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Osteoarthritis and LTCI

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Objectives

- Discuss osteoarthritis as a multifocal disease
- Review domains of assessment including pain, patient self-report, functional status and joint imaging
- Recognize underwriting considerations including risks and co-morbidities
- Examine impact of osteoarthritis on disability and LTCI claims

Osteoarthritis

- Highly prevalent among older adults
 - Prevalence estimates vary widely
 - Based on X-ray, symptoms, age, sex, joint
- Strongly linked to late-life disability
- Second to depression as most disabling condition
- Major cause of musculoskeletal pain
- Public health issue
- Significant economic burden: 7x that of RA
- Patient concerns: falling, loss of independence
- Impact of rising incidence of obesity

Osteoarthritis

- Traditionally thought to be noninflammatory
- Recent studies show synovitis
- Inflammatory markers (CRP, IL-6) higher in patients with OA knee
- High levels of soluble TNF- α associated with lower physical function, increased OA symptoms, worse knee radiograph scores in older obese adults with OA
- Does not invariably deteriorate; when it does social as well as biological factors may be important*

Pennix Journal of Rheumatology 2004

** Peters British J General Practice 2005*

Pain Assessment

- Assess severity, frequency, number and location of pain sites, function
- More consistently disabling with age, as measured by interference with function
- Influenced by coping strategies and mood
- Pain intensity and physical impairment only partly predict daily functional status
- Pain-related fear and self reported pain intensity show strong association with daily functioning

Patient-Related Fear

- Growing evidence supporting pain-related fear and functional disability
- “Activity avoidance” *
 - Belief that activity may result in reinjury or increased pain
- “Somatic focus” *
 - Belief in underlying somatic-medical problem
- Level of pain and pain related fear associated with functional limitations

** Heuts et al International Association for the Study of Pain 2004*

OA Pain in Older Persons

- Systematic review relating OA pain and QOL
 - lack of studies in persons >75yo

Jacobson and Hallberg. J Clin Nurs 2002

- North Staffordshire Osteoarthritis Project
 - Recent pain, # and location, interference with function
 - 4 week prevalence 72.4%
 - Higher in females
 - Median # sites: 6; 12.5%: widespread
 - Interference with daily activities: 38.1%
 - Pain interference with daily living increases with age

Thomas , Peat et al International Study of Pain, 2004

Functional Status: Self-report vs Performance Measures

- Self-report questionnaires: patient centered, subjective
 - WOMAC (Western Ontario & McMaster Universities Osteoarthritis Index)
 - Pain, stiffness, physical function
 - Health Assessment Questionnaire
 - Arthritis Impact Measurement Scales
- Patient observation: performance based, objective
 - Functional Independence Measure
 - Klein-Bell ADL Scale

Functional Status: Self-report vs Performance Measures

- Methods of disability assessment
 - Self-report, proxy reports, clinical judgment, home performance-based assessment
- Study: 26 tasks; 4 domains of daily living
 - 57 community dwelling women (>70yo)
- Disability estimates
 - not interchangeable with in-home task performance
- Self-report & proxy report
 - Higher concordance with performance
 - Rate of discordance 31%-54%
 - Least concordance in personal care and greatest in functional mobility and physically oriented IADL

Functional Status:

Self-report vs Performance Measures

- Relationship between self-report and performance-related measures
- Validity of timed tests
 - Lower Extremity Functional Scale (LEFS)
 - Self paced walk
 - Timed up-and-go
 - Stair test
- 3 domains: time, pain, exertion
- Performance based on time alone does not adequately represent functional status
- Composite based on time, pain & exertion better

OA of Knee

- Associated with mobility disability and with disability progression
- Affects 33% of all older adults in US
- Self-reported task difficulty preceded by task modification*
- Preclinical disability⁺
 - Associated with lower knee extensor strength, higher body weight and pain severity
- Quadriceps weakness
 - strongest single predictor of functional limitation
 - Implicated in development and progression
- Obesity: modifiable risk factor

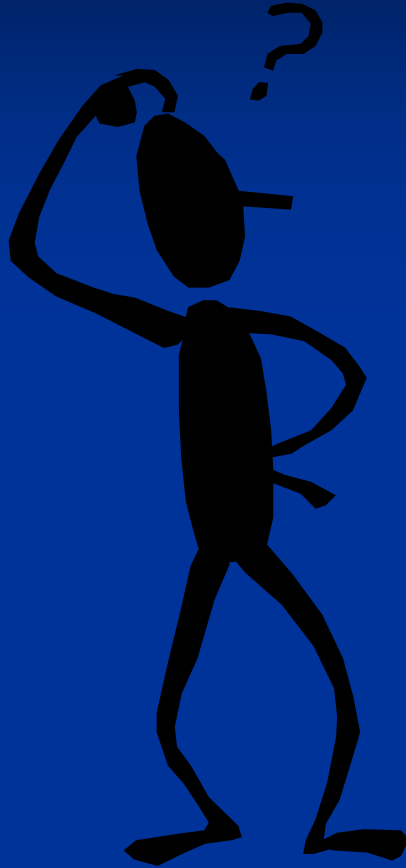
* *Women's Health and Aging Study (WHAS)II. 2000*
+ *Ling et al Journal of Rheumatology. 2003*

Joint Imaging in OA of Knee

- Substantial risk of progression in clinical OA patients with radiographic abnormalities
 - 50% of patients with JSN=1 progress to complete joint loss in 12.03 years
 - 50% of patients with JSN=2 progress to complete joint loss in 7.44 years
- Pain and disability not well correlated with JSN
- Osteophytes, limited additional value with JSN=2
- Contralateral findings useful only if JSN=0

Underwriting Concerns

- Presence and severity of pain
 - Single most important factor in shaping perception of disability
- Disability
 - Highest when pain and deformity interact
- Co-morbidities
 - Depressive symptoms
 - Anxiety
 - Lowered pain threshold
 - Obesity



Questions?

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2006 Intercompany LTCIF Conference

April 27, 2006

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