude of superior and colleagues should be discussed with the patient
- (b) If attitude of superior or co-workers hampered return to work there had to be at least one intervention from the same range as mentioned under (3).

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