**Appendix 1**

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| **Author + year** | | **Setting** | **Design and Analysis** | **Sample** | **Predictors** | **Definition RTW** |
| 1) | Cuthbert, 2015a | Region: USA  Period: admission between 2001 and 2010 | Design: Secondary analysis  Follow-up: 2 years post-injury  Analysis: modified poisson regression | Sampling frame: TBI-MS,  Sample size: N=64081  TBI severity: MoTS-TBI  Note: weighed to match US TBI rehabilitation population | Age, ethnicity, gender, marital status, primary payer source, education, preinjury employment status, inpatient rehabilitation LOS, PTA severity, FIM, DRS, alcohol and drug consumption | Employment status:  Being unemployed (≠ retired) or being employed part-time |
| 2) | Cuthbert, 2015b | Region: USA  Period: admission between 1989 and 2009 | Design: Secondary analysis  Follow-up: 1,2,5,10  Analysis: random effects modeling | Sampling frame: TBI-MS  Sample size: N=3618  TBI severity: MoTS-TBI | Age, year, PTA duration, preinjury vocation, sex, ethnicity, preinjury substance misuse, primary rehabilitation payer source, education | Employment status:  Employment as any amount of paid work. Unemployment as any vocation that did not involve paid work, including student, homemaker, unemployed (any reason), retired (any reason), hospitalized, and other. |
| 3) | Ponsford, 2015 | Region: Australia  Period: ? | Design: prospective cohort study  Follow-up: 1,2,3 years post-injury  Analysis: logistic regression | Sampling frame: patients of a TBI rehabilitation center in the context of a no-fault accident compensation system  Sample size: N=236  TBI severity: MiTS-TBI | Age, years of education, preinjury occupation, marital status, metropolitan or country/interstate area, English as primary language at home, psychological or psychiatric treatment received before injury, cause of injury, presence of other physical injuries, PTA duration, preinjury occupation, mobility, driving independence, cognitive difficulties, behavioral difficulties, emotional difficulties | Employment status:  Categorized as employed (including alternative employment), unemployed, not in the labor force, students  Employment stability: stable employment as employed at all three time points, otherwise unstable employment |
| 4) | Grauwmeijer, 2017 | Region: The Netherlands  Period: 1999-2004 | Design: Prospective cohort study  Follow-up: ¼, ½, 1, 1½, 2, 3,10 years post-injury  Analysis: GEE | Sampling frame: patients of three level-1 trauma centers  Sample size: N=48-109 depending on time point  TBI severity: MoTS-TBI | Employment pre-injury, LOS, FAM score | Employment status:  Employment as all paid vocational activities. Unemployment as any voluntary vocation without payment, including students, homemakers, early retirement and sick leave |
| 5) | Odgaard, 2017 | Region: Denmark  Period: admission between 2004 and 2012 | Design: Secondary analysis  Follow-up: up to 6 years  Analysis: logistic regression | Sampling frame:  Danish patients who received initial neurorehabilitation after TBI  Sample size: N=336  TBI severity: S-TBI | Age, sex, education level, receiving public assistance benefits before injury, cohabitation status, duration of PTA, LOS in acute care, injury | Employment status: Not receiving benefits for public assistance or for supported employment, rehabilitation, activation, state |
| 6) | Palm, 2017 | Region: Sweden  Period: admission between 2007 and 2012 | Design: Prospective cohort study  Follow-up: between 4 months and 5 years  Analysis: Kruskall-Wallis, Spearman correlation | Sampling frame: Patients who attended the emergency department at Kungälv Hospital.  Sample size: N=615  TBI severity: intracranial injury | Mental fatigue | Employment status:  Five categories:  Working full-time, part-time in percentage, unemployed and actively seeking employment, on parental leave/not working/retired, full-time sick-leave/disability pension |
| 7) | Ruet, 2017 | Region: Parisian area (France)  Period: admission between 2005 and 2007 | Design: prospective cohort study  Follow-up: 4 years post-injury  Analysis: logistic regression | Sampling frame: Patients were included by all mobile emergency services of the area  Sample size: N=133  TBI severity: S-TBI | Age, gender, home environment, education level, employment status at time of injury, occupation category at time of injury, initial GCS, duration of coma, time to follow commands, LOS ICU, GOS at ICU discharge | Employment status:  Employment as a paid, productive activity including sheltered workshops, while studying and volunteering work is considered unemployment |
| 8) | DiSanto, 2018 | Region: USA  Period: admission since 2007 | Design: Secondary analysis  Follow-up: 1,2,5 years  Analysis: multinomial logistic regression | Sampling frame: TBI-MS  Sample size: N=5683  TBI severity: MoTS-TBI | Primary predictors:  Age, sex, preinjury employment, education, race, preinjury marital status, rehabilitation payment source, military service, annual earnings in the year prior to injury, substance abuse prior to injury, driving ability, duration of PTA  Secondary predictors:  Anxiety and depression at follow-up, cognitive performance during inpatient rehabilitation | Employment status:  Unemployment includes seeking a job, unpaid volunteering work, taking care of the household, retired and on leave.  Employment stability: four categories based on employment status at the three follow-up points. Stable employment is being employed at all follow-up moments, otherwise unstable employment or unemployment |
| 9) | Stromberg, 2018 | Region: USA  Period: admission between 1997 and 2017 | Design: secondary analysis  Follow-up: 1,2,5 years post-injury  Analysis: Decision tree | Sampling frame: TBI-MS  Sample size: N=7867-4927 (depending on time point)  TBI severity: MoTS-TBI | Sex, age at injury, educational level, history of prior TBI, history of alcohol abuse, history of illicit drug use, preinjury occupational category, preinjury productivity, preinjury competitive employment, GCS motor score, discharged from inpatient rehabilitation in PTA, acute hospital LOS, intracranial pressure elevation, craniotomy, craniectomy, presence of a focal traumatic intracranial lesion on CT. | Employment status:  Competitive employment (full- or part-time) paying at least minimum wage, excluding supported employment |
| 10) | Awan, 2019 | Region: USA  Period: ? | Design: Secondary analysis  Follow-up: 1,2,5 years  ANALYSIS: structural equation modelling | Sampling frame: TBI-MS  Sample size: N=2890  Tbi severity: MoTS-TBI | Age, sex, injury severity, pre-injury marital status, education, pre-injury employment, pre-injury substance abuse, post-injury rehospitalization within previous year, TBI severity | Employment status:  Employment as full- or part-time, unemployment as retirement, work-related leave, unpaid work, volunteering or household work |
| 11) | Hart, 2019 | Region:USA  Period: ? | Design: Secondary analysis  Follow-up: 1 year post-injury  Analysis: logistic regression | Sampling frame: TBI-MS patients competitively employed at injury  Sample size: N=320  TBI severity: MoTS-TBI | Age, sex, ethnicity, education level, rehabilitation payer (proxy for SES and potential support for RTW), duration of PTA, GCS at admission, substance abuse, primary mode of transportation at follow-up, cognitive status | Employment status:  Employment as returned to paid employment at follow-up, regardless of hours worked |
| 12) | Klyce, 2019 | Region: USA  Period: admission between 1997-? | Design: secondary analysis  Follow-up: 2 and 5 years post-injury  Analysis: logistic regression | Sampling frame: TBI-MS  Sample size: 2784  TBI severity: MoTS-TBI | Employment status at one year post-injury, depression at previous timepoint, category based on tree nodes of tree including duration of PTA, education, preinjury employment, age | Employment status:  Full- or part-time job employment of at least minimum wage, excluding supported employment |
| 13) | Pretz, 2019 | Region: USA  Period: 1989-2007 | Design: Secondary analysis  Follow-up: 1,2,5 years post-injury  ANALYSIS: GLMM | Sampling frame: TBI-MS  Sample size: N=2542,  Tbi severity: MoTS-TBI  Note: sample weighted to represent US population of patients receiving inpatient rehabilitation | Age at injury, sex, ethnicity, primary payment source, preinjury substance abuse, preinjury occupation, preinjury level of education, days from injury to follow commands, DRS, rehabilitation LOS | Employment status:  Return to productivity as studying or employment.  Homemakers, unemployed (for any reason) or hospitalized are considered ‘nonreturn’. |
| 14) | Sima, 2019 | Region: USA  Period: ? | Design: Secondary analysis  Follow-up: between 1 and 2 years post-injury  Analysis: logistic regression | Sampling frame: TBI-MS  Sample size: N=93  TBI severity: MoTS-TBI | Resilience | Employment status:  Employment as full or part time |
| 15) | Singh, 2019 | Region: UK  Period: admission between 2011 and 2015 | Design: prospective cohort study  Follow-up: 1 year post-injury  Analysis: Kendall-tau, Kruskal-Wallis and Mann-Whitney | Sampling frame: Patients admitted to a large teaching hospital in the UK  Sample size: N=1147  TBI severity: MiTS-TBI | TBI severity, gender, etiology, socio-economic class, pre-injury employment | Employment status:  Three categories: unable to work/study, partial return to work/study, complete return to work/study |
| 16) | Arango-Lasprilla, 2020 | Region: Europe (18 different countries)  Period: between 2014 and 2019 | Design: Prospective cohort study  Follow-up: 1 year  Analysis: logistic regression | Sampling frame: CENTER-TBI study  Sample size: N=1015  TBI severity: MiTS-TBI | Age, employment status at baseline, premorbid psychiatric problems, ISS, GCS, LOS | Employment status: Employment including less hours, change of job or sheltered employment, and unemployment including inability to work |
| 17) | Howe, 2020 | Region: Norway  Period: 2017 | Design: single-centre RCT  Follow-up: 3, 6 months | Sampling frame: patients of an outpatient clinic  Sample size: 116  TBI severity: MiTM-TBI | Received combined cognitive and vocational intervention | Employment status: Returning to work at any level |
| 18) | Iida, 2021 | Region: Japan  Period: | Design: retrospective recruiting  Follow-up: 3 years | Sampling frame: patients of a rehabilitation department Sample size: 53 TBI severity: MiTS-TBI | Full IQ, verbal IQ (+ subitems), performance IQ (+subitems), verbal comprehension, perceptual organization, working memory, processing speed | Employment status: ? |
| 19) | O’Neil-Pirozzi, 2021 | Region: USA  Period: 1988-2019 | Design: Secondary analysis  Follow-up: 1, 2, 5 years | Sampling frame: TBI-MS  Sample size: 3543 TBI severity: MoTS-TBI | Age, gender, education, prior employment status, comprehension, expression, social interaction, problem solving, memory | Employment status:  Employment as competitive employment including part time work |