OUTCOMES MEASURES ON ORTHOPEDICS

Arie J. van Duijn
Associate Professor and Program Director
Doctor of Physical therapy Program
Florida Gulf Coast University
avanduij@fgcu.edu

PTNOW

- Centralized resource for EBP
- Free access for APTA members
- Provide access to major databases through ArticleSearch, which includes:
  - Proquest databases
  - CINAHL Complete
  - SportDiscus
  - Cochrane Library
  - Physical Therapy & Occupational Therapy in Pediatrics
- Let’s take a quick tour!
LIST OF ORTHOPEDIC FUNCTIONAL MEASURES

Sources: APTA Sections and EDGE Taskforce

- Disabilities of the Arm, Shoulder, and Hand Scale (DASH) **
- Disabilities of the Arm, Shoulder, and Hand Scale - QuickDASH **
- Foot and Ankle Ability Measure (FAAM) ** Get Test
- Hip Outcome Score **
- International Knee Documentation Committee (IKDC)-Subjective Knee Evaluation Form **
- Knee Outcome Survey Activities of Daily Living Scale (KOS-ADLS) **
- Lower Extremity Functional Scale (LEFS) **
- Modified Low Back Pain Disability Questionnaire **
- Neck Disability Index (NDI) **
These FOMs were identified as primary examples for the specific domain (in this case, the specific region of the body), and were specifically mentioned in the Medicare regulation as examples that can be used for functional outcomes reporting and PQRS reporting.

There are many other FOMs that may be used for specific circumstances, for example:

- WOMAC for OA, KOOS for knee OA
- More general FOM such as the TUG, 6MWT, Tinetti, BERG etc can also apply to the orthopedic population

MODIFIED LOW BACK PAIN DISABILITY QUESTIONNAIRE (OWSESTRY)

- Use: patients with LBP and/or radiculopathy
- Measures the extent to which a person’s LBP affects ADLs
- MCID of 12% (6 points)
- Sensitivity=91% (95% CI=0.82-0.99) (Fritz and Irrgang, 2001)
- Specificity=83% (95% CI=0.67-0.98) (Fritz and Irrgang, 2000)
- Normative data:
  - 0%-20%=minimal disability
  - 20%-40%=moderate disability
  - 40%-60%=severe disability
  - 60%-80%="crippled"
  - 80%-100%=bedbound
USE OF THE TOOL: CASE STUDY (APTA FUNCTIONAL LIMITATION REPORTING TOOL KIT)

- 72-year-old male is referred to outpatient physical therapy with an exacerbation of low back pain due to spinal stenosis.
- Past medical history includes osteoarthritis in both knees and moderate COPD.
- The patient indicates that the occasional pain he experiences in his knees is controlled with nonsteroidal anti-inflammatory medication.
- Physical exam indicates bilateral lower extremity muscle weakness. He describes low motivation to exercise.
- Intermittent pain, ranges from a 3-6/10 on the visual analog scale (VAS).

**Standardized Instrument:** Oswestry Modified LBP Disability Index

**Patient Score (initial visit):** 56% (severe disability)

- Therapist’s Evaluation (initial visit): Based on the combination of the initial examination results and the items most limited on the Oswestry Disability Index, the therapist identifies the patient’s primary problem using G9887 (Self Care).
- CL modifier (at least 60% but less than 80% impaired, limited, or restricted) based on the Oswestry, lower extremity muscle strength, and VAS.
- The therapist and patient set a goal of 10% limitation. The CI modifier (at least 1% but less than 20% impaired, limited, or restricted) is used to append to the goal G-code (G9888).
VISIT 8 PROGRESS REPORT

- Oswestry is re-administered on visit 8:
- Patient Score (visit 8, first reporting period): 42% (moderate disability)
- the patient’s pain has improved and is intermittent at 2-4/10.
- Therapist reports G8987 with the CJ modifier (at least 20% but less than 40% impaired, limited, or restricted).

DISCHARGE STATUS

- Patient Score (final visit, discharge): 28% (moderate disability)
- the therapist and patient believe that maximum therapy benefit for this episode of care has been achieved. As a result, the therapist discharges the patient and reports G8989 with the CJ modifier (at least 20% but less than 40% impaired, limited, or restricted)
NECK DISABILITY INDEX

- Measures how neck dysfunction and resultant arm pain/symptoms affect ADLs
- ICF domains: Activity (Function), Body Structure & Function (Impairment), Participation (Disability, Quality of Life)
- G code categories:
  - Mobility:
    - Walking & Moving Around
    - Carrying, Moving, & Handling Objects
  - Self-Care
- 10 functional categories scored 0-5, total score 50 pts
- MDC:
  - 5 points, 95% CI (Stratford et al, 1999)
- SN .78, SP .8
- Normative Data:
  - 4 points (0%-8%) no disability
  - 5-14 points (10%-28%) mild disability
  - 15-24 points (30%-48%) moderate disability
  - 25-34 points (50%-64%) severe disability
  - 35-50 points (70%-100%) complete disability

CASE SCENARIO

- 66 YO female, c/o neck and R arm pain
- No previous HX
- Difficulty with ADLs, activities around the house, lifting and holding of objects
- NDI score 64% Severe disability
- NPR 5-8/10, pain constant, but increased with activities
- Therapist interpretation: 60% limitation in carrying, moving, and Handling (G8984, CL modifier)
- Patient Goal: since no previous HX and prior activity level, goal is 10% limitation (G8985, CI modifier)
Reevaluation at visit 8: pain decreased to intermittent, 2-4/10. NDI score 30% (moderate disability)

Therapist interpretation: 30% limitation, G8984-CJ. Goal remains 10% limitation, G8985-CI

Discharge at visit 12: Pain 0-2/10, NDI score 10%, able to do most activities pain free, and able to lift most objects without pain.

Therapist interpretation: 10% limitation in carrying, moving, and handling: G8986-CI. Goal was 10%: G8985-CI