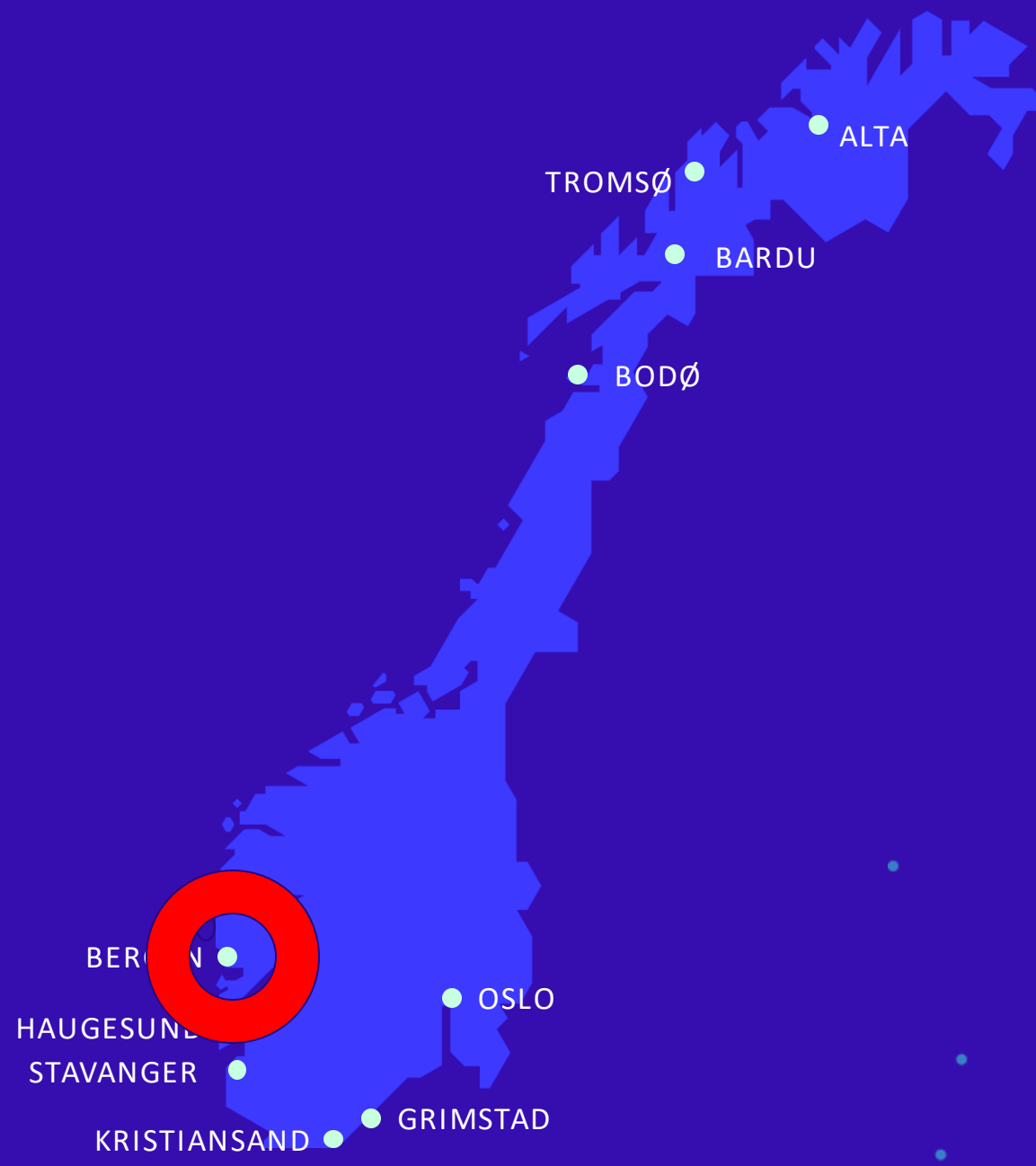


VOCATIONAL REHABILITATION IN A LIFE COURSE PERSPECTIVE: THE ROLE OF TRANSITIONS

Merete Labriola, Research Professor

NORCE Norwegian Research Centre AS,
Bergen, Norway

18. MARS 2021

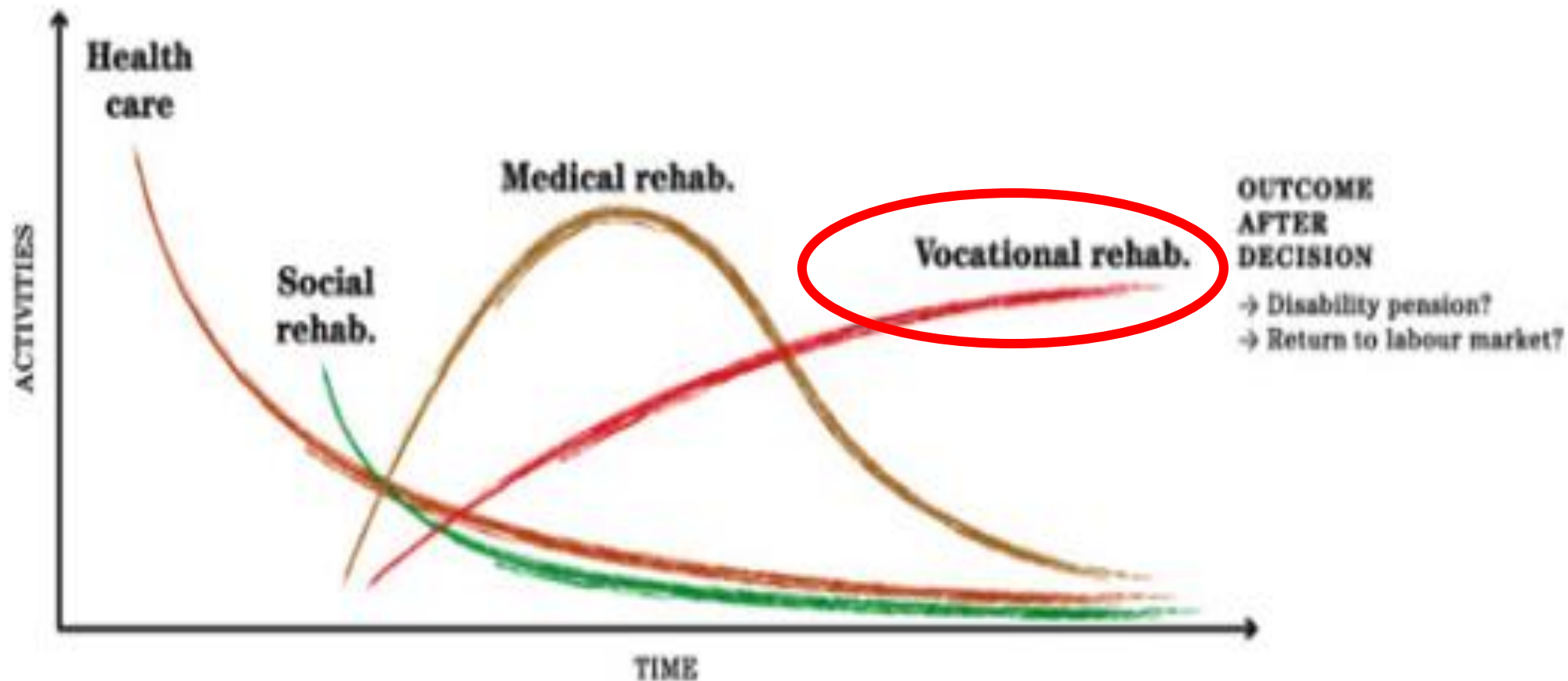


Given that vocational rehabilitation is all about:

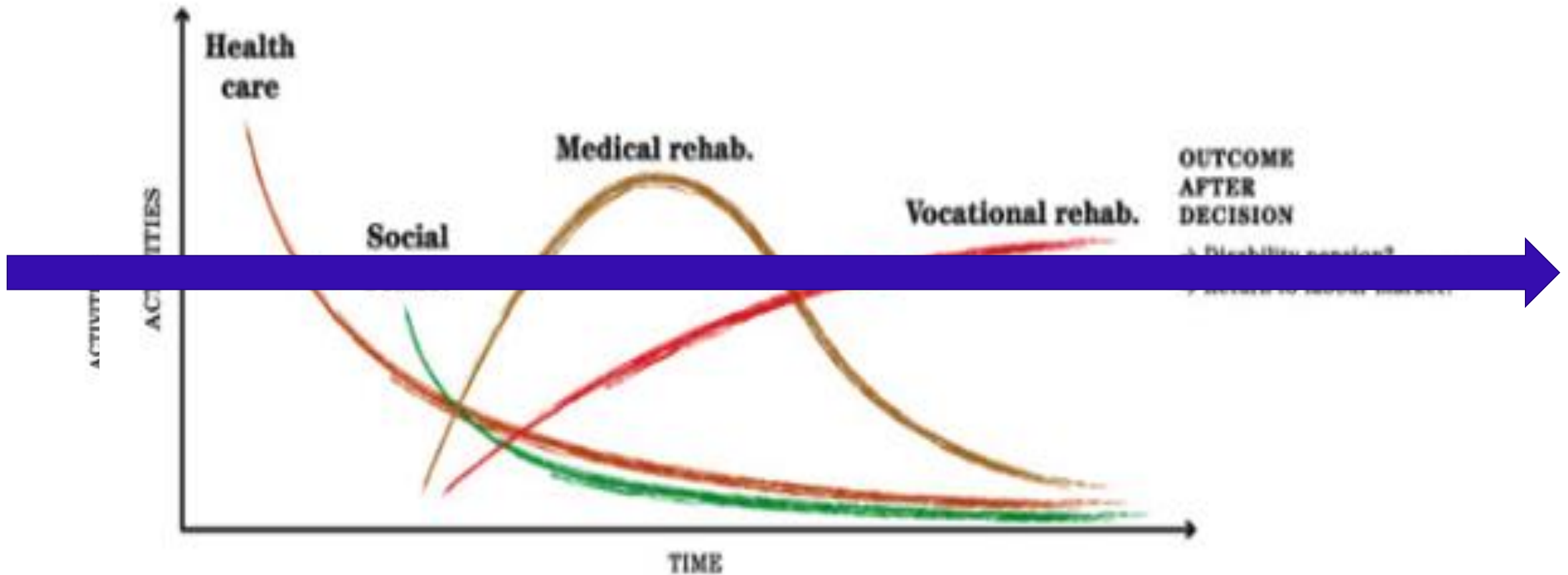
- Helping people with health problems stay at, return to and remain in work, it is logical that it starts with the individual experiencing a health problem.



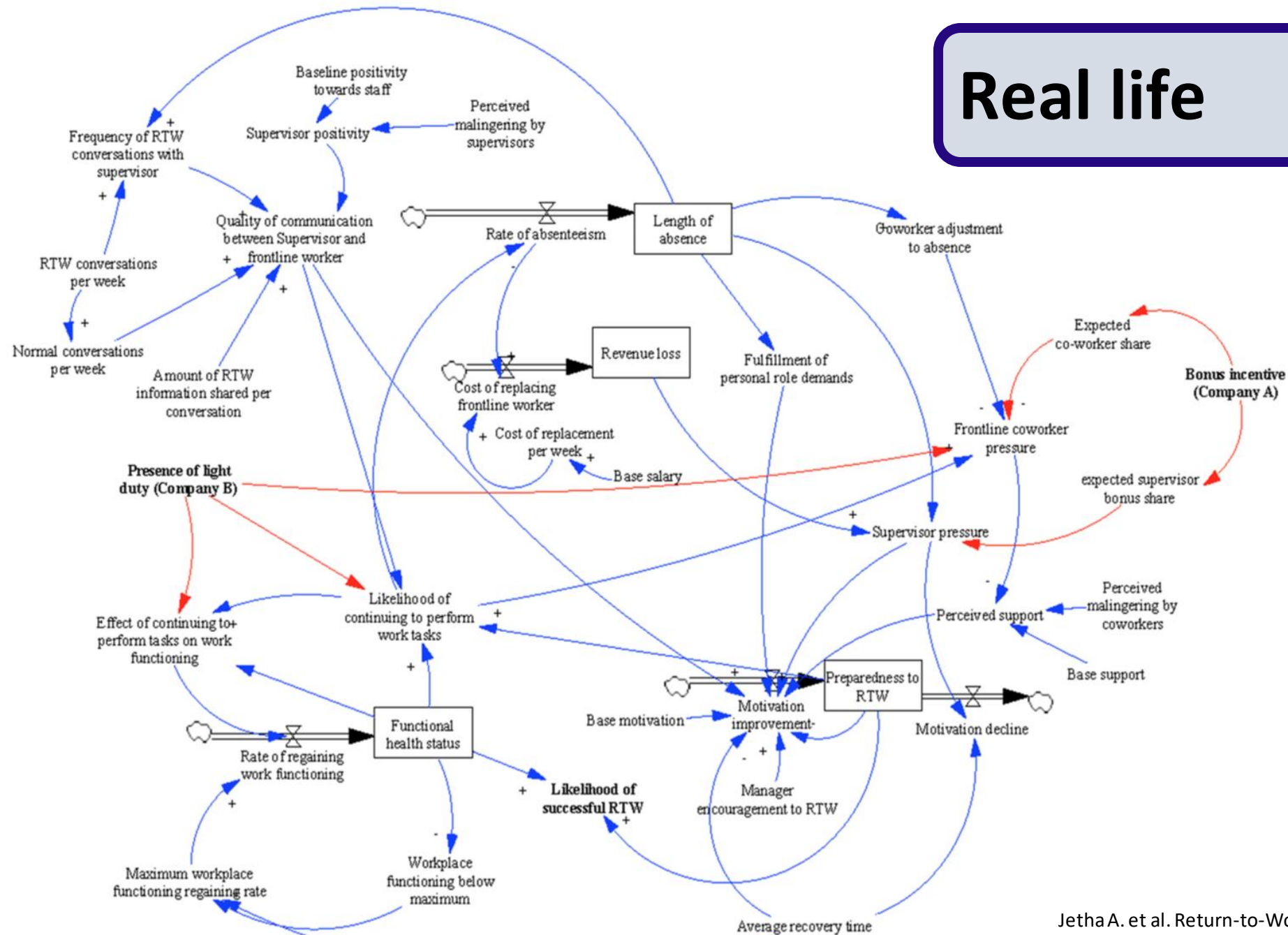
An individual experiencing a health problem towards a Return To Work or disability pension



An individual's progress from disease or injury towards a RTW or disability pension



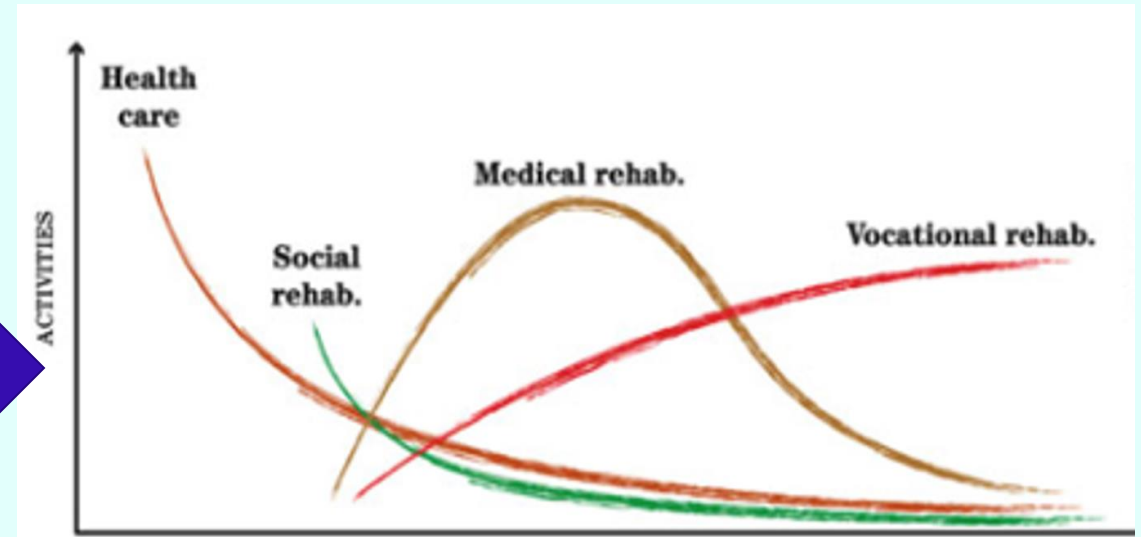
Real life



So

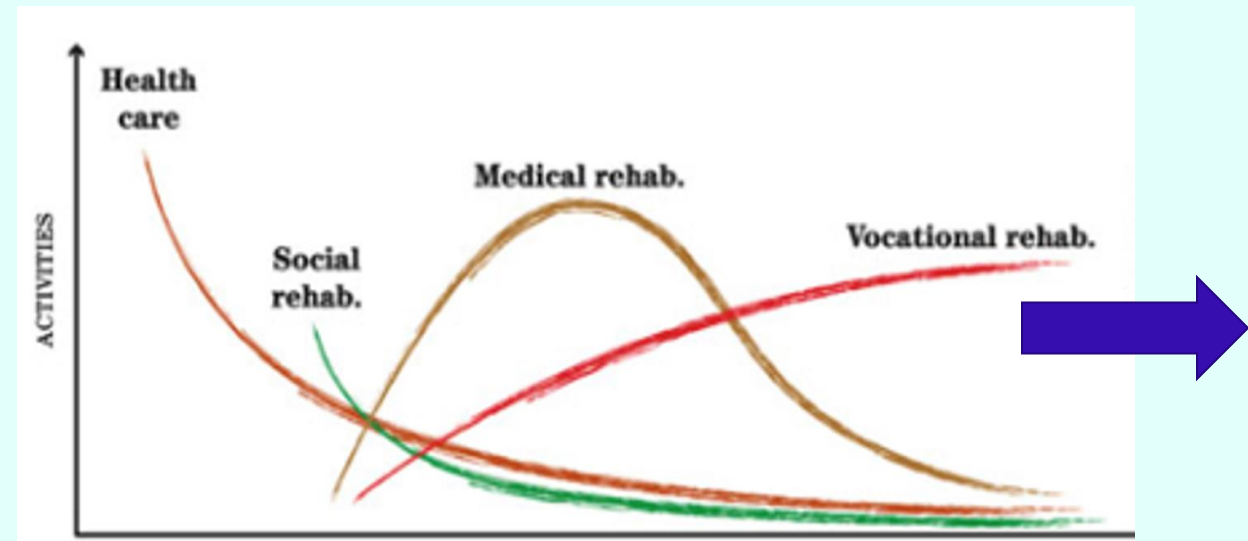
vocational rehabilitation often requires knowledge and understanding of events that lead to health problems:

- Was it a chain of events
- was it accumulation of events over time that led to the health problems?
- It often involves knowledge of the labor market history



In order to evaluate the success of vocational rehabilitation knowledge and understanding of events that happened after is important:

- Return to work (RTW) is often use as outcome
- But does this give us knowledge on whether the intervention changes the pathways for the individual and does the change last over time?



1 out of 4 papers



J Occup Rehabil
DOI 10.1007/s10926-012-9405-x

Methods in Measuring Return to Work: A Comparison of Measures of Return to Work Following Treatment of Coronary Heart Disease

**Karin Biering · Niels Henrik Hjellund ·
Thomas Lund**

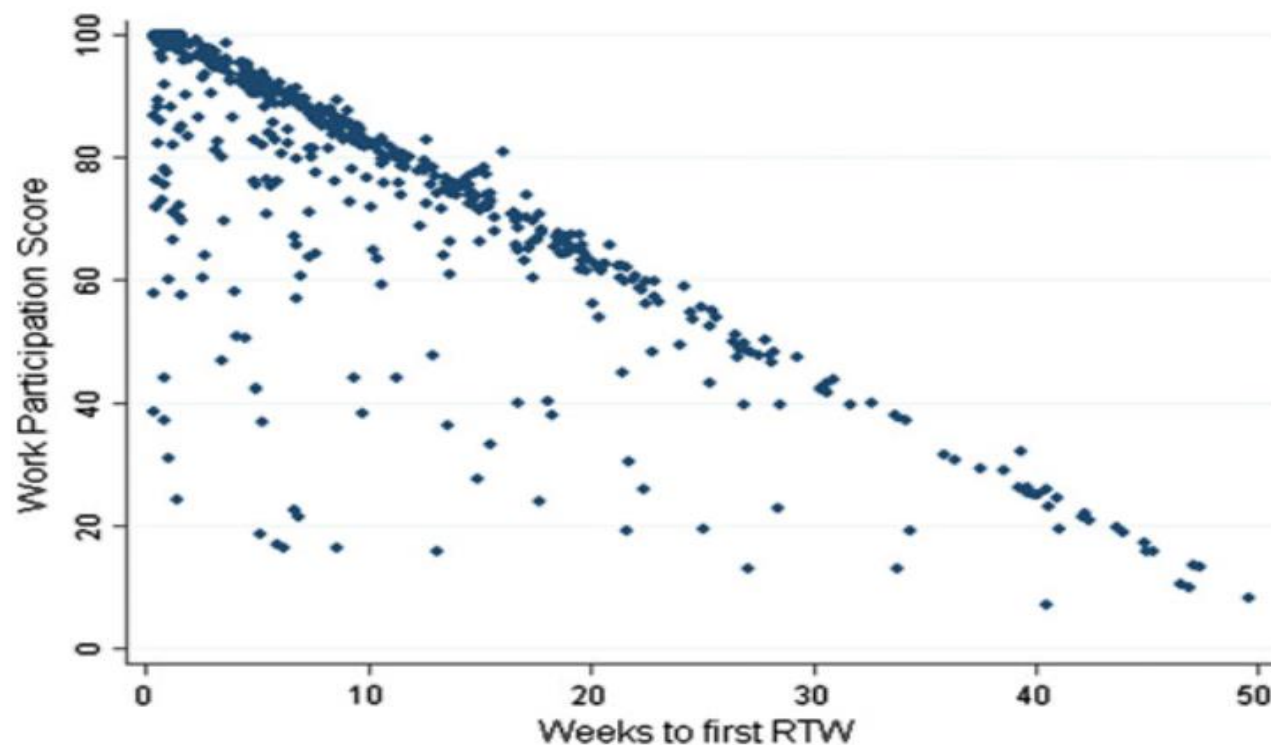


Fig. 2 Comparison of traditional time to first RTW with Work Participation Score. A jitter of 3 weeks was used to enhance the visual graphics by separation of overlapping points

Dynamic work disability model for sickness absence and return to work

Sickness absence

Return to work

At work

Short-term
absence

Long-term
absence

Permanent
expulsion

Health, work
& employment,
health behaviour,
personality, age, gender,
socio-economic position

Health, work
& employment,
health behaviour,
personality, age, gender,
socio-economic position

Health, work
& employment,
health behaviour,
personality, age, gender,
socio-economic position

Workplace policies & practices

Health care & social systems

Legislation

A proper vocational rehabilitation outcome should be able to

- Incorporate such knowledge in order to prevent relapse and promote sustainability



The Life-course approach



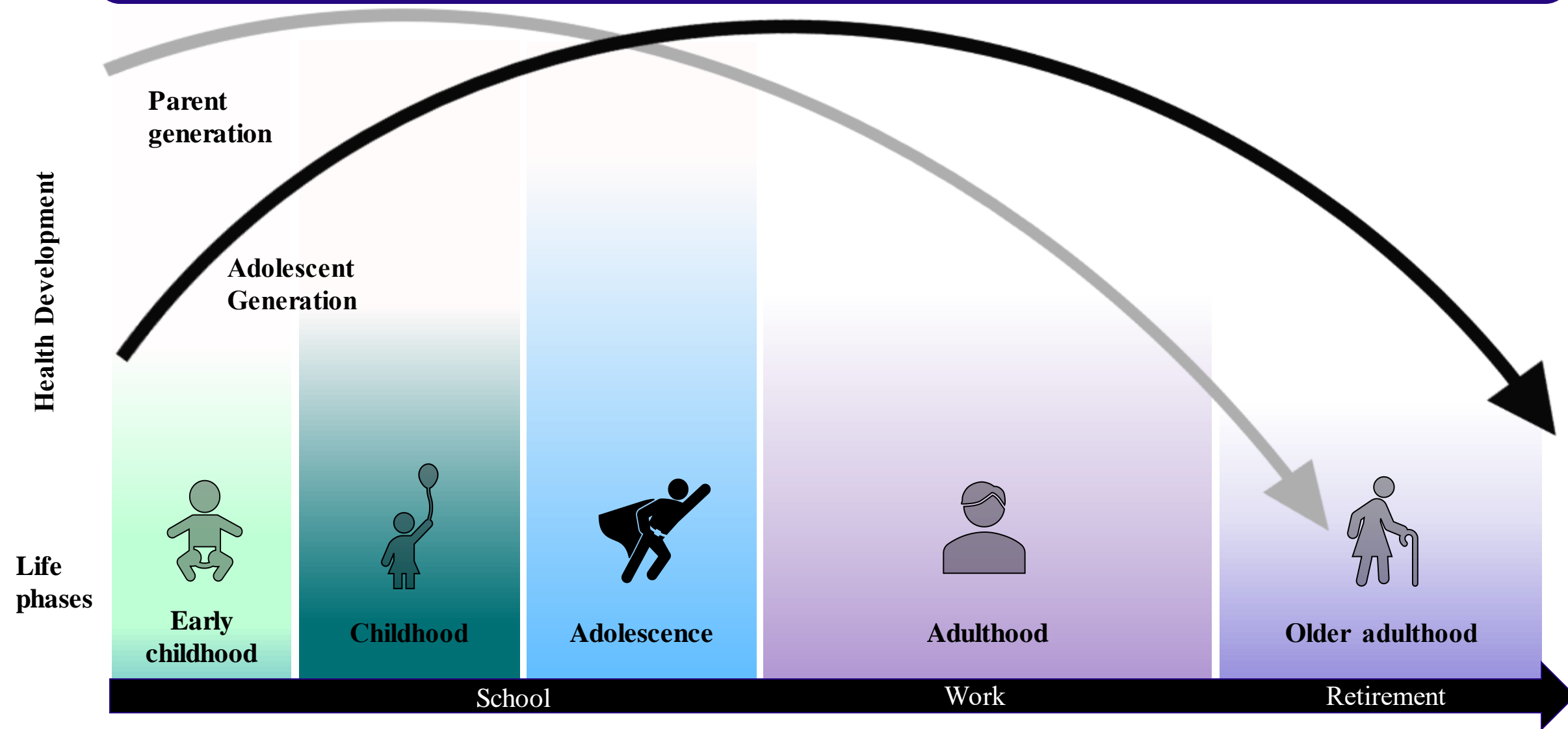
- Offers an approach that moves research away from:
- a static model of health and work towards
- a more dynamic model of how a person's labor market and health experiences are shaped by labor markets and social contexts into a working life trajectory.

The Life-course health development approach




- Is based on the concept, that health development occurs continuously over the lifespan, from conception to death, and is shaped by prior experiences and environmental interactions

Illustration of the life course health development approach



The life course approach is an emerging field in terms of an overarching theoretical complex, based on different theories, models and concepts about accumulation, pathways, and timing.

Life-Course Theories

- 
- Describe changes in behaviour in age-graded patterns as individuals mature
 - Behaviour of individuals results from inner psychological changes in response to life circumstances
 - Sometimes called developmental theories
 - Life-course theories are created by analyzing the behaviours of large groups of individuals over a long period of time
 - Life-course theories began to appear in the 1950s
 - Life-course theories reflect the historical and cultural context in which the researchers conducted their studies

Life-course perspective



**IS ABOUT EXAMINING CHANGES
OVER TIME**

– whether they are developmental

THREE IMPORTANT TRAJECTORIES

- 1) The phases prior to the health problem or sickness absence
- 2) The progression through vocational rehabilitation
- 3) The exit from vocational rehabilitation and into a life with or without work

The concepts of trajectories and transitions

- A **trajectory** is defined as a long-term view or pattern of a given dimension, for example labour market attachment, within the life course

The concepts of trajectories and transitions

whereas

➤ **transitions** are changes between different states

like

➤ employment to unemployment

➤ transitions in health status - healthy to sick

A trajectory may comprise multiple transitions

2 out of 4 papers



***D**iscussion paper*

Scand J Work Environ Health. 2016;42(4):346–353. doi:10.5271/sjweh.3567

Labor markets and health: an integrated life course perspective

by Benjamin C Amick, PhD,^{1,2} Christopher B McLeod, PhD,^{2,3} Ute Bültmann, PhD,⁴

- An important aspect of health relevant to the labor markets and health framework is that health is a determinant and a resource/capability, which shapes the working life trajectories.

- The return-to-work (RTW) process after long-term sickness absence is often complex and long and implies multiple shifts between different labour market states for the absentee.
- Standard methods for examining RTW research typically rely on the analysis of one outcome measure at a time, which will not capture the many possible states and transitions the absentee can go through.

Labor market transitions into and out of the labor market significantly shape the working life course.

Table 3. Overview of labor market and health transitions

Into/out of the labor market

- School to work and/or work to school
- Work into and/or out of retirement
- Work into and/or out of family care
- New labor market entrance (eg, new immigrants)

Within the labor market

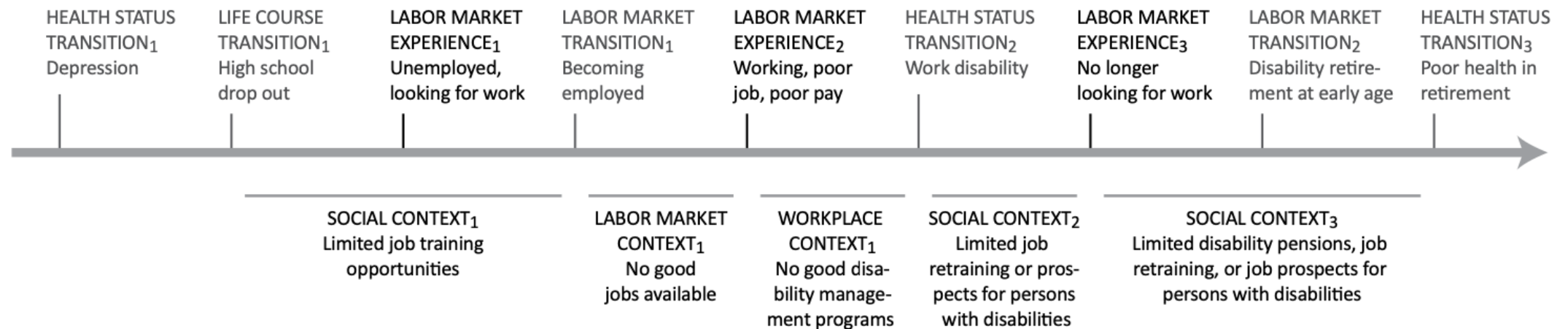
- Employment to unemployment and /or out of unemployment to employment
- Work to maternity/paternity leave and/or maternity/paternity leave to work
- Connectedness to the labor market, related to the nature of the contract (working arrangement and time): self-employed to not self-employed and/or vice versa (vv), part-time to full-time and/or vv, salary to hourly/piece and/or vv, permanent to temporary and/or vv, unionized employer to a non-unionized employer and/or vv
- One job to another job
- One firm to another firm

Health-related transitions that affect the work status

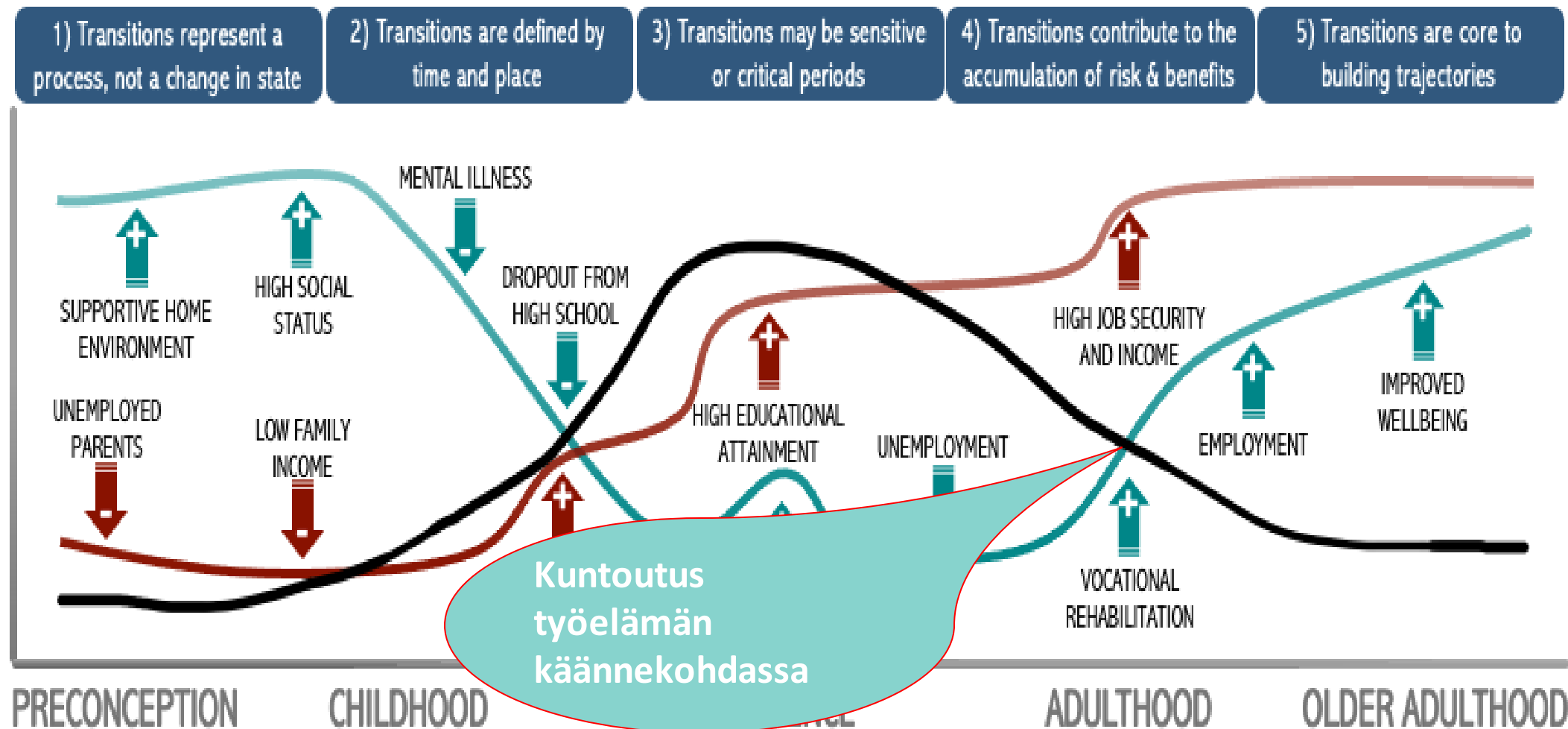
- Remain working (accommodated or not)
 - Not working, but able to return to work (short-term disability or sickness absence)
 - Not working and not able to return to work (eventual exit from the labor market)
-

This model highlights the need to capture the various ways in which individuals engage in the labor market over the working life course creating multiple transitions between different labor market experiences and health states

MODEL 4



The concepts of trajectories and transitions



3 out of 4 papers



Open Access

Research

BMJ Open Sequence analysis to assess labour market participation following vocational rehabilitation: an observational study among patients sick-listed with low back pain from a randomised clinical trial in Denmark

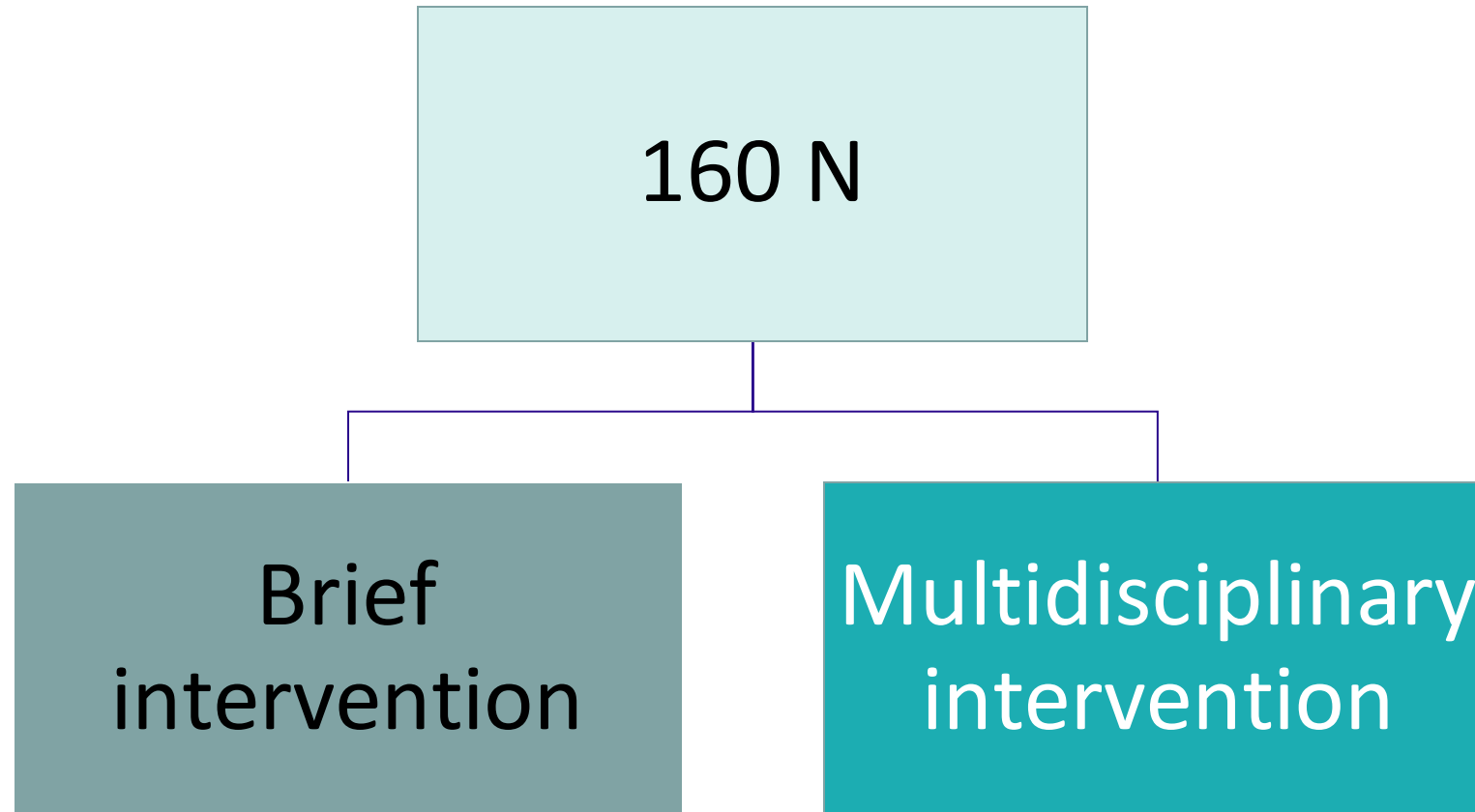
Louise Lindholdt,^{1,2} Merete Labriola,^{1,2} Claus Vinther Nielsen,^{1,2}
Trine Allerslev Horsbøl,³ Thomas Lund^{1,2,4}

Purpose in short



- To explore potential added analytical value of sequence analysis as supplement to standard regression analysis when assessing the effect of two Low Back Pain interventions on labour market participation.

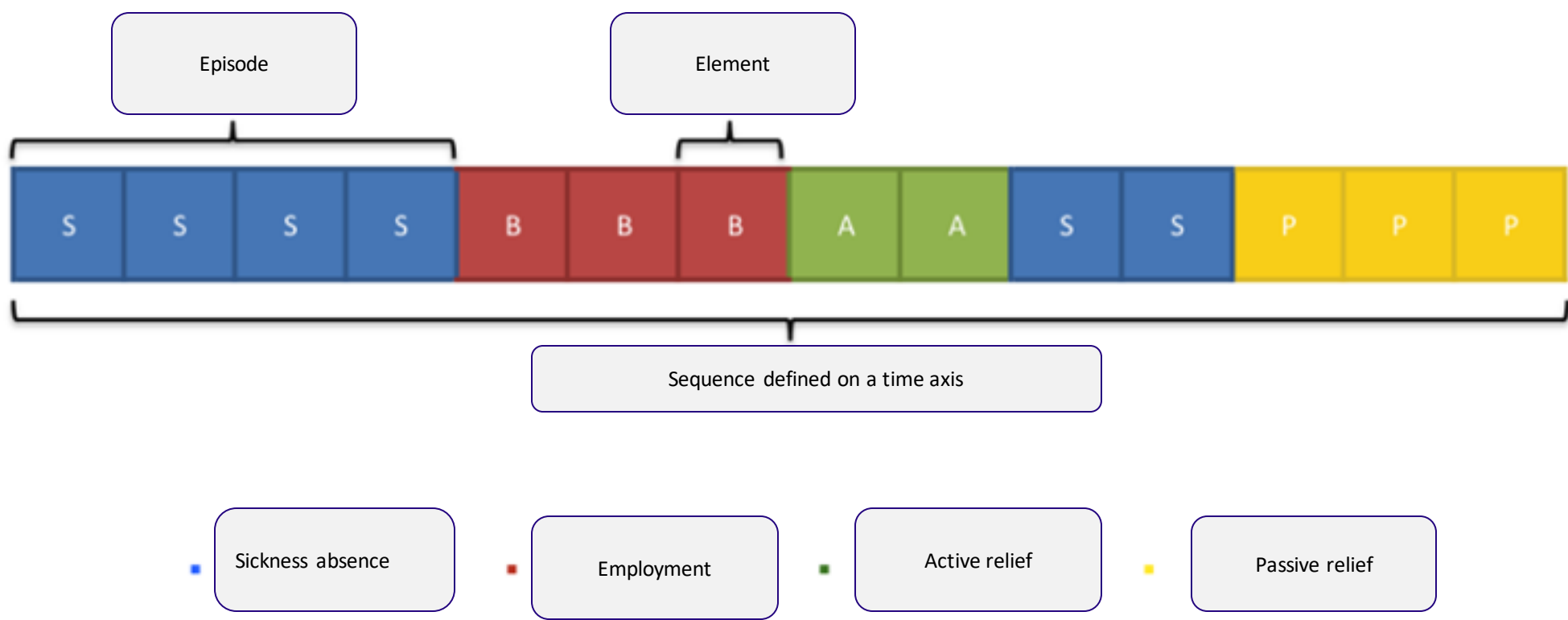
The study population consisted of
160 patients randomly allocated to...



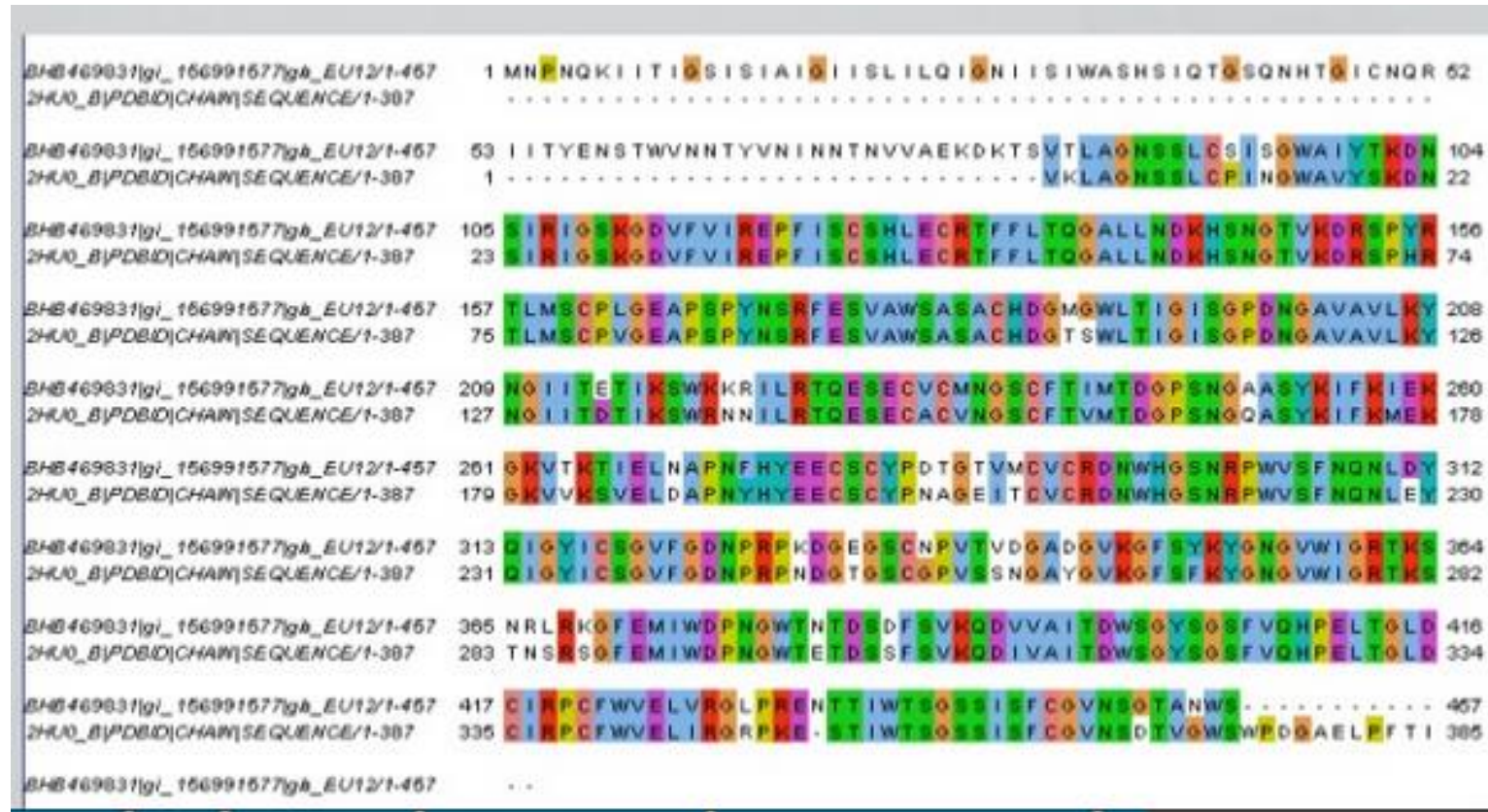
- Data on labour market participation following intervention were obtained from a national register and analysed in two ways:
 - 1) binary, as active or passive relief at a 1-year follow-up
 - 2) 4 different categories for labour market participation 2-year follow-up.

- No difference in labour market participation for patients in the randomisation groups (OR=1.03, 95%CI 0.55 to 1.93)
- Further adjustment for age, gender, marital status, educational level, general self-rated health and previous episodes of sickness absence due to LBP did not alter this result.

Sequence



Example multiple sequences



Sequence index plot

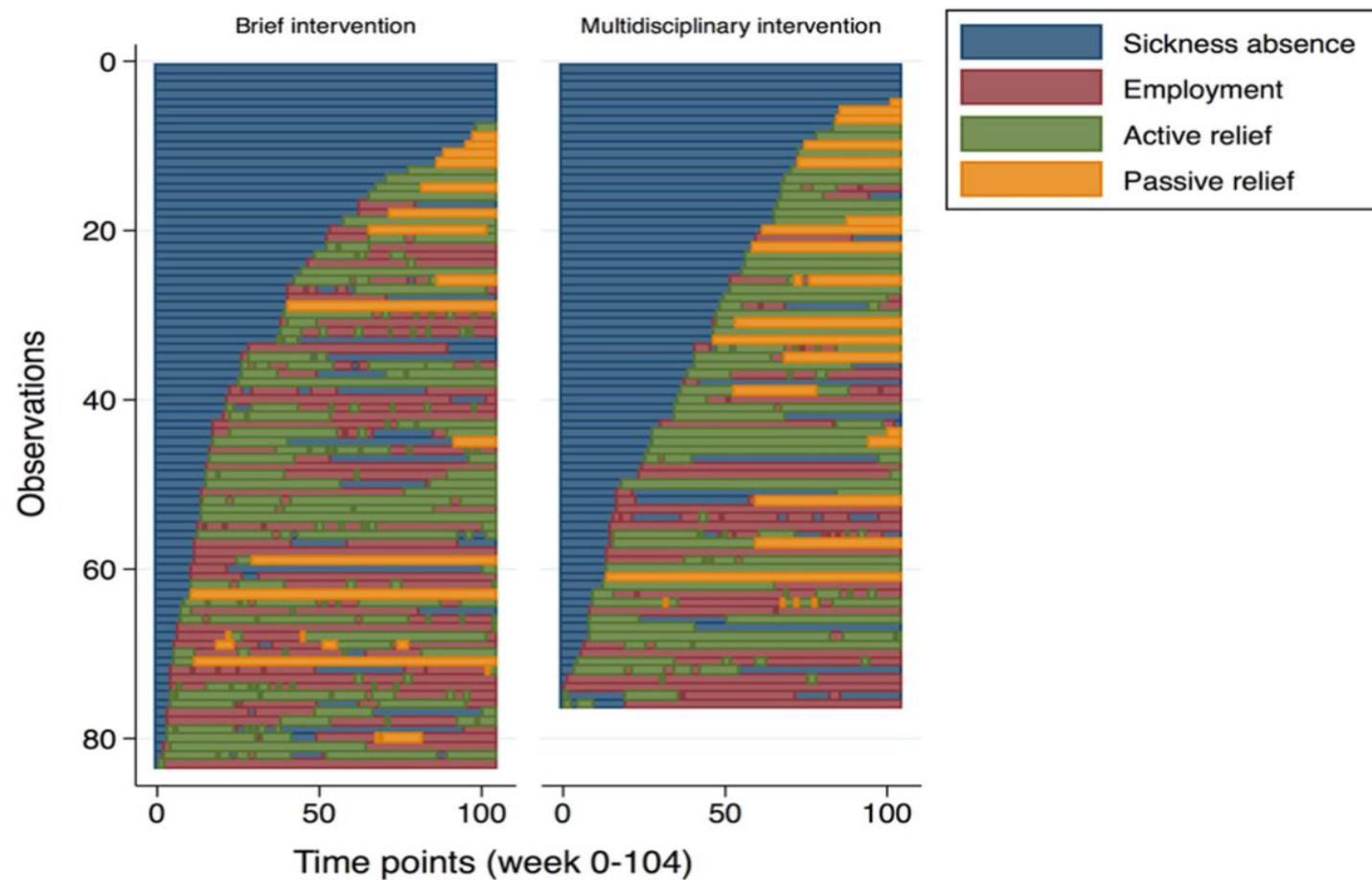


Figure 1 Sequence index plot visualising the history of events in an individual level from baseline to 2-year follow-up for each randomisation group (n=160).

Status proportion plot

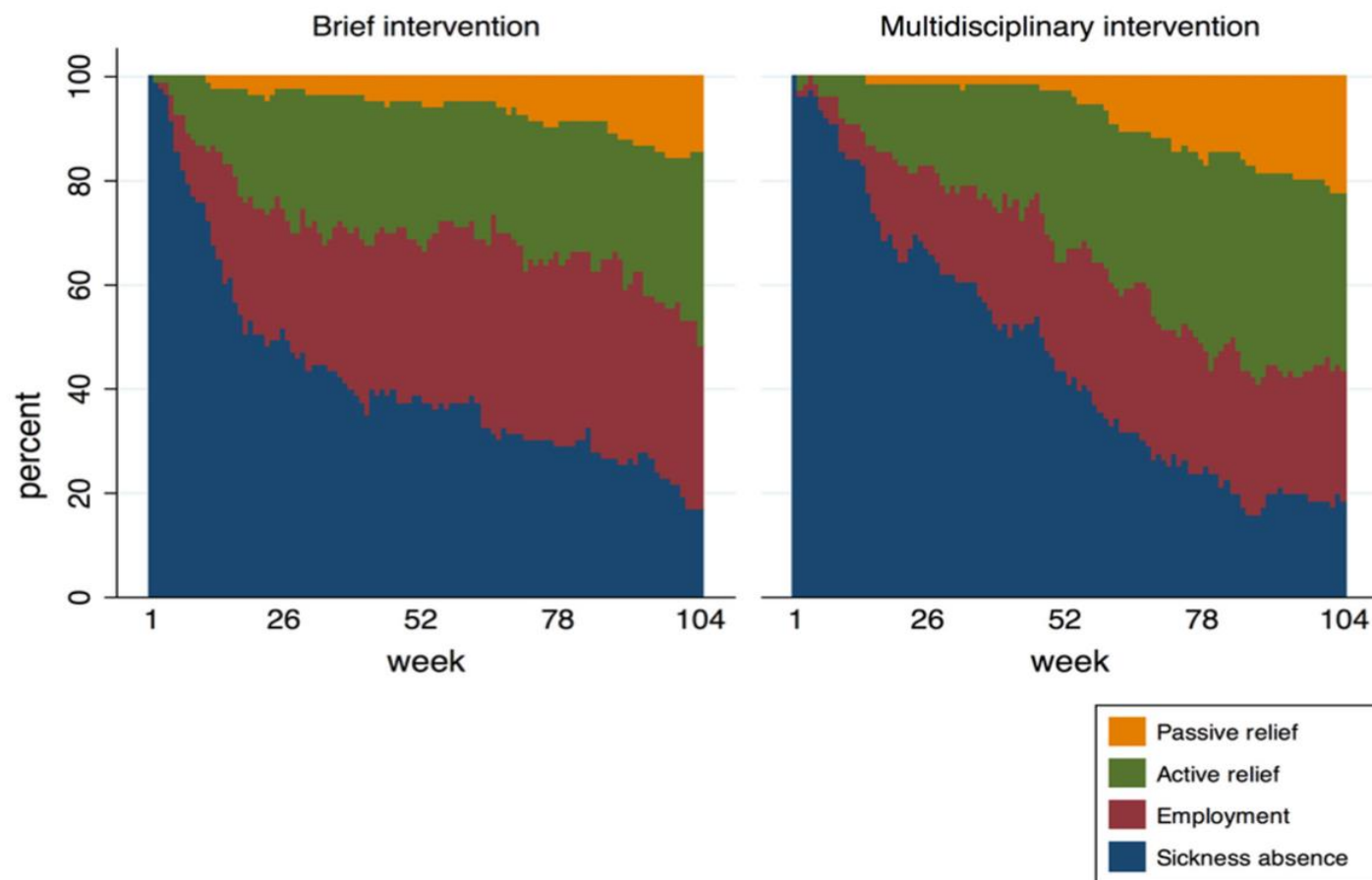


Figure 2 Status proportion plot visualising the relative proportion of each outcome category for each randomisation group (n=160).

Results

Sequence analysis



The sequence analysis indicated some variation in all outcomes between the randomisation groups

Patients receiving the multidisciplinary intervention had longer spells of and spent more time on sickness absence benefits, had shorter employment episodes and less time spent in employment than those receiving the brief intervention.

- Data on labour market participation following intervention were obtained from a national register and analysed in two ways:
 - 1) as active or passive relief at a 1-year follow-up. **NO DIFFERENCE**
 - 2) 4 different categories for labour market participation 2-year follow-up. **DIFFERENCE**

One year before the intervention



Weeks on sickness absence benefits



1 year before	Intervention group	1 year after	2 years after	3 years after
19.4	Brief intervention	29.1	15.1	7.4
20.8	Multi- disciplinary intervention	35.8	12.8	7.7

4 out of 4 papers



Labour market attachment among parents and self-rated health of their offspring: an intergenerational study

Lindholdt L, Lund T, Andersen JH, Labriola M

The FOCA cohort

Questionnaire data est. 2017 Study population
N = 11,267 adolescents Mean age 15.8 years

Parental labour market attachment

Over a 5-year period on a weekly basis

Six categories on labour market status:

1. Employment
2. Active relief
3. Passive relief
4. Sick
5. Unemployed

Adolescents' self-rated health

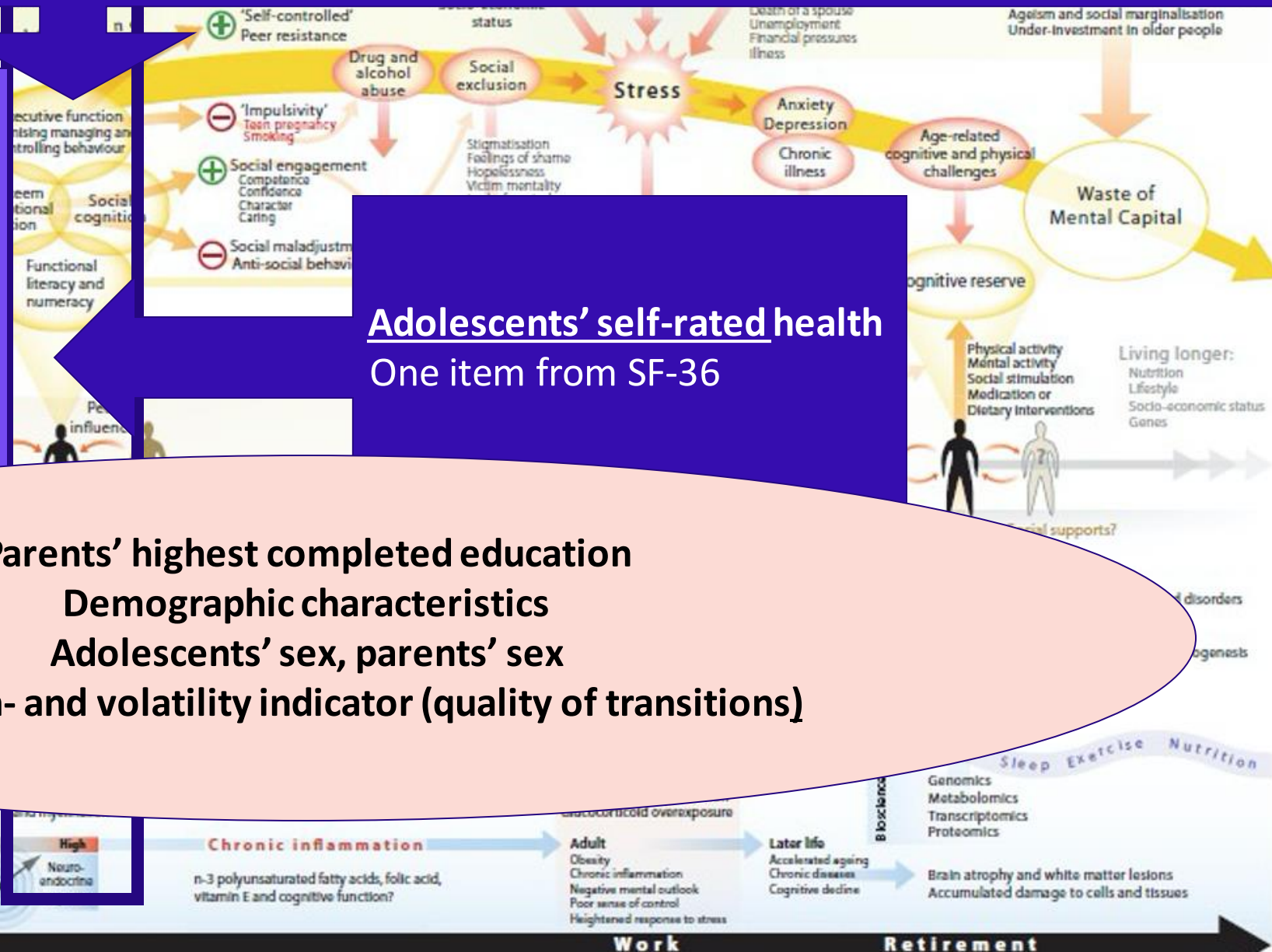
One item from SF-36

Parents' highest completed education

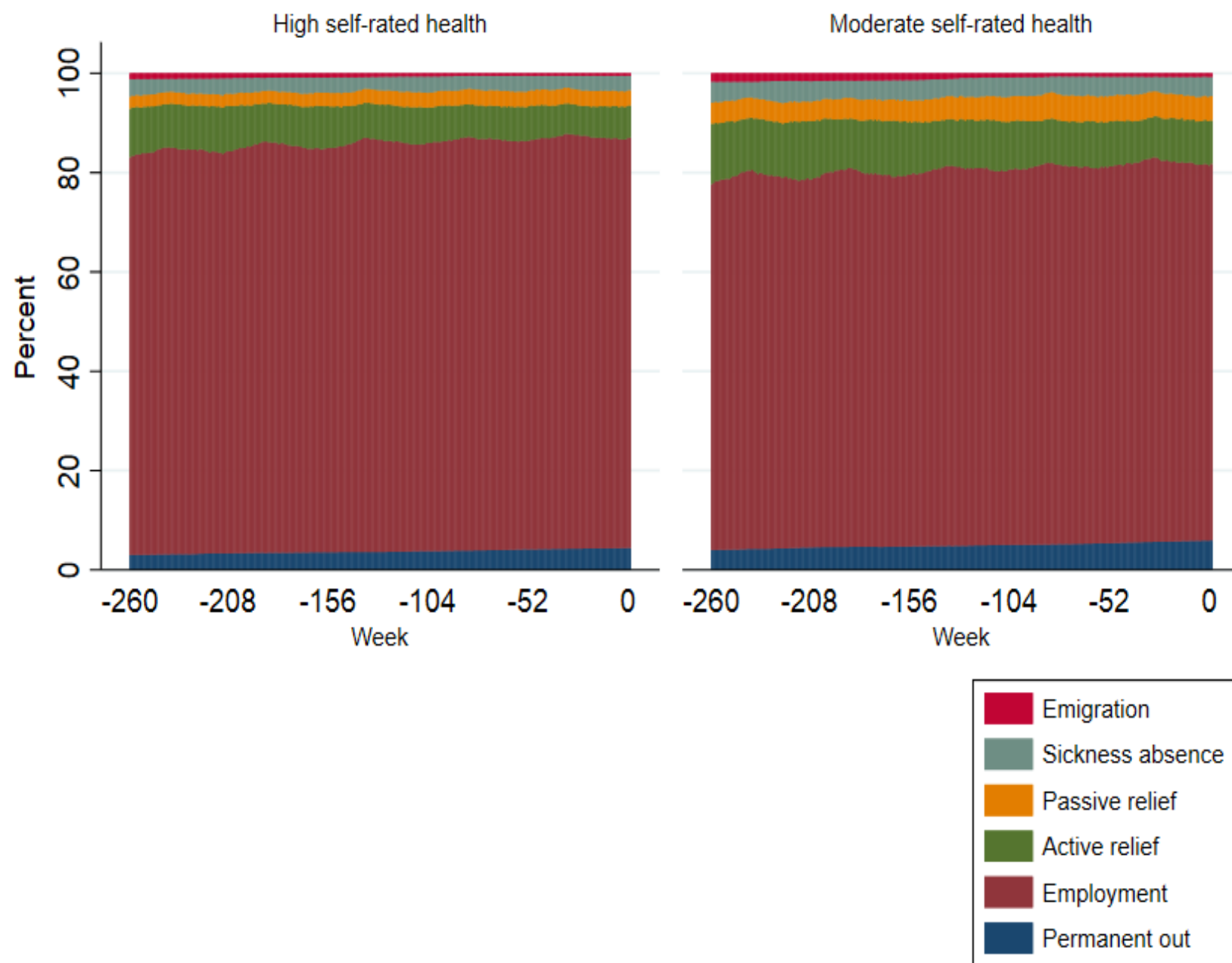
Demographic characteristics

Adolescents' sex, parents' sex

Integration- and volatility indicator (quality of transitions)



- A total of 3,279 (29.1%) adolescents reported low self-rated health

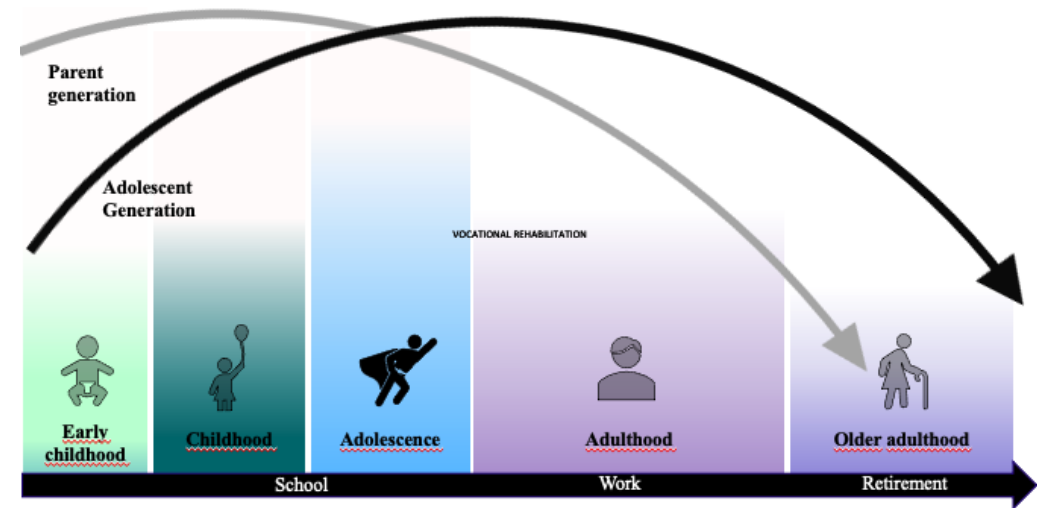


- A mean difference of **17.0 weeks** within employment emerged during the 5 years in favour of the parents to the adolescents who reported high self-rated health.
- **Adolescents who reported low self-rated health** had parents who had more weeks on **social transfer payments** or **were outside the labour market**.

Conclusion

THE RESULTS INDICATE THAT:

- **Unstable labour market attachment among parents affected self-rated health among their offspring:**
- Indicating a negative effect of labour market marginalisation from one generation to the next generation, regardless of the parents' educational level.

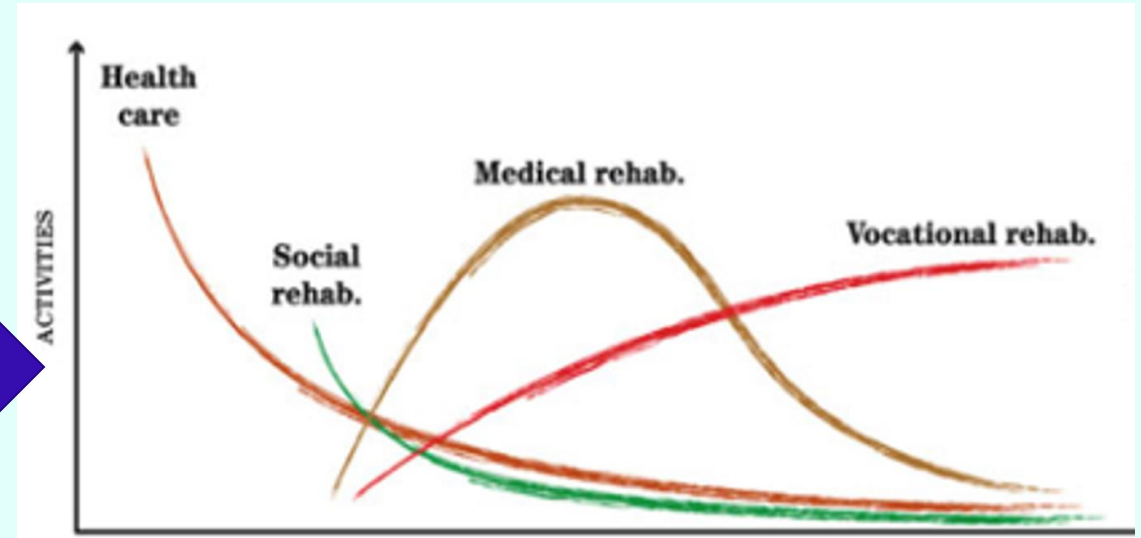


Implications for practice

- Helping people with health problems stay at, return to and remain in work, it is logical that it starts with the individual experiencing a health problem.

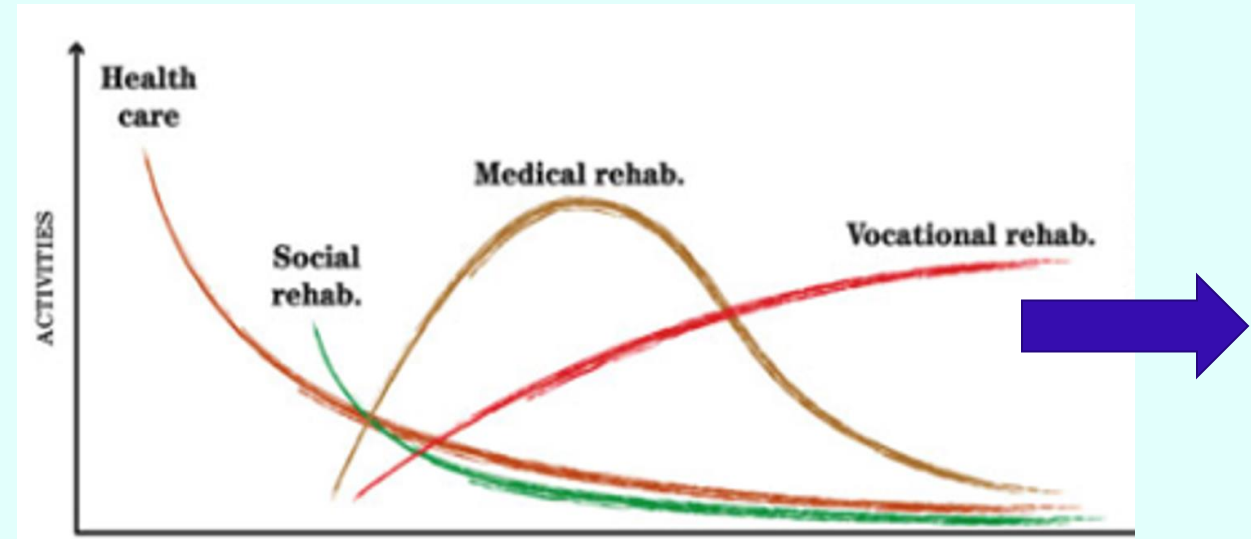
BUT

- at least as important is understanding the individual's health history and labor market history



Implications for practice

- Creating realistic recovery expectations (for both patients and their environments) could be important for successful and sustainable recovery and work participation.

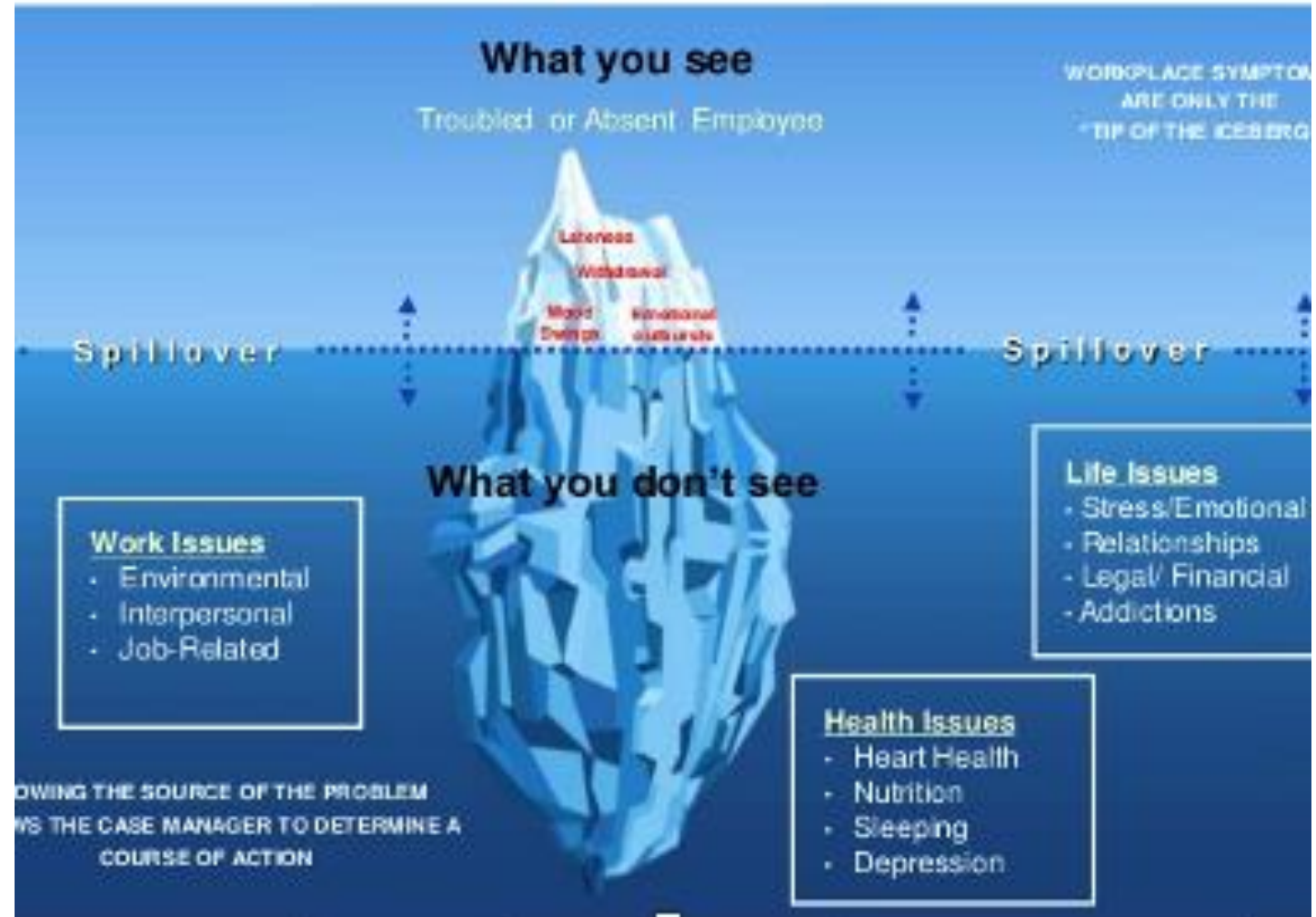


VOCATIONAL REHABILITATION



Vocational rehabilitation is already complex

And further it requires an understanding of pre and post health problems + an understanding of the dynamics and context.



VOCATIONAL REHABILITATION is important



- While helping people with health problems stay at, return to and remain in work have a long-term effect, from one generation to the next



