Additional file 2. Detailed description of the generic self-reported instruments measuring health-related productivity changes

| Instrument | Construct / Content | \# questions / items | Rating | Item example | Recall period | Discipline |
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| Work Limitations Questionnaire (WLQ) (18, 20, 26, 27, 35, 36, 41, 43) | Degree to which health problems interfere with specific aspects of job performance and its productivity impact | $\begin{array}{\|l\|} \hline 16 \text { or } 25 \\ 4 \text { dimensions: physical } \\ \text { demands, time } \\ \text { management, output } \\ \text { demands, and } \\ \text { mental/interpersonal } \\ \text { demands } \\ \hline \end{array}$ | 5-point scale form none of the time ( $0 \%$ ) to all of the time (100\%) | "In the past two weeks, how much of the time did your physical health or emotional problems make it difficult for you to stick to a routine or schedule?" | 2 to 4 weeks | Medical |
| Endicott Work <br> Productivity Scale <br> (EWPS) <br> $(18,28)$ | Wide variety of mental and medical disorders working in a wide variety of job settings to assess the degree to which this affects the work functioning of a subject | 25 | 5-point scale of how often the behaviour or feeling, or attitude has been manifested during the past week: 0 (best possible score) to 100 (worst possible score) | "During the past week, how frequently did you find you have forgotten to call someone?" | 7 days | Medical |
| Work Productivity and Activity Impairment Instrument (WPAI) ( $18,21,38$ ) | The effect of general health and symptom severity on work productivity and regular activities | 6 | 5-point scale of how severity of symptoms interfere with performance: 0 ('very severe') to 5 ('did not have symptom') | "Are you currently employed (working for pay)?" | 7 days | Economics |
| Work Productivity Short Inventory (WPSI) (18, 20, 30) | The prevalence of medical problems that may influence work productivity and the financial implications thereof | 22 | Open questions | "During the past year, did you experience an anxiety disorder, such as Generalized Anxiety Disorder, Panic Disorder, Phobias, Obsessive Compulsive Disorder, or Post-traumatic Stress Disorder?" | 2 weeks, 3 months, 1 year | Social sciences |
| American Medical Association-Guides (AMA-guide) (29) | The loss of function and determination of compensation and ability to work after injury or illness | 15 | 10-point scale how pain now affects functioning in everyday activities: 0 ('work normally') to 10 ('unable to work at all') | "Does your pain interfere with your normal work inside and outside the home?" | Now | Medical |


| World Health <br> Organization Health and work <br> Performance <br> Questionnaire (WHO <br> HPQ) $(31,32)$ | Indirect workplace costs of illness by assessing absenteeism, presenteeism, and critical incidents | 3 categories: <br> Health (31 items) <br> Work (16 items) <br> Demographics (8 items) | Open questions | \|"Now please think of your work experiences over the past 4 weeks ( 28 days). In the spaces provided below, write the number of days you spent in each of the following work situations. In the past 4 weeks ( 28 days), how many days did you miss an entire work day because of problems with your physical or mental health? Number of days (00-28)." | Four week period or the past 7 days | Social sciences (occupational environment al medicine) |
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| Stanford Presenteeism Scale (SPS) $(33,40)$ | The impact of health problems on individual performance and productivity | 6 statements reflecting cognitive, emotional and behavioural aspects | Five-point scale from 1 (if you strongly disagree with the statement) to 5 (if you strongly agree with the statement) | "Statement: 'because of my health problem, the stresses of my job were much harder to handle'." | 30 days | Social sciences (occupational environment al medicine) |
| The PROductivity and DISease Questionnaire (PRODISQ) (23) | Productivity costs by assessing the relationship between health and productivity | 7 modules <br> 64 questions: <br> General information ( $\mathrm{N}=4$ ), Profession, working situation and income ( $\mathrm{N}=16$ ), Absenteeism ( $\mathrm{N}=4$ ), Compensation mechanisms ( $\mathrm{N}=5$ ), Presenteeism ( $\mathrm{N}=3$ ), Organizational level ( $\mathrm{N}=17$ ), Administrative and management costs ( $\mathrm{N}=15$ ) | Open questions Multiple-choice | "On the scale below, please circle how much work you've done during your last day in your normal working hours compared to a normal working day ' 0 ' (nothing) to '10' (as much as normal)." | 3 months | Economics |
| Health-Related Productivity Questionnaire Diary (HRPQ-D) (34) | Work productivity data within clinical trials and survey data collections: data relating to health-related labour force participation | 9 | Open questions Multiple-choice | "Hours of work outside the home missed because of 'the health problem': record the number of hours you work you missed today because of 'the health problem'. If none, put a zero here." | Daily | Social sciences (occupational environment al medicine) |
| Health and Labour Questionnaire (HLQ) $(19,24)$ | Relationship between illness and treatment and work performance: estimate the | 4 modules: <br> Absence from paid work, <br> Reduced productivity at | 4-point scale from (almost) never to (almost) always | "I did go to work but as a result of health problems. I had a problem | 2 weeks | Economics |


|  | production losses (costs) and the ability to use work as an indicator of health status in the social domain | paid work, Unpaid production, and Impediments to paid and unpaid labour |  | concentrating." |  |  |
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| Quality \& Quantity <br> Questionnaire (Q\&Q) <br> (19) | Quantity and quality of the work performed on the last working day | 2 | 10-point scale from 0 (practically nothing and very poor quality) to 10 (normal quantity and normal quality) | "Could you indicate how much work you actually performed today during regular hours as compared to normal on the scale below?" | Last working day | Economics |
| Well-Being Assessment for Productivity (WBA-P) <br> (37) | Informative evaluation of job performance loss due to wellbeing related barriers | 12 common barriers to productivity | Individual's ability to perform his or her best at work (not at all, some, or a lot) <br> Work-related and personal barriers (scoring from 0 'not at all' to 100 'a lot for all 11 reasons') | "How often have you had trouble at work concentrating or doing you best because of ...? (each of the 11 items)" | 4 weeks | Social sciences |
| Health and Work Questionnaire (HWQ) (39) | Workplace productivity and worker health | 24 | Multi-part questions on a 10 point-scale | "How satisfied were you overall with your job this week?" | 7 days | Social sciences |
| Work and Health Interview <br> (WHI) <br> (42) | Captures data on absence time from work and related causes and on health-related reduced performance while at work and the health-related causes | Six module interview (first 3 obtain verbal informed consent, detailed data on employment status and usual work time, and data on episodes of 21 health problems; then a job visualization module, questions about health problems reported as the cause of missed work or reduced productivity, and data on demographics and annual salary) | Computer-assisted telephone interview (open questions and categorical response options (percentages)) | Primes respondents to report on health-related lost productive time on days at work; asks detailed questions about usual tasks and activities performed at work and time allotted to each | 2 weeks | Economics |


| Valuation of Lost Productivity questionnaire (VOLP) (22) | Assess labour input loss due to health (any physical, mental, or emotional problems or symptoms) | 36 questions in 6 sections: employment status, job characteristics, absenteeism, work performance, unpaid work, and working environment | Open questions and multiple-choice | "Which of the following describes your current work situation? 1. Working full time as an employee 2. Working part time as an employee 3. Self-employed" | 7 days | Social sciences |
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