



**School of Rehabilitation Science**  
**MSc(PT) Program**

**Paul W. Stratford Research & Evidence  
Based Practice (REBP) Day**  
**ABSTRACTS**

**2019**

**Paul W. Stratford Research and Evidence-based Practice (REBP) Day: Tuesday, July 30, 2019**

No	Time	Presentation
	9:00 -9:10	<b>WELCOME</b> Dr. Dina Brooks, Vice-Dean (Health Sciences) and Executive Director, School of Rehabilitation Science
1	9:10-9:25	Identifying physiological response to calls experienced during 24-hour shifts among Thunder Bay Fire Rescue firefighters Team members: Jessica Connolly, Josh Hepburn, Will Jeurond, & Brittany Kafka Supervisor: Dr. Kathryn Sinden with co-investigator: Regan Bolduc
2	9:25-9:40	Manipulation or mobilization for neck pain contrasted against no intervention or control: A systematic review update Team Members: Mansoor Amon, Daniel Kim, Brandon Rozario, Ishwam Sethi Supervisor: Anita Gross
3	9:40-9:55	Online Problem-Based Learning in Academic Health Professional Programs: A scoping review Team members: Rebecca Chow, Anisha Kinnarath, Emily Miki, Evan Roberts Supervisor: Dr. Pat Miller
4	9:55-10:10	Massage for neck pain: A systematic review update Team members: Julia Colwell, Mercy Danquah, Laura Fedy, Chris Rigby Supervisor: Anita Gross
5	10:10-10:25	Unmet Needs for Physiotherapy Services for the Pediatric Population in Canada: A scoping review Team members: Sandra Hannah, Melanie Lyons, Justin Parker, Anne Stokes Supervisor: Dr. Sarah Wojkowski
	10:25-10:40	<b>BREAK</b>
6	10: 40-10:55	Defining ABI Rehabilitation in Residential Settings: A scoping review Team members: Taryn Bignaut, Emma Conron, Tess Kruspe, Alexandra Pichler, Supervisors: Jacquelyn Bonneville, Candy Sarraf, & Mila Ray-Daniels

**Paul W. Stratford Research and Evidence-based Practice (REBP) Day: Tuesday, July 30, 2019**

No	Time	Presentation
7	10:55-11:10	Thinking Outside the [Mirror] Box: Guidance for Using Graded Motor Imagery for Persons with CRPS: A scoping review Team members: Jasmine Choi, Greene Lasin, Stephanie McCoy, Madison McKinney Supervisors: Janet Holly & Dr. Tara Packham
8	11:10-11:25	Does High Intensity Physical Activity Reduce the Impact of Posttraumatic Stress Disorder in Individuals After Experiencing Trauma? Team members: Raquel Bachman, Amanda Lee, Mari Mueller, Emma Spelt Supervisors: Dr. Luciana Macedo & Dr. Rebecca Gewurtz, with co-investigator: Nick Halmasay
9	11:25-11:40	The Role of Rehabilitation in Opioid Tapering: A scoping review Students: Devon Jarrett, Alissa Settimi, Courtney White, Miranda Wiens, Supervisors: Zach Hollingham & Dr. Tara Packham
10	11:40-11:55	Gait characteristics in children with unilateral cerebral palsy: the impact of orthotics on the uninvolved side Students: Amanda Baxter; Shirin Davarpanah Jazi; Emily Fisher; Eve Sohn Supervisors: Marilyn Wright, Donna Twose, with co-investigator: Kristina Chavez
	12:00-1:15	<b>LUNCH</b>
11	1:15-1:30	Improving Knowledge of Pelvic Health Physiotherapy among Pre-Licensure Students through Interprofessional Education Workshops Team Members: Heather MacAulay, Aislinn MacPhail, Joanna Miller, Karly Roser Supervisors: Grecia Alaniz & Dr. Sinéad Dufour,
12	1:30-1:45	Physical Determinants of Mobility in Typical Community Dwelling Older Adults: A scoping review Team Members: Claire Goodin, Natalie Koehler, Justin Smal, Beth Song Supervisors: Micheal Kalu & Dr. Vanina Dal Bello-Haas
13	1:45-2:00	Missing Data in Psychometric Studies Team members: Loveprett Bhatti, Liam Newlands, Frank Rubino, Connor Willis Supervisors: Dr. Ayse Kuspinar & Dr. Julie Richardson with co-investigators: Muhib Masrur & Emily Cino

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No	Time	Presentation
14	2:00-2:15	Features of Psychological and Social Determinants of Mobility for Older Adults: A scoping review Team members: Tristan Richardson, Nic Savatteri, Christian Tkachyk, Yimo Wang Supervisors: Michael Kalu & Dr. Vanina Dal Bello-Haas
15	2:15-2:30	Effectiveness of Decision-Making Aids in people seeking treatment for hip and/or knee osteoarthritis: A scoping review Team members: Natalie Bertrand, Thea Chan, Katrina Majetic, Simonne Paine Supervisors: Ange Accettura, Stephen Patton & Dr. Pat Miller

## 1. Identifying physiological response to calls experienced during 24-hour shifts among Thunder Bay Fire Rescue firefighters.

Team Members: Brittany Kafka, Jessica Connolly, Joshua Hepburn, William Jeurond

Supervisor: Dr. Kathryn Sinden

Co-Investigators: Regan Bolduc and Sarah Sayed

### ABSTRACT

*Purpose:* The aim was to investigate changes in heart rate (HR), breathing rate (BR), and heart rate variability (HRV) as measures of physiological load during one 24-hour firefighter shift.

*Method:* Secondary analysis of physiological data from five firefighters was analyzed. Data was collected using a Zephyr bioharness. Data was separated based on call type: Primary response area call (PRAC) and secondary response area call (SRAC). Descriptive statistics were used to determine physiological load experienced over 1x24 hour shift.

*Results:* SRACs elicited physiological changes across participants; however, these changes were smaller than those elicited by PRACs. In HRV SRACs decreased by a mean of 0.1 (32.92) Hertz (Hz), while there was a mean increase in PRACs by 99.22 (81.70) Hz from pre- to post-call. Participants showed a mean increase 2.57 (3.37) beats per minute (bpm) in SRACs, and a mean of 40.09 (20.91) bpm in PRACs. Finally, BR had a mean increase of 0.95 (1.13) breaths per minute (brpm) in SRAs, and 2.59 (2.06) brpm in PRAs.

*Conclusions:* SRAs correlated with increased physiological load. Firefighters' increased HRV in PRAs demonstrates improved autonomic nervous system control. These findings may provide preliminary evidence to demonstrate a unique physiological adaptability in this population.

## 2. Manipulation or mobilization for neck pain contrasted against control or as an adjuvant to exercise

Students: Mansoor Amon, Daniel Kim, Brandon Rozario, Ishwam Sethi  
Supervisor: Anita Gross

### ABSTRACT

**Purpose:** This systematic review update assessed the short- and long-term effects of manipulation or mobilization on pain intensity, disability, global perceived effect, quality of life and adverse events in adults with neck pain including mechanical neck disorders and neck disorders with radiculopathy compared to a placebo, no treatment or as an adjuvant to exercise or passive treatment in randomised clinical trials.

**Methods:** A grey literature search was performed on ClinicalTrials.gov, PubMed, MEDLINE(R), and PEDro. A research librarian completed a literature search on multiple databases to identify studies published since the previous review. Data extraction, collection, analysis and synthesis were performed for relevant studies.

**Results:** 36 trials (n = 4135) assessed subacute to chronic neck disorders with immediate-term follow-up. For manipulation compared to control, a clinically important benefit was observed for pain intensity and disability. For manipulation as an adjuvant, a clinically important benefit was only seen for pain intensity. For mobilization as an adjuvant, significant but non-clinically important benefit was found for disability and quality of life.

**Conclusion:** The evidence is low to very-low for the use of manipulation or mobilization for subacute to chronic neck disorders. Although significant benefits were found, higher quality research is required to improve confidence in results.

### 3. Online problem-based learning in academic health professional programs: A scoping review

Students: Rebecca Chow, Anisha Kinnarath, Emily Miki, Evan Roberts  
Supervisor: Dr. Patricia Miller

#### ABSTRACT

*Purpose:* To explore the current evidence on the impact of problem-based learning (PBL) in an online setting in outcomes of student performance and on student and tutor perceptions in healthcare professional academic programs.

*Methods:* A scoping review of online problem-based learning in health professional programs was performed between database inception to 2019 using three electronic databases. Data was extracted on characteristics of PBL tutorials, technology, student and tutor outcomes, and reported benefits and drawbacks of online PBL.

*Results:* A total of eight studies met the inclusion criteria for this review. Despite the limited research, there were numerous reported benefits in student performance and both student and tutor perception. However, studies lacked consistency in outcome measures evaluating PBL. The most commonly reported barriers were technical difficulties and the lack of nonverbal communication in an online environment.

*Conclusion:* Overall, the evidence demonstrated that online PBL could be a promising platform for future healthcare professional education. Future research using randomized controlled trials to evaluate the effectiveness of online PBL are needed and should utilize consistent measures to evaluate PBL.

#### 4. Massage for mechanical neck pain: A Cochrane systematic review update

Students: Julia Colwell, Mercy Danquah, Laura Fedy, Chris Rigby

Supervisor: Anita Gross

##### ABSTRACT

*Purpose:* This systematic review update assessed the effect of massage against placebo, no treatment, another treatment, or as an adjuvant in randomized controlled trials on pain, function, patient satisfaction, global perceived effect, quality of life, and adverse events for adults with acute-chronic mechanical neck pain (NP).

*Methods:* Databases (CENTRAL, Medline, EMBASE, AMED, CINAHL, and additional sources) were searched up to March 2019. Selected studies were assessed for risk of bias (RoB). Meta-analyses were conducted and GRADE was used to assess the quality of the evidence.

*Results:* Seven new trials were included in this update; four were high RoB. For chronic NP, massage added to manual therapy (MT) reduced pain (n=3 trials, low quality) and for subacute-chronic NP, massage added to MT improved function (n=1 trial, very low quality) at short-term. For chronic NP, acupuncture was favoured compared to massage for pain and function (n=6 trials, low-moderate quality) at short-term. At intermediate and long-term follow-up, there were no trials. No new trials reported adverse events.

*Conclusion:* Massage as an adjuvant to MT may improve pain and function, while acupuncture may be favourable to massage for pain and function. Future research is likely to impact these findings, and should investigate adequately dosed massage with long-term follow-up.

## 5. Unmet needs for physiotherapy services for the pediatric population in Canada

Students: Sandra Hanna, Melanie Lyons, Justin Parker, Anne Stokes  
Supervisor(s): Dr. Sarah Wojkowski

### ABSTRACT

**Purpose:** To investigate the types of unmet needs for physiotherapy services for the pediatric population in Canada.

**Methods:** This scoping review was completed between January and July 2019. Recommendations proposed by Arksey and O'Malley and Levac et al. were followed to conduct the review. Four reviewers independently reviewed 2983 abstracts, of which 81 articles were selected for full text review. A total of 24 articles were included for which data was extracted. The access framework proposed by McIntyre et al. was used for thematic analysis of the extracted data and to draw results.

**Results:** The most commonly reported unmet needs were in the domains of availability (e.g. physical or geographic access to services) and acceptability (e.g. concordance of expectations for care between clients and health care providers). Increased coordination of care between services, appropriate information for parents, clarification of roles and expectations for healthcare providers and parents, and decreased wait times were the most commonly reported unmet needs.

**Conclusion:** To meet the healthcare needs of the pediatric population physiotherapists and rehabilitation teams would benefit from maximizing collaboration and communication between service providers and families, and engaging in service reorganization efforts to improve wait times and coordination of services.

## 6. Defining ABI rehabilitation in residential settings: a scoping review

Students: Taryn Blignaut, Emma Conron, Tess Kruspe, Alexandra Pichler  
Supervisor(s): Jacquelyn Bonneville, Mila Ray-Daniels, Candy Saraff

### ABSTRACT

*Purpose:* Acquired brain injury currently impacts about 1.5 million Canadians. Currently, there are no clinical practice guidelines for individuals with chronic, moderate to severe acquired brain injury in residential settings focusing on community reintegration. The purpose of this scoping review was to determine what practices currently exist in this population.

*Methods:* The databases EMBASE, CINAHL, AHMED, PubMed and Medline were searched. Articles were included if they examined conservative interventions carried out in a residential/community setting, with the majority ( $\geq 80\%$ ) of participants classified as having moderate to severe brain injury and time post-injury of  $\geq$  two years, and a mean age of  $\geq 18$  and  $\leq 65$ .

*Results:* In total, ten articles were included. This review shows that definitions, interventions, health care professionals and outcome measures are inconsistent and vary significantly. Despite inconsistencies among rehabilitation practices, there is an overall positive trend in their effectiveness.

*Conclusion:* Further research is warranted to establish consistent definitions of what is meant by acquired brain injury rehabilitation in residential settings with regards to community integration. The abundance of outcome measures necessitates the development of a tool that captures the impairments and limitations experienced by this population. Future research should focus on evaluating and establishing best practice management.

## 7. Thinking outside the [mirror] box: guidance for utilizing graded motor imagery for persons with CRPS (a scoping review)

Students: Jasmine Choi, Greene Lasin, Stephanie McCoy, Madison McKinney

Supervisors: Tara Packham and Janet Holly

### ABSTRACT

#### *Purpose:*

Graded Motor Imagery is a promising therapy for people with Complex Regional Pain Syndrome. The literature regarding this topic is heterogeneous in nature, and no universal parameters exist to help clinicians delineate how to most effectively implement this intervention. We conducted a scoping review to explore the breadth of research available on this topic, and to make recommendations for clinical implementation.

#### *Methods:*

We searched five databases from their inception until April 21, 2019. We screened articles following a robust process with predetermined inclusion and exclusion criteria.

#### *Results:*

39 studies were included in this scoping review, the majority of which were case reports and randomized controlled trials. Interventions were comprised of GMI, or component(s) of GMI, alone or with an adjunct therapy. Outcomes were reported for: pain, symptomatology, range of motion, function, strength and dexterity, participation, laterality and psychological variables.

#### *Conclusion:*

This scoping review provides recommendations for the clinical use of GMI for people with CRPS. Interventions comprised of GMI, alone or with an adjunct therapy, improve outcomes in people with CRPS. Interventions including a component of GMI are effective, only if in combination with an adjunct therapy. Future research should include robust randomized control trials with larger sample sizes.

8. Does high intensity physical activity reduce the impact of posttraumatic stress disorder in individuals after experiencing trauma? A scoping review

Students: Raquel Bachman, Amanda Lee, Mari Mueller, Emma Spelt  
Supervisor(s): Dr. Luciana Macedo

**ABSTRACT**

*Purpose:* Engaging in physical activity has been suggested as a potential management and prevention strategy for post-traumatic stress disorder (PTSD). The purpose of this scoping review was to examine the literature on high intensity physical activity (HIPA) for PTSD.

*Methods:* A systematic literature search was conducted on MEDLINE, PsychINFO, EMBASE and PEDro using terms for HIPA AND PTSD. Study types included were RCTs, pre-post designs, and longitudinal cohort studies.

*Results:* In total, 11 articles were included involving 39,310 individuals. Exercise interventions consisted of aerobic exercise, group-based activity, and combined aerobic plus resistance exercise. Two studies were observational and included self-report measures. All studies included participants after a diagnosis of PTSD and there were no prevention studies.

*Conclusion:* Current literature investigating the effects of exercise on PTSD symptoms is still in its infancy. The results of this scoping review suggest that engaging in any form of HIPA may have beneficial effect on PTSD. Potential directions for future research are included. Large scale RCTs evaluating exercise as a management or prevention strategy are needed.

## 9. The role of rehabilitation in opioid tapering: a scoping review

Students: Devon Jarrett, Alissa Settimi, Courtney White, Miranda Wiens  
Supervisors: Zachary Hollingham and Dr. Tara Packham

### ABSTRACT

**Background:** One in five Canadians are affected by chronic non-cancer pain with Canada having the highest rate of opioid prescribing in the world. A recent coalition created for Canadian clinicians suggested that non-pharmacological pain management alternatives including physiotherapy and occupational therapy should be used in opioid tapering.

**Purpose:** To summarize and explore the current available evidence regarding the roles of physiotherapy and occupational therapy in opioid tapering for individuals with chronic non-cancer pain.

**Methods:** A systematic search of the following databases was undertaken - Medline, EMBASE, PubMed, and CINAHL. Articles were included if physiotherapy or occupational therapy were described or were part of an interdisciplinary team and if opioid tapering or reduction were mentioned.

**Results:** Twenty-two articles were included - one systematic review, four narrative reviews, two case-reports, six retrospective studies, one cross-sectional study, one RCT, one prospective longitudinal, one evidence-based perspective, one program description, and four conference abstracts.

**Conclusion:** The findings suggest there is currently limited evidence to guide PTs and OTs in their role in opioid tapering for patients with chronic non-cancer pain. It appears that the general use of PT and OT interventions are helpful in supporting the opioid tapering process, however, further research is needed to establish effectiveness.

## 10. Gait Characteristics in Children with Unilateral Cerebral Palsy: The Impact of Ankle Foot Orthoses on the Children's Uninvolved Legs

Students: Amanda Baxter, Shirin Davarpanah Jazi, Emily Fisher, Eve Sohn

Supervisors: Marilyn Wright, Donna Twose

### ABSTRACT

**Purpose:** The purpose of the current study was to examine the kinematic and spatiotemporal gait characteristics of the uninvolved leg in children with unilateral cerebral palsy (UCP) following an ankle foot orthosis (AFO) intervention on the involved leg.

**Methods:** A retrospective chart review of 16 children aged 7-14 with a medical diagnosis of UCP was performed. Spatiotemporal and sagittal plane kinematic data of the hip, knee, and ankle of both legs were obtained via 3D gait analysis with and without AFO application on the participants' involved leg. Primary outcomes were analyzed using a repeated-measures ANOVA.

**Results:** Participants' gait velocity ( $p < 0.001$ ) and step length ( $p < 0.001$ ) increased significantly bilaterally with no change in cadence with an AFO intervention. On the participants' uninvolved leg, ankle dorsiflexion ( $p < 0.001$ ) and knee extension ( $p < 0.001$ ) increased significantly at initial contact. No statistically significant changes were found in the participants' hip kinematics or the Gait Deviation Index (GDI).

**Conclusion:** The findings indicate that clinician's prescribing AFO's in children with UCP should consider that the AFO may change the gait kinematics of the child's uninvolved leg. Further studies are needed to determine if these changes in the child's uninvolved leg are related to functional outcomes.

## 11. Promoting Pelvic Health Physiotherapy as a Conservative Care Strategy for Pelvic Floor Dysfunction among Pre-Licensure Students through an Interprofessional Education Workshop

Students: Heather MacAulay, Aislinn MacPhail, Joanna Miller, Karly Roser  
Supervisors: Dr. Sinéad Dufour, Grecia Alaniz

### ABSTRACT

*Purpose:* This study evaluated the impact of an interprofessional workshop regarding conservative care strategies for pelvic floor disorders on pre-licensure healthcare students' knowledge and perceptions of interprofessionalism.

*Methods:* A pretest, post-test design utilized a knowledge questionnaire and the interprofessional education perception scale. Subjects from Physiotherapy, Midwifery, Medicine, Physician Assistant, and Nursing programs at McMaster University were recruited to participate in a workshop. The workshop included a presentation outlining common pelvic floor disorders and roles of healthcare professionals followed by discussion of a clinical scenario in interprofessional groups. Descriptive and statistical analyses were used.

*Results:* Fifty-three subjects were included in this study. Overall, improvements in knowledge of the impacts and multidisciplinary conservative care of pelvic floor disorders were found. Improvements in knowledge of Kegels was statistically significant. Subjects identified members of the urogynecological care team, however, lacked knowledge of scope. Changes in perception of interprofessionalism was statistically significant.

*Conclusions:* Findings support the potential benefit of a one-time interprofessional workshop for pre-licensure students regarding pelvic floor dysfunction. Enhanced pre-licensure knowledge may facilitate future interprofessional collaboration within the urogynecological team, with potential to enhance care provision for common, yet poorly managed, pelvic floor conditions such as stress urinary incontinence and pelvic organ prolapse.

## 12. Physical Determinants of Mobility in “Typical” Community Dwelling Older Adults: A Scoping Review

Students: Claire Goodin, Natalie Koehler, Justin Smal, Beth Song  
Supervisors: Dr. Vanina Dal Bello-Haas, Michael Kalu

### ABSTRACT

*Purpose:* The purpose of this scoping review is to identify the physical determinants of mobility and to describe the association between physical determinants and mobility in “typical” community-dwelling older adults  $\geq 60$  years old.

*Method:* We followed the Arksey and O’Malley framework (2005) and searched Medline, EMBASE, AMED, CINAHL, PsychINFO databases to capture studies published from year 2000 to 2019 using terms related to physical determinants and mobility. We used the narrative approach to describe the associations between physical determinants and mobility outcomes.

*Results:* A total of 150 articles with 252 analyses reported association between 19 physical determinants and nine mobility outcomes. Of the 252 analyses, 171 analyse reported a significant association between mobility and muscle strength, body composition, vision, muscle power, history of falls, pain, balance, orthopedic conditions, gait characteristics, respiratory function, chronic obstructive pulmonary disease, range of motion, diabetes mellitus, muscular endurance, hearing, proprioception, sensation, cardiovascular function and coordination.

*Conclusions:* The results of this scoping review highlighted the individual physical determinants that can be targeted in treatments to improve mobility in older adults. Future studies can investigate the influence of combined physical determinants on mobility and include a more comprehensive population of older adults.

### 13. Missing Data in Psychometric Studies of the 6MWT, 10MWT and TUG

Students: Lovepreet Bhatti, Liam Newlands, Frank Rubino, Connor Willis

Supervisors: Dr. Ayse Kuspinar, Dr. Julie Richardson

Co-Authors: Emily Cino, Muhib Masrur

#### ABSTRACT

*Purpose:* This scoping review had three primary objectives: 1) Identify approaches to adjust for missing data 2) Describe how estimates are influenced by different adjustments. 3) Determine how missing data should be handled in psychometric studies of performance measures.

*Methods:* This study searched Embase, MEDLINE and CINAHL databases for psychometric studies that examined the TUG, 6MWT and 10MWT in older adults (>49yr). Studies were included if missing data clearly existed in the study and they were written in English. Studies were assessed for the amount of missing data and whether or not researchers reported on and/or adjusted for missing data.

*Results:* 31% of included studies had acceptable levels of missing data, the remaining 69% of studies had over 10% missing data. Across all of the included studies, there was a range of missing data from 0.48% to 66%, and an average of 20.71%. Only 31% of the studies reported on the significance of missing data, and only 6.9% performed an imputation method.

*Conclusions:* Missing data is prevalent in psychometric studies, greatly influencing the validity and reliability of performance measures; leading physiotherapists astray when evaluating these measures. Guidelines for how to report and adjust for missing data are warranted.

#### 14. Psychological and social factors as determinants of mobility for older adults: A scoping review of the literature

Student: Tristan Richardson, Nicholas Savatteri, Christian Tkachyk, Yimo Wang  
Supervisors: Michael Kalu, Dr. Vanina Dal-Bello Haas

##### ABSTRACT

*Purpose:* This scoping review was conducted to identify the features of psychological and social determinants of mobility in older adults ( $\geq 60$  years old).

*Methods:* This scoping review utilized the Arksey and O'Malley Framework. Seven databases (EMBASE, CINAHL, MEDLINE, PsychINFO, AgeLINE, Web of Science, AMED) were searched. Following title/abstract and full text screening, data was extracted from included studies to form themes describing the key determinants.

*Results:* 45 unique articles were included; 26 psychological and 19 social determinant articles. Of the 26 psychological determinant articles, 4 themes were identified: mental health ( $n=12$ ), fear of falling and movement ( $n=6$ ), confidence ( $n=3$ ), and emotional well-being ( $n=5$ ). Of the 19 social determinant articles, 3 themes were identified: social isolation ( $n=4$ ), social engagement ( $n=10$ ) and social participation ( $n=5$ ).

*Conclusions:* Better mental health, less fear of falling and movement, greater confidence, and greater emotional well-being were associated with better mobility in older adults. Similarly, greater social engagement, greater social networks, and less loneliness were associated with better mobility in older adults.

## 15. Effectiveness of decision making aids in people seeking treatment for hip and/or knee OA: A scoping review

Students: Natalie Bertrand, Thea Chan, Katrina Majetic, & Simonne Paine

Supervisors: Angela Accettura & Stephen Patton & Dr. Patricia Miller

### ABSTRACT

**Background:** Decision making aids (DMAs) are tools that help patients make informed choices about their care by providing information and clarifying personal values. DMAs create a common language for patients and providers to improve shared decision making (SDM), facilitating collaboration to select the best course of treatment. A number of DMAs have been developed for patients with osteoarthritis (OA).

**Purpose:** This scoping review aims to determine if DMAs are effective and add value to routine clinical practice.

**Methods:** The literature search used MEDLINE, EMBASE, CINAHL, and references of screened articles.

**Results:** A total of 22 studies were included. DMAs can add value to the care of patients with hip and knee OA. Improvements in patient knowledge, SDM and decision quality with the use of DMAs were found. Additionally, DMAs do not affect consult duration or surgical wait time. There were mixed results on whether DMAs increased or decreased surgical rates.

**Conclusion:** The use of DMAs facilitates the decision-making process for individuals with hip and knee OA without burdening the healthcare system. Future researchers should focus on determining the optimal time for DMAs to be administered and how their use can impact overall healthcare costs.