faster in working men 1.4(0.2) m/s and women 1.3(0.2) m/s compared to NWH men 1.17(0.2)m/s and women 1.08(0.2)m/s, respectively. Univariate analysis found that demographic (race, age), socioeconomic (income, level of education, marital status, obesity, number of people living in home), comorbidities and WS were significantly associated with NWH. Compared to their own gender walking at normal speeds(WS≥1.30 m/s), women and men considered to be slow walkers (WS<1.10 m/s) were 12 times and 6 times more likely to be NWH (Women: Odds Ratio [OR] 12.4, 95% Confidence Interval [CI] 6.0 -25.6; p<0.001; Men: OR 6.43, CI 2.21-18.69; p<0.001) after controlling for age, gender, race, education, obesity, income, marital status and comorbidities.
Conclusions: Walking speed was an independent predictor of NWH status among community dwelling women and men. It may be a useful and easily implemented way to identify health related job loss. Further evaluation of the longitudinal predictive capability of WS is warranted.

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DIFFERENCES IN TOTAL KNEE ARTHROPLASTY GOALS BY AGE GROUP IN OSTEOARTHRITIS PATIENTS REFERRED TO ORTHOPAEDIC SURGERY

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Purpose: In North America, the greatest increase in total knee arthroplasty (TKA) rates is occurring in the youngest age groups (20-60 years). Potential explanations include an increased prevalence of end-stage OA in this age group (greater need) and secular trends in peoples' motivations for surgery (preferences for surgery). Compared with older individuals, it has been hypothesized that aging baby boomers have a greater desire to maintain their ability to participate in vigorous activities like sport and are less willing to wait for debilitating symptoms before seeking TKA.
Methods: In consecutive OA patients referred to orthopaedic surgery for consideration regarding TKA, a standardized questionnaire assessed socio-demographics, prior joint replacement, knee OA severity (WOMAC pain/20, KOOS-PF/100; higher scores worse), acceptability of current knee state (PASS - acceptable/unacceptable) and top 3 goals for TKA (open-ended text). Each TKA goal was coded as relating to: a) symptom relief, e.g. pain or sleep; b) activity limitations, e.g. walking or stair climbing; or c) participation restrictions, e.g. work, travel, overall quality of life. T tests and chi-square statistics were used to compare OA severity and TKA goals of younger versus older patients (≤60 versus >60 years).
Results: Of 83 knee OA patients referred for TKA, 26 (31.3%) were ≤60 years; younger participants were similar to older participants in sex, level of education, living circumstances, and history of previous joint replacement, but were more likely to be working (65.4% vs 16.4%, p<0.0001). Younger patients were significantly heavier (mean BMI 39.4 vs 32.8, p=0.0004; obese 88.5% vs 59.7%, p=0.009), had more OA pain and disability (WOMAC pain 12.9 versus 10.9, p=0.03 and KOOS-PS 63.0 versus 48.6, p=0.0002, respectively), rated their knee-related quality of life as lower (mean KOOS QOL 88.9 vs 72.0, p<0.0001) and were more likely to indicate their symptom state as unacceptable (80.0% vs 56.1%, p=0.04). 79 participants (95.2%) provided one or more TKA goals. Although most indicated that 'reduced pain' was their primary TKA goal, younger individuals were more likely to indicate improved ability to participate in social and recreational activities, e.g., running, golf and travel, as their primary TKA goal (p=0.004), and as one of their top 3 goals(p=0.02)(Table).
Conclusions: Compared with older individuals seeking TKA, those that were younger were far more obese and had greater self-reported symptoms and disability, suggesting more severe knee OA. Younger individuals were also more likely to be seeking TKA to maintain or improve their ability to participate in leisure activities like sport.

Primary TKA Goal by Age Group

Primary TKA Goal	≤ 60 yrs (n=26)	> 60 yrs (n=52)	P value 0.004
↓ Pain / other symptoms	53.8%	51.9%	
↓ Activity limitations	23.1%	46.2%	
↓ Participation restrictions	23.1%	1.9%	
≥ 1 goal is ↓ participation restrictions	88.5%	61.4%	0.01

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PROGNOSTIC FACTORS FOR RADIOGRAPHIC PROGRESSION OF OSTEOARTHRITIS OF THE KNEE: AN UPDATED SYSTEMATIC REVIEW OF OBSERVATIONAL STUDIES

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Purpose: To update a systematic review on prognostic factors for the radiographic progression of knee osteoarthritis (OA).
Methods: We searched for observational studies up to February 2013 in Medline and Embase following a specified search strategy. Studies fulfilling the initial inclusion criteria were assessed for methodological quality. Data were extracted and results were pooled if homogeneity was assumed or summarized according to a best evidence synthesis.
Results: 1,912 additional articles were identified; 43 met our inclusion criteria. The previous review contained 36 articles, totalling 79 articles. The pooled OR of two determinants showed association with knee OA progression: baseline knee pain (OR 2.38) and Heberden nodes (OR 2.66). Our best evidence synthesis showed strong evidence that varus alignment and high levels of serum hyaluronic acid and TNFα are associated with knee OA progression. There is strong evidence that gender, former knee injury, quadriceps strength, smoking, running and regular performance of sports are not associated with knee OA progression. Evidence for the majority of determined associations however was limited (including MRI detected cartilage loss); conflicting (including age and body mass index); or inconclusive.
Conclusions: Baseline knee pain, presence of Heberden nodes, varus alignment and high levels of serum markers hyaluronic acid and TNFα predict knee OA progression. Gender, knee injury and quadriceps strength, amongst others, do not predict knee OA progression. Large variation remains in definitions of knee OA and knee OA progression. Future reviewers would be enabled to summarize determined risk factors through meta-analyses if homogeneity would exist amongst these definitions.

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PATIENT-PREFERENCE DISABILITY ASSESSMENT FOR DISABLING KNEE OSTEOARTHRITIS: VALIDITY AND RESPONSIVENESS OF THE MCMASTER-TORONTO ARTHRITIS PATIENT PREFERENCE DISABILITY QUESTIONNAIRE

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Purpose: To evaluate validity and responsiveness of the McMaster Toronto Arthritis Patient Preference Disability Questionnaire (MACTAR) to assess priorities in disability and restriction in participation in patients with disabling knee osteoarthritis (OA).
Methods: We evaluated 127 in- and out-patients with knee OA in two tertiary care teaching hospitals between August 2010 and July 2012 by using the MACTAR, the Western Ontario and McMaster Universities Osteoarthritis Index, Lequesne scale, Fear Avoidance Beliefs Questionnaire, a life satisfaction score, pain, global assessment of disease activity and functional impairment. Validity was assessed by Pearson correlation, and responsiveness, by the standardized response mean (SRM) and the effect size (ES).
Results: The MACTAR score was best correlated with global assessment of functional impairment (r=0.5). Convergent and divergent validities were as expected. In all, 108 patients completed a 6-month follow-up evaluation. The SMR (0.64) and ES (0.92) values for MACTAR without shifts were the highest among the outcome measures tested; for patients considering their condition improved, the values were 0.85 and 1.17, respectively. 27 patients shifted their priorities at 6 months, for a decrease in SMR and ES. Patients ranked 35 different activities; the 3 domains of the International Classification of Functioning, Disability