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PRE-REHABILITATION SCORES OF FUNCTIONING MEASURED USING THE WORLD HEALTH ORGANIZATION DISABILITY ASSESSMENT SCHEDULE IN PERSONS WITH NON-SPECIFIC LOW BACK PAIN: A SCOPING REVIEW

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Background: Knowledge of pre-rehabilitation generic status of functioning in individuals with low back pain (LBP) is necessary to understand the clinical utility of rehabilitation care. However, this information is lacking. We conducted a scoping review to describe pre-rehabilitation functioning status of persons with non-specific LBP using World Health Organization Disability Assessment Schedule (WHODAS)-36 or WHODAS-12. Data Sources: MEDLINE, Embase, CINAHL, APA PsycInfo, EBSCO Discovery Service, and CENTRAL from January 2010-June 2021. Study Selection, Data Extraction: Eligible studies were randomized trials, cohort and cross-sectional studies reporting pre-rehabilitation scores using WHODAS-36 or WHODAS-12 in persons with LBP. Reviewers independently screened articles and extracted data. Data Synthesis: We descriptively summarized results, including pre-rehabilitation functioning scores, by LBP duration (acute/subacute <3 months; chronic ≥3 months), WHODAS version, and geographical location (World Health Organization region; low-, middle- or high-income country).

Results: We screened 1770 citations and eight citations were relevant (five utilized WHODAS-36, three utilized WHODAS-12). Five studies were conducted in Europe, two in Americas, and one in Africa Region. All studies except one were conducted in high-income countries. In persons with acute LBP, mean WHODAS-36 pre-rehabilitation summary score (complex-scoring) was 22.8/100 (SD=15.4) (1 study). In persons with chronic LBP, mean WHODAS-36 summary score (complex-scoring) ranged 22.8/100 (SD=15.7) to 41.5/100 (SD=13.8) (2 studies). For WHODAS-12 in persons with chronic LBP, mean summary score was 11.4/48 (SD=8.7) or 14.4/48 (SD=9.4) using simple-scoring (2 studies), and 25.8/100 (SD=2.2) using complex-scoring (1 study). No floor or ceiling effects were observed in WHODAS-36 summary scores for chronic LBP.

Conclusions: Our scoping review comprehensively summarizes available studies reporting pre-rehabilitation levels of functioning measured using WHODAS in persons with LBP. Persons with LBP seeking rehabilitation have moderate limitations in functioning, and limitations level tends to be worse with chronic LBP. Studies assessing pre-rehabilitation functioning for LBP in low-/middle-income countries are needed.

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were conducted comparing AMS patients in the four periods. **Results:** 1096 patients were classified as pre-pandemic, 128 patients as restricted, 481 patients as post-restricted 2020, and 965 patients as post-restricted 2021. The three pandemic periods had a lower admission rate (7.8% to 9.1%) compared to the pre-pandemic period (13.2%). The ITS analysis demonstrated a significant drop in mean LOS at the beginning of the restricted period. Hospital LOS gradually increased after the sudden drop and recovered to the pre-pandemic levels in one year’s time. Compared to the pre-pandemic period, the patients who underwent surgery during the restricted period were younger and had fewer comorbidities. After adjusting for these patient factors, post-restricted 2020 patients still showed significant association with decreased LOS. **Conclusions:** Our results suggest that spine surgery patients from the restricted pandemic period were younger and healthier and that led to a shorter LOS. Hospital LOS which significantly decreased in the beginning of the restricted period gradually increased and recovered to the pre-pandemic levels in one year’s time. **Disclosures:** Yusuke Dodo none; Ichiro Okano none; Neil Kelly none; Leonardo Sanchez: None declared, Henry Haffer none; Maximillian Mueller none; Erika Chiapparelli none; Jennifer Shue none; Darren Lebl consultant;Company=Viseon, Inc; Stryker ,stock/shareholder;Company=Viseon, Inc; HS2, LLC; ISPH II, LLC; Remedey Logic; Vestia Ventures MiRus Investment LLC royalties;Company=Stryker, Nuvasive, Inc, other financial report;Company=advisory board - Remedey Logic, Frank Camnisa grants/research support;Company=4WEB Medical/4WEB, Inc. Mallinckrodt Pharmaceuticals Camber Spine Centinel Spine ,consultant;Company=4WEB Medical/4WEB, Inc. DePuy Synthes Nuvasive, Inc. Spine Biopharma, LLC Synexis LLC,stock/shareholder;Company=4WEB Medical/4WEB, Inc. Bonovo Orthopedics, Inc. Healthpoint Capital Partners, LP ISPH II, LLC ISPH 3 Holdings, LLC Ivy Healthcare Capital Partners, LLC Medical Device Partners II, LLC Medical Device Partners III, LLC Orthobond Corporation Spine Biopharma, LLC Synexis LLC Tissue Differentiation Intelligence, LLC 4WEB VI, LLC 4WEB X, LLC (Centinel) Woven Orthopedic Technologies 4WEB Medical/4WEB, Inc. Bonovo Orthopedics, Inc. Medical Device Business Services, Inc stock/shareholder;Company=Vesta Ventures MiRus Investment LLC; ISPH II LLC; ISPH 3 LLC, VBVX Ventures X, LLC (Centinel) Woven Orthopedic Technologies, royalties;Company=Nuvasive, Inc, other financial report;Company=Healthpoint Capital Partners, LP Medical Device Partners III, LLC Orthobond Corporation Spine Biopharma, LLC Synexis LLC Woven Orthopedic Technologies, Alexander Hughes grants/research support;Company=Nuvasive, Inc., Kuros Biosciences, Gbolabo Sokunbi none; Andrew Sama grants/research support;Company=Spinal Kinetics, Inc.,consultant;Company=Clariance Inc; Kuros Biosciences AG; Medical Device Business Services Inc stock/shareholder;Company=Vesta Ventures MiRus Investment LLC; ISPH II LLC; ISPH 3 LLC, VBVX Ventures X, LLC (Centinel) Woven Orthopedic Technologies, royalties;Company=Ortho Development Corp, other financial report;Company=DePuy Synthes Products, Inc employee;Company=Hospital for Special Surgery, Federico P. Girardi consultant;Company=Depuy Synthes Spine; Nuvasive, Inc; Spineart USA, Inc; Ethicon, Inc; Ortho Development Corp stock/shareholder;Company=Bonovo Orthopedics, Inc; Healthpoint Capital Partners, LP; Tissue Differentiation Intelligence; BiCord, royalties;Company=Nuvasive, Inc; Ortho Development Corp; DePuy Synthes Spine

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**RISK FACTORS FOR AMBULATORY SURGERY CONVERSION TO EXTENDED STAY AMONG PATIENTS UNDERGOING ONE-OR TWO-LEVEL POSTERIOR LUMBAR DECOMPRESSION**

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Ambulatory surgery (AMS) or outpatient surgery is increasingly common for patients with lumbar spine disease. Previous reports suggest AMS is associated with lower cost and similar quality of care compared to conventional inpatient spine surgery. However, in some cases, AMS patients may unintentionally be subjected to extended hospital stays, which can lead to higher medical costs. An unanticipated extension of hospitalization can be a great burden not only to patients, but to medical providers and insurance companies alike. However, little is known about the risk factors for AMS conversion to extended stay. To investigate the factors associated with the conversion of patient status from ambulatory surgery (outpatient) to observation stay (OS) (less than 48hrs) or inpatient (greater than 48hrs), we have collected 1096 adult patients undergoing one-or two-level lumbar decompression surgery at a single academic institution from January 1st 2019 to March 16th 2020. **Methods:** Patients were categorized in three groups based on length of stay that, consisted of AMS, OS (less than 48hrs stay), and Inpatient (staying greater than 48hrs). Data on patient demographics, medical co-morbidities, surgical information including intraoperative complications and post-surgical pain scores, and administrative information, such as operation start time was collected. Simple and multivariable logistic regression analysis were conducted comparing AMS patients and OS/inpatient as well as OS and inpatients. **Results:** Of the 1096 patients, 641 (58%) patients were converted to either OS (486,44%) or inpatient (155,14%) status. The multivariable analysis demonstrated that age (>80 years old), high ASA grade, history of sleep apnea, drain use, high estimated blood loss, long operation, laminectomy for spinal stenosis, late operation start time, and a high pain score in the acute care unit were considered independent risk factors for AMS conversion to OS/inpatient status. **Conclusions:** Our results indicate that several surgical factors along with patient factors are significantly associated with AMS conversion. Addressing modifiable surgical factors, such as blood loss and operation start time, and post operative pain management might reduce the AMS conversion rate and be beneficial to patients and facilities. **Disclosures:** Yusuke Dodo none; Ichiro Okano none; Neil Kelly none; Leonardo Sanchez none; Lisa Oezel none; Henry Haffer none; Maximillian Mueller none; Erika Chiapparelli none; Jennifer Shue none; Darren Lebl consultant;Company=Stryker, Viseon, Inc stock/shareholder;Company=HS2, LLC; ISPH II, LLC; Vestia Ventures MiRus Investment LLC, Viseon, Inc; Woven Orthopedic Technologies, royalties;Company=Nuvasive, Inc; Stryker, Frank Camnisa grants/research support;Company=4WEB Medical/4WEB, Inc. Mallinckrodt Pharmaceuticals Camber Spine Centinel Spine ,consultant;Company=4WEB Medical/4WEB, Inc. DePuy Synthes Nuvasive, Inc. Spine Biopharma, LLC Synexis LLC stock/shareholder;Company=4WEB Medical/4WEB, Inc. DePuy Synthes Nuvasive, Inc. Spine Biopharma, LLC Synexis LLC Tissue Differentiation Intelligence, LLC 4WEB VI, LLC 4WEB X, LLC (Centinel) Woven Orthopedic Technologies, royalties;Company=Ortho Development Corp, other financial report;Company=Healthpoint Capital Partners, LP Medical Device Partners III, LLC Orthobond Corporation Spine Biopharma, LLC Synexis LLC Tissue Differentiation Intelligence, LLC 4WEB VI, LLC 4WEB X, LLC (Centinel) Woven Orthopedic Technologies, royalties;Company=Nuvasive, Inc, other financial report;Company=Healthpoint Capital Partners, LP Medical Device Partners III, LLC Orthobond Corporation Spine Biopharma, LLC Synexis LLC Woven Orthopedic Technologies, Alexander Hughes grants/research support;Company=Nuvasive, Inc., Kuros Biosciences, Gbolabo Sokunbi none; Andrew Sama grants/research support;Company=Spinal Kinetics, Inc.,consultant;Company=Clariance Inc; Kuros Biosciences AG; Medical Device Business Services Inc stock/shareholder;Company=Vesta Ventures MiRus Investment LLC; ISPH II LLC; ISPH 3 LLC, VBVX Ventures X, LLC (Centinel) Woven Orthopedic Technologies, royalties;Company=Ortho Development Corp, other financial report;Company=DePuy Synthes Products, Inc employee;Company=Hospital for Special Surgery, Federico P. Girardi consultant;Company=DePuy Synthes Spine; Nuvasive, Inc; Spineart USA, Inc; Ethicon, Inc; Ortho Development Corp stock/shareholder;Company=Bonovo Orthopedics, Inc; Healthpoint Capital Partners, LP; Tissue Differentiation Intelligence; BiCord, royalties;Company=Nuvasive, Inc; Ortho Development Corp; DePuy Synthes Spine

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**ANTERIOR LUMBAR SPINAL FUSION PERIOPERATIVE MORBIDITY AND MORTALITY UTILIZING THE NATIONAL INPATIENT SAMPLE (NIS): 2005-2013**

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**Introduction:** Minimally invasive approaches to the lumbar spine have become increasingly popular for the treatment of degenerative conditions and deformity correction. Anterior lumbar interbody fusion (ALIF) is one type of approach to the lumbar spine that has seen a massive increase in utilization over the past two decades. However, large scale studies evaluating the overall morbidity and mortality of this procedure are scarce. The National Inpatient Sample (NIS) serves as the single largest all-payer inpatient database in the United States and provides weights for nationally representative estimates. For this reason, it can be used to provide an approximation of the overall perioperative morbidity and mortality statistics for procedures such as ALIF. **Purpose:** To evaluate the perioperative morbidity and mortality of patients undergoing lumbar spinal fusion via an anterior approach from 2005 to 2013.