ity to use the inhaler in case of breathing difficulties, followed by features giving patients the reassurance about taken dose – precise dose counter and confirmation mechanism.

PMD58 COMPARISON OF THE IASP GRADING SYSTEM AND S-LANSS IN IDENTIFICATION OF NEUROPATHIC PAIN IN PATIENTS WITH CHRONIC LOW BACK PAIN

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OBJECTIVES: Prevalence of neuropathic pain in patients with chronic low back pain is high. Delaying surgical intervention for neuropathic pain is important because pharmacological management differs from nociceptive pain. There are various methods to assess the neuropathic pain. However, these methods have shown different sensitivity and specificity in identifying neuropathic pain. Present study compared the IASP grading system, and S-LANSS in identification of neuropathic pain in patients with chronic low back pain.

METHODS: This is a prospective questionnaire based study where consecutively chronic low back patients attending pain clinic of public tertiary care teaching hospital were recruited and graded according to the IASP grading system about the certainty of neuropathic pain. Later patients filled the S-LANSS Questionnaire. RESULTS: According to the IASP grading system, 45 patients (75%) classified as probable or definite neuropathic pain and 15 patients (25%) as unlikely neuropathic pain. According to the S-LANSS Questionnaire, 30 patients (50%) were classified as likely neuropathic pain and 30 patients (50%) as unlikely neuropathic pain. All patients who were classified as neuropathic (n = 60) included in the S-LANSS questionnaire were also classified as definite or probable neuropathic pain by the IASP grading system.

CONCLUSIONS: About 25% of neuropathic pain patients were not detected by S-LANSS. Self reported neuropathic pain assessment scale may miss patients with neuropathic pain.

PMD59 MEASURING FUNCTION IN COGNITIVE IMPAIRMENT: A SUGGESTED TAXONOMY FOR CHARACTERIZING ASSESSMENT INSTRUMENTS

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OBJECTIVES: Various assessment instruments are used for gathering data on different functional domains (i.e., mental), from various reporters (e.g., patient or observer). The objective of this study was to create an inventory of functional instruments used in patients with cognitive impairment and to categorize them using a taxonomy that combines several approaches: functional domain, data reporter, and performance versus opinion based.

METHODS: A literature search was conducted using the following: English language, any date, “performance based measure”, “functional measures”, “functional tests”, “cognitive measures”, “functional assessment”, “cognitive impairment”, “Alzheimer disease”. Three reviewers abstracted and evaluated retrieved studies to identify measure instruments and assign categories: 1. Addressing physical, mental, and/or social functioning; 2. Performance based (PerfO) or opinion based; and 3) Patient-reported (PRo), clinician-reported (ClinRO), or observer-reported (ObsRO) outcome. Discrepancies among reviewers were decided through consensus.

RESULTS: The literature search led to the identification of 212 measures used in cognitive impairment. Reviewers identified 134 as PerfOMs and 78 as ObsROs. The remaining 60 opinion-based measures were categorized into PRos, ClinROs, and ObsROs. Overall, one, 17, and 152 measures assessed social, physical, and mental functioning, respectively. Forty-two measures assessed multiple domains. Within the 134 PerfOMs, 13 were designed to assess physical, 109 mental, and one social functioning. Eleven included multiple functional domains.

CONCLUSIONS: When measuring function in patients with cognitive impairment, it is important to recognize the wide range of instruments available and their characteristics. The taxonomy applied here, organizing functional measurement instruments used in cognitively impaired populations by various characteristics, is recommended as a starting point for characterizing tools. Researchers and clinicians can use such an approach to better understand the complexity of the measures as well as the strengths and limitations of these tools to guide them in selection and use, and interpretation of findings.

PMD60 PATIENT FACTORS IN THE DECISION TO DELAY TOTAL KNEE ARTHROPLASTY

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OBJECTIVES: Delaying a total knee arthroplasty (TKA) carries an increased likelihood of patient’s control (HbA1c ≥ 6.00) and decreased function at the time of surgery. However, patients with higher fill rates (> 4 fills) were more likely to achieve control (≤ 6.00) relative to a 44% control rate among those with lower fill rates (< 4 fills). Using the AME analysis, each increase in fills was associated with a 2.5% increase in achieving control (AME: 2.5%, 95% CI: 2.1% - 2.8%, p < 0.001). The most effect between strip fills and HbA1c control was greater among type 1 patients (AME: 3.5%, 95% CI: 2.5% – 3.5%, p < 0.001).

RESULTS: We found a statistically significant AME between testing strip fills and glycemic control. These findings highlight the importance of efforts to encourage better SMBG monitoring practices to align with, with implications for improved patient outcomes and long term cost savings.

PMD61 USER EXPERIENCE A NOVEL, BUT CRITICAL ELEMENT IN PAYER AND PURCHASER VALUE ANALYSIS OF MEDICAL TECHNOLOGIES

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OBJECTIVES: Healthcare in the US is being reimagined to deliver technology enabled, high quality, cost-effective care. User experience (UX) drives clinician preferences and out of pocket cost, while both clinical and economic impact drives payer/purchaser decision making. The value of a medical technology is intrinsically tied to the user experience and preferences. Elements of user experience include ease of use, reproducibility of results, and ability to easily and effectively determine and measure, "functional measures", "functional tests", "cognitive measures", "functional assessment", "cognitive impairment", "Alzheimer disease". Three reviewers abstracted and evaluated retrieved studies to identify measure instruments and assign categories: 1. Addressing physical, mental, and/or social functioning; 2. Performance based (PerfO) or opinion based; and 3) Patient-reported (PRo), clinician-reported (ClinRO), or observer-reported (ObsRO) outcome. Discrepancies among reviewers were decided through consensus.

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PMD62 A FRAMEWORK FOR COVERAGE DECISIONS FOR DIGITAL HEALTH TECHNOLOGIES

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OBJECTIVES: Digital health solutions are an emerging trend in healthcare delivery, with over $3 Billion dollars being invested in the space in the first three quarters of 2014. In the absence of evidence that digital device venture funding and representation in venture capital is likely to continue at its current level (100% YoY growth), Healthcare, technology, and industry stakeholders are collaborating to develop tools that provide near patient monitoring, engagement, and interaction among patients with the expectation that these technologies will improve outcomes and potentially decrease costs. However, little work has been done to develop methods to evaluate digital health solutions for payers and HTA decision-makers. The objective of this study was to determine the framework with which US payers will make coverage decisions for digital health technologies. METHODS: In-depth interviews were conducted with 15 US payer and HTA decision-makers to determine preferences for evaluation frameworks for digital health technologies, drivers of value, evidence requirements, and economic impact expectations. RESULTS: Most payers reported that they were currently experimenting with digital health technologies...