

# Translating prognostic factors for long-term work disability among cancer survivors to recommendations for the Dutch guideline 'Cancer and Work' for occupational physicians and insurance physicians

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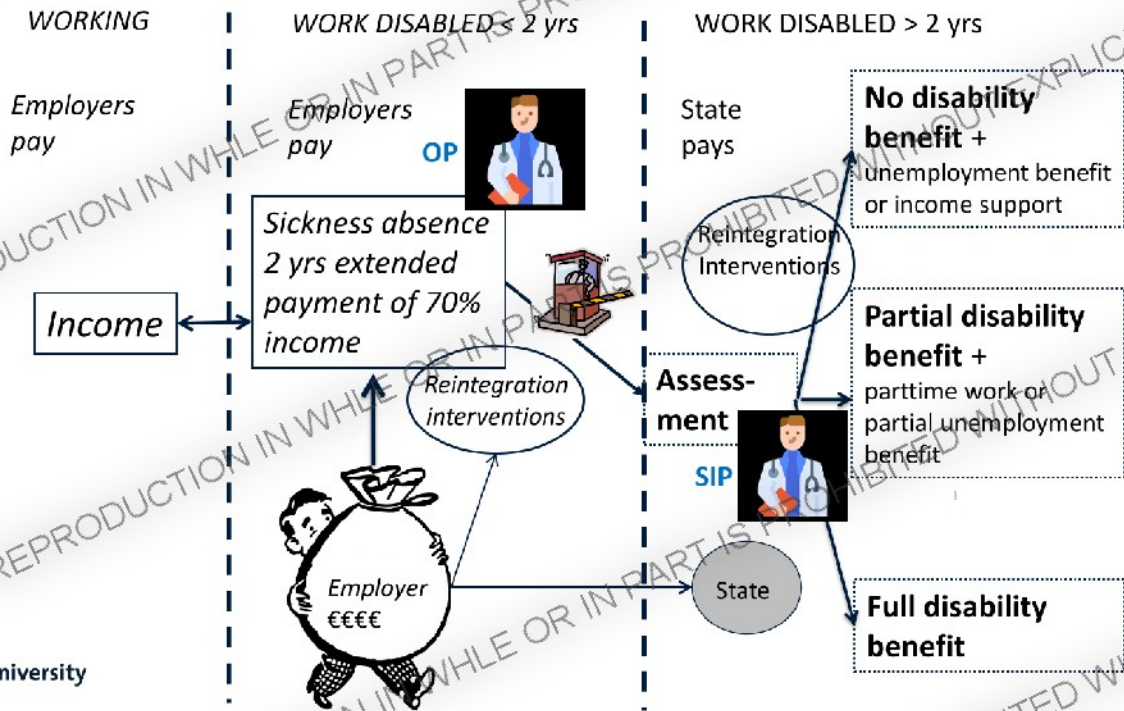
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# Work disability scheme NL since 2004





# Guideline development



<https://gdt.gradepro.org/app/handbook/handbook.html>

## Phase

### 1. Preparation

- Step 1. Composing projectgroup
- Step 2. Exploration of literature
- Step 3. Formulating bottlenecks
- Step 4. Analysis of bottlenecks and leading question: **What are prognostic factors to predict work disability after 2 years?**

## Phase

### 2. Development

- Step 5. Develop search strategy and perform literature search
- Step 6. Selection relevant articles
- Step 7. Describe evidence report, incl. evidencetables
- Step 8. Discussion other considerations
- Step 9. Define concept guideline

# From evidence to recommendation



## Considerations

1. Quality of scientific evidence
2. Balancing desirable and undesirable consequences
3. Values and preferences of patients
4. Values and preferences of professionals
5. Available resources (costs)
6. Acceptability
7. Feasibility

**recommendation**



**ADVISE**

**CONSIDER**

**ADVICE AGAINST**

**ADVICE STRONGLY AGAINST**

## Absenteeism/not working > 2y

### Quality

#### Person related

<i>Higher age (61-62) after 3y*</i>	⊕⊕⊕⊕
Lower age (≤35) after 5y	⊕⊕⊕
<i>Higher age after 3-4y</i>	⊕
Birth country	⊕⊕
Lower education	⊕⊕
Relative lower income	⊕⊕

#### Diagnosis or treatment related

Cancer stage at diagnosis III,IV	⊕⊕
New cancer event	⊕⊕
<i>Mastectomy*</i> → no mastectomy	⊕⊕⊕
Additional hormone therapy	⊕⊕
Chemotherapy	⊕⊕

#### Health related

Comorbidity	⊕⊕
Depression	⊕⊕

#### Work related

Prediagnostic sick leave	⊕⊕⊕
<i>Work adjustments*</i> → no work adjustments	⊕⊕⊕
Decreased value of work since diagnosis	⊕⊕⊕
Union membership	⊕⊕⊕

Breast  
Cancer

\*Protective factor



## Absenteeism/not working > 2y

Quality

Agree

### Person related

Lower age (≤35) after 5y	⊖⊕⊕	50%
Birth country	⊖⊕⊕	50%
Lower education	⊖⊕⊕	67%
Relative lower income	⊖⊕⊕	67%

### Diagnosis or treatment related

Cancer stage at diagnosis III-IV	⊖⊕⊕	100%
New cancer event	⊖⊕⊕	80%
Breast saving surgery	⊖⊕⊕	33%
Additional hormone therapy	⊖⊕⊕	33%
Chemotherapy	⊖⊕⊕	50%

### Health related

Comorbidity	⊖⊕⊕	80%
Depression	⊖⊕⊕	80%

### Work related

Predagnostic sick leave	⊖⊕⊕⊕	80%
No work adjustments	⊖⊕⊕⊕	80%
Decreased value of work since diagnosis	⊖⊕⊕⊕	50%

## Digital round



Breast  
Cancer

## Considerations: 5 difficulties

### 1. Determining factors as not relevant in a certain setting

*'During a insurance medical examination age is not relevant'*

*'In fact, this mainly applies to occupational medicine and not to insurance medicine'*

### 2. 'Combining' evidence

*'A low income is probably a result of low education, a different ethnicity, etc., and as a result people are less prepared for illness and treatment.'*



## Continued

### 3. Mixing opinions with evidence

*'I don't think this is right, but I'm not a doctor'*

*'I think that in that case there is a question of dysfunction instead of disability'*

### 4. Mixing experience with evidence

*The rest of the symptoms of chemotherapy can be extremely disabling for some people.*

*Others have little or no problem with it. Extremely personal.'*

### 5. 'Doubts' about evidence

*'Maybe also cause-effect discussion.'*

*'Proof is too thin.'*





**Table 1. Prognostic factors for not working at long-term after diagnosis breast cancer**

Absence >2 yr	Work-disabled after 5 yrs
<i>Person-related</i>	
Age at diagnosis = ≤35 yrs	Age at diagnosis 50-56 yrs
Lower education	Lower education
Lower income	
Younger	
Lower educated/income	
Cancer: More severe cancer	Cancer severity
New comorbidity (Comorbidity, depression)	
Earlier high absence	
Co-morbidity	
Depression	
<i>Work-related</i>	
Pre-diagnostic sickness absence	Pre-diagnostic sickness absence
No work accommodations	
Decreased value of work	

**Table 2. Prognostic factors for not working at long-term after diagnosis colorectal cancer**

No RTW >2 yrs	Absence >2 yrs	Work disabled after 5 yrs
<b>Person-related</b>		
Age at diagnosis <55 jr	Age at diagnosis <55 jr	Age at diagnosis <60 jr
Lower educated	Female gender Lower educated	Lower income Lower educated
	<b>Younger</b>	<b>Earlier high absence</b>
	<b>Lower educated/income</b>	
Cancer No cure	<b>More severe cancer</b>	Cancer severity
Post-com	<b>Complications</b>	Surgery complications
	<b>Worse health</b>	Post-surgery complications
		Re-surgery
Decreased general health	Pre-diagnostic co-morbidity	Pre-diagnostic co-morbidity
	Mental co-morbidity	Mental co-morbidity
	Physical status	Physical status
<b>Work-related</b>		
	Pre-diagnostic sickness absence	Pre-diagnostic sickness absence
	Absence episodes after diagnosis	Practical work
	Not working	Not working

## Recommendations of guideline project group

### OP:

- Consider documenting diagnosis, treatment, health-related and work-related information

### SIP:

- Consider when assessing eligibility to disability pension to include the prognostic factors in coherence and judge per person.
- Consider to describe the information about the factors as 'belonging to a risk group' when communicating with other professionals (NB sharing medical information not allowed)





## Discussion



- Risk factors > 2 years absence: regard in their coherence

**GRADE**

- Accepting evidence / translating to practice is difficult

- More longitudinal research needed!

- In other countries
- In other diagnostic groups than BC or CRC
- Including changeable risk factors for RTW (eg. working conditions)

- Guideline tested and finished in 2024

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