**Abstract**

**Title**: Duration of time off paid employment associated with diabetes-related complications

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**Background and aims:** Diabetes mellitus (DM) is associated with a high and growing burden on health care systems and society. Days of paid work missed due to complications are part of the economic burden of DM. A study was undertaken to elicit time off work associated with DM-related complications in the working population in Sweden.

**Materials and methods:** The study utilised **the STORE** database which is maintained by the Swedish Social Insurance Agency and records all claims for sick pay in Sweden. Sick pay may be claimed for sick periods lasting 14 days or longer including prevention, extended and continued sickness benefit, rehabilitation and sickness due to work injury. We extracted episodes of sickness completed over a 12-month period between 1 October 2009 and 30 September 2010 for 16 conditions which are commonly associated with DM-related complications. Conditions were identified by 3 digit ICD-10 code. We extracted sick time (calendar days between the start and end of sick period) for all cases meeting our criteria and calculated mean, median and standard deviation of the number of sick days per episode for each condition..

**Results:**

The most common conditions were related to coronary heart disease (AMI, angina heart failure) and to cerebrovascular accident (stroke events and post-stroke).

Table: Estimated sick leave duration per DM-related condition.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Condition (ICD-9)** | **Number of episodes**  **(\*, <10)** | **Duration of sick leave in calendar days** | | |
|  |  | **Mean** | **SD** | **Median** |
| Post stroke | 454 | 618 | 477 | 556 |
| Renal dialysis | 14 | 564 | 528 | 514 |
| Renal transplant | 330 | 461 | 510 | 252 |
| Stroke event | 2,514 | 403 | 419 | 233 |
| Peripheral vascular disease | 110 | 364 | 434 | 160 |
| Heart failure | 670 | 296 | 358 | 149 |
| Severe vision loss | 68 | 281 | 337 | 124 |
| Cataract | \* | 266 | 349 | 266 |
| Neuropathy / Amputation | 14 | 231 | 441 | 59 |
| Foot ulcer | 136 | 183 | 271 | 67 |
| Gangrene | \* | 182 | 241 | 75 |
| Angina | 1,120 | 159 | 290 | 62 |
| Myocardial infarction | 2,463 | 93 | 189 | 45 |
| Metabolic acidosis event | 22 | 75 | 136 | 28 |
| Major hypoglycemia event | \* | 37 | 18 | 40 |

**Conclusion:** Data from Swedish Social Insurance Agency show that work loss due to majorevents associated with DM is frequentand extended. These estimates may underestimate burden in people with DM as the database does not collect absences of less than 14 days, also data are not limited to people with DM, and need to be adjusted for workforce participation. These new data will permit healthcare payers and decision makers to estimate with greater precision the impact of diabetes interventions on productivity loss.

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