# 4.Q. Oral presentations: Work and sick leave trajectories

Multimorbidity matters: The effect on specific sickness absence diagnosis-groups

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### Background

As the world's population ages, the prevalence of multiple chronic health-related conditions is increasing. Research on multimorbidity, the co-occurrence of two or more health-related conditions, has mainly focused on patient and older populations. Studies on the workforce, presumably younger and healthier, are scarce. The effect of multimorbidity in working populations is not well known, but could conceivably have a negative impact on the ability to perform at work or delay return to work after a sickness absence (SA). We examined the effect of multimorbidity on the incidence and duration of SA episodes by frequent diagnoses.

# Methods

Prospective study of 372,370 workers in Spain. Information on health-related conditions collected with a standardized questionnaire was used to construct a sex-specific multidimensional multimorbidity score (MDMS). We fit Cox models adjusted for age, occupational social class and number of prior SA episodes, to estimate the effect of MDMS on incidence and duration of SA episodes due to cardiovascular diseases, musculoskeletal and mental health disorders for both sexes.

## Results

Men with high MDMS showed a trend towards higher incidence risk for SA due to cardiovascular diseases and musculoskeletal disorders ([adjusted hazard ratio (aHR) =2.03; 95%CI: 1.48-2.78] and [aHR=1.20; 95%CI: 1.01-1.43], respectively. Women showed a similar trend for musculoskeletal disorders, but mental health episodes had the strongest association [aHR=4.78; 95%CI: 1.97-11.62] for high MDMS. In both sexes, the effect of MDMS persisted and was stronger among those without a prior SA. No consistent associations with duration were observed.

#### Conclusions

High multimorbidity was associated with greater risk of diagnosis-specific SA but not with duration. More tailored workplace interventions could make use of measuring multimorbidity to identify workers who may need especial attention and to prevent future SA.

## Key messages:

- Increasing multimorbidity is associated with future sickness absence episodes but not with their duration
- Measuring multimorbidity may help to design tailored workplace interventions to prevent SA