stress and barrier to societal reintegration for affected patients. We sought to quantify the labor market implications for tax-filing adult TBI survivors. Methods: We performed a matched difference-in-difference analysis using a national retrospective cohort of working adult TBI survivors injured between 2007-2017. Linear and logistic mixed effects regressions were used to estimate the magnitude of personal income loss and proportion of patients displaced from the workforce in the three post-injury years (Y+1 to Y+3). Results: Among 18,050 patients identified with TBI, the adjusted average loss of personal annual income was $-7,635 dollars in Y+1 and $-5,000 in Y+3. An additional -7.8% individuals were newly unemployed compared to the pre-injury baseline. For mild, moderate, and severe TBI subgroups, income loss was $-3354, $-6750, and $-17375 respectively in Y+3; the proportion of newly unemployed individuals in Y+3 was 5.8%, 9.2%, and 20% lower than baseline. We estimated 500 million dollars of incurred labor markets losses related to TBI in Canada. Conclusions: This work represents the first national cohort data quantifying the labor market implications of TBI. These results may be used to inform post-injury care pathways and vocational rehabilitation.

## P.116

### Days at home after traumatic brain injury: moving beyond mortality to evaluate patient-centered outcomes using population health data

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Background: Despite the utility of administrative health data, there remains a lack of patient-centered outcome measures to meaningfully capture morbidity after traumatic brain injury (TBI). We sought to characterize and validate days at home (DAH) as a feasible measure to assess population-level moderate to severe TBI (msTBI) outcomes and health resource utilization. Methods: We utilized linked health administrative data sources to identify adults with msTBI patients presenting to trauma centers in Ontario injured between 2009-2021. DAH at 180 days reflects the total number of days spent alive and at home excluding the days spent institutionalized in acute care, rehabilitation, inpatient mental health settings or post-acute readmissions. Construct and predictive validity were determined; we additionally estimated minimally important difference (MID) in $DAH_{180days}$. Results: There were 6340 patients that met inclusion criteria. Median $DAH_{180days}$ were 70 days (interquartile range 0-144). Increased health resource utilization at baseline, older age, increasing cranial injury severity and major extracranial injuries were significantly associated with fewer $DAH_{180days}$. $DAH_{180days}$ was correlated to DAH counts at 1-3 years. The average MID estimate from anchor-based and distribution-based methods was 18 days. Conclusions: We introduce $DAH_{180days}$ as a feasible and sufficiently responsive patient-centered outcome measure with construct, predictive and face validity in an msTBI population.

## P.117

### Antiplatelet and anticoagulation use and outcomes following chronic subdural hematoma drainage: systematic review and meta-analysis

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Background: Chronic subdural hematoma (CSDH) is a common neurosurgical condition which can be treated with surgical evacuation. A significant percentage of CSDH patients are on antiplatelet or anticoagulation therapy at baseline which may influence risk of recurrence and postoperative thromboembolic events Methods: A search was conducted in MEDLINE (1946 to April 6, 2023), Embase (1974 to April 6, 2023), and PubMed (up to April 6, 2023) on preoperative use of antiplatelet or anticoagulation therapy and outcomes following surgical evacuation of CSDH. Results: Our literature includes 14,410 patients ifrom 42 studies, with 3218 (22%) in the antiplatelet (AP) group, 1731(12%) in the anticoagulation (AC) group, and 9537 (66%) in the no antithrombotics (NA) group. The AP group had significantly higher recurrence compared to NA (OR = 1.21, 95% CI = 1.04 to 1.40, p = 0.01). The AC group also had significantly high recurrence compared to NA (OR = 1.39. 95% CI = 1.15 to 1.68, p = 0.0007). However, being on any antithrombotic therapy is also associated with significantly higher thromboembolic events (OR 5.41, 95% CI 3.16 to 9.26, $p < 0.00001$). Conclusions: Patients on antithrombotic therapy have both higher recurrence and higher thromboembolic risk compared to patients not on antithrombotic therapy.

## P.119

### NIRS regional oxygen saturation based cerebrovascular reactivity in the recovery from moderate/severe TBI

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Background: Near-infrared spectroscopy (NIRS) regional cerebral oxygen saturation ($rSO_2$) based cerebrovascular reactivity (CVR) indicies have enable the entirely non-invasive continuous monitoring. This study aims to compare CVR in those recovering from moderate/severe TBI to a health control group. Methods: In this prospective cohort study the cerebral oxygen CVR index, COx_a (using $rSO_2$ and arterial blood pressure), was measured in subjects with moderate/severe TBI at follow-up. COx_a was also measured in a group of healthy controls. CVR was compared within and between these groups using conventional statistics. Results: A total of 101 heathy subject were recruited for this study along with 29 TBI patients. In the health cohort COx_a was not statistically different between males and females or in the dominate and non-dominate hemisphere. The TBI cohort, COx_a was not statistically different between first and last available