on hourly labour costs is used for productivity costs per working day/hour.

**RESULTS:** Vacancy rates estimated in 2009 for The Netherlands, Belgium, Germany, France and Sweden range between 40-60 days. Regression analysis of the vacancy durations shows that, there is a strong negative relationship between vacancy durations and unemployment rates. When unemployment increases, vacancy durations and hence friction period decline. We also find that an increase in the friction rate (the ratio of the stock of vacancies to the labor force) has a positive effect on vacancy durations which can be explained by the congestion provoked by the increase in the number of vacancies competing in the labor market. **CONCLUSIONS:** This paper provides estimates on vacancy durations, friction periods and the price component in order to calculate the friction costs. For several Western European countries, we present empirical estimates to use the friction cost method in a practical way which can improve more uniform analysis of productivity costs in economic evaluations of diseases. Our regression results confirm the validity of estimated vacancy durations which are necessary to calculate the length of friction period and friction costs.

**PC3**

**BREAST AND PROSTATE CANCER PRODUCTIVITY COSTS: A COMPARISON OF THE HUMAN CAPITAL APPROACH AND FRICTION COST APPROACH**

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**OBJECTIVES:** Productivity costs constitute a substantial proportion of the total societal costs associated with cancer. Cancer patients may leave the workforce permanently post-diagnosis, take time off during treatment and/or return to work with reduced hours or die prematurely; the associated productivity costs have rarely been considered. We applied the dominant human capital approach (HCA) and the emerging friction cost approach (FCA) to estimate breast and prostate cancer productivity costs in Ireland in 2008. **METHODS:** Data from a survey of breast and prostate cancer patients (n=358) was combined with population-level survival estimates (from the population-based National Cancer Registry) and a national wage dataset to calculate costs of temporary disability (cancer-related work absence) and permanent disability (workforce departure), reduced working hours and prematurity mortality, using the HCA and FCA. Sensitivity analyses were conducted for key factors: GNP growth and discount rates for HCA and friction period and labour elasticity for FCA. **RESULTS:** According to the HCA, productivity costs per person amounted to €193,425 for breast and €109,154 for prostate cancer. FCA projected lower productivity costs of €8010 for breast and €8205 for prostate cancer. The HCA generated higher costs for younger patients (breast cancer) due to greater lifetime earning potential. In contrast FCA resulted in higher productivity costs for older male patients (prostate) commensurate with higher earning capacity over a shorter time period. Reduced working hours post-cancer was a key driver of total HCA productivity costs. HCA costs were sensitive to assumptions about discount and growth rates. FCA costs were sensitive to assumptions about the friction period. **CONCLUSIONS:** This study highlights the importance of choosing the correct valuation method for chronic long-term illnesses such as cancer, being explicit about assumptions, and considering a range of cost sub-components, including those due to reduced working hours.

**PC4**

**HEALTH SERVICES UTILIZATION, WORK ABSENTEEISM AND COSTS OF PANDEMIC INFLUENZA A (H1N1)**

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**OBJECTIVES:** The aim of this study was to estimate the impact of pandemic Influenza A H1N1/2009 in terms of patient’s health care services utilization, work absenteeism and associated costs. **METHODS:** Longitudinal, descriptive, multi-centre study of in- and outpatients with confirmed diagnosis of Influenza A H1N1/2009 in Spain. Sociodemographic and clinical characteristics were gathered together with health and social resources use, at the admission or primary visit, and also after recovery. Cost analyses were conducted under a social perspective, incidence focus and with a temporal horizon of 3 months. Unit cost of resources was imputed to calculate the mean cost by inpatient and outpatient. A sensitivity analysis with variations was conducted (Monte Carlo simulation). **RESULTS:** A total of 172 inpatients and 224 outpatients were included, 20% and 30% of whom, respectively, were under 17 years old; 12% of inpatients were at ICU, 7.8 (SD=3.7) days, on average, and stayed in general wards for 9.6 (SD=7.7) additional days. The rest of inpatients had a mean hospitalization length of 5 (SD=4.4) days. The most frequent resource used by health resource was the primary care medical assistance; 43.8% of inpatients and 66.1% of outpatients were employed, of whom 100% (inpatients) and 91.7% (outpatients) went on sick leave. Absenteism length was of 30 (SD=20.7) days for inpatients and 9 (SD=6.3) for outpatients. Caregivers of 21.7% of the work absenteeism, as well as the 8.5% of those of outpatients. The proportion of indirect cost for general-ward-inpatients was 30%. This percentage ascended to 77% in the case of outpatients. The mean costs per inpatient were €6,236 (CI95% = 1,384–14,623) and €940 (CI95% = 66–3,064) per outpatient. **CONCLUSIONS:** Hospitalizations represent the highest economic cost, together with work absenteeism. Since only a marginal proportion of influenza cases are hospitalized, productivity losses emerge as the most important impact of the disease.