**GLA:D Back Cohort**

**Patient profiles and variation across health care providers**

This study aims to provide insights into the variation in back pain presentations to inform targets groups for further investigations of the GLA:D Back program and the choice of relevant outcome measures for populations with persistent back pain. Further, it aims to describe the degree of uniformity in implementation of GLA:D Back across clinics in terms of patient profiles enrolled. The specific objectives are:

1. To investigate the multivariate profiles of patients enrolled in GLAD Back
2. To investigate the variation in patient profiles across clinics

**Data**

By March 2021 there are app. 4,200 patients in the registry.

**To be reported (preliminary)**

1. Underlying dimensions of patient characteristics identified in e.g. factor analysis
2. Patient profiles based on latent class analyses
3. Variation of distributions across clinics. In mixed models we use the variance on the random effect of clinic to obtain the 95% range of mean values for each variable (WV suggested to start with something like forest plots and then decide, how to proceed)

**Outcome profiles**

One idea is that we want to investigate outcome profiles - how different outcome measures change together (or not) and how these relate to the baseline patient profiles.

**Mechanisms of change**

Hypothesis testing: Investigating effect mediation by single mediators outlined in the protocol paper.

Data driven: Exploring relationships between variables and patient classes over time. E.g. an SEM approach.

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| **Construct** | **Instrument** | **Patient reported** | | | | **Clinician reported** | |
| **Baseline** | **3-months** | **6-months** | **12-months** | **Pre- intervention** | **Post- intervention** |
| Demographics | Age, sex, body mass index (calculated from self-report of height + weight), education | x |  |  |  |  |  |
| Work situation | Job type | x |  |  |  |  |  |
| Risk profile | The START Back screening tool (low risk, medium risk, high risk) | x |  |  |  |  |  |
| LBP history | Pain duration (0-2 weeks; 2-4 weeks; 4-12 weeks; 3-12 months; >1 year)  Pain trajectory last 12 months (one of seven patterns or ‘I don’t recognise any of the patterns) | x |  |  |  |  |  |
| Comorbid pain | Pain in any of nine regions on body chart in the last 2 weeks | x |  |  |  |  |  |
| Comorbidity | Any chronic disease (yes/no) on a list of 15 conditions |  |  |  |  | x |  |
| Illness perceptions | The Brief Illness Perceptions Questionnaire (21, 22) | x |  |  |  |  |  |
| Physical back performance | Standing forward bending (24) (normal mobility pain free; restricted pain free; normal mobility with pain; restricted with pain)  The Ito back extensor endurance test (25, 26)  Trunk flexor endurance test (26, 27)  Sit-to-stand test |  |  |  |  | x |  |
| Perceived physical fitness | Self-assessed physical capacity (0-10; 5 = average for my sex and age) (20) | x |  |  |  |  |  |
| Fear of movement | Fear Avoidance Beliefs Questionnaire, physical activity (23, 28) | x |  |  |  |  |  |
| Self-efficacy | The Arthritis Self-efficacy Scale (subscales pain + other symptoms) (29) | x |  |  |  |  |  |
| Pain | Pain intensity: Numeric Rating Scale 0-10 for LBP and leg pain (30)  Pain medication: Any medication for LBP (y/n), prescribed medication for LBP (y/n) | x |  |  |  |  |  |
| Activity limitation | Oswestry Disability Index (0 = No disability to 100 = bed bound) (16, 17) | x |  |  |  |  |  |
| Quality of life | SF-36 general health (5-point scale from poor to excellent), social functioning (0-100), emotional well-being (0-100)(31) | x |  |  |  |  |  |
| Work ability | Work ability index (Current work ability compared with lifetime best; 0 = Unable to work 10 = work ability at its best)  Number of days with LBP related sick leave within last 3 months | x |  |  |  |  |  |
| Individual goal | Achieved SMART goal (0 = not at all; 10 = fully achieved) |  |  |  |  |  |  |
| Satisfaction | Overall are you satisfied with your course of care (5-point Likert scale) |  |  |  |  |  |  |
| Harms | Did you experience any side effects or problems in relation to your participation in GLA:D Back? (LBP worsening; Pain in other body parts; Serious symptoms/injury requiring other treatment; Other) |  |  |  |  |  |  |