

Sharing the Burden of Disease: Multidisciplinary Shared Medical Appointments for Osteoarthritis

Kathryn Miller, M.D., Linda Baier Manwell, M. S., and David Rabago, M.D.

University of Wisconsin School of Medicine and Public Health, Madison WI

Problem

Knee and hip osteoarthritis (KHOA) is a disabling condition affecting more than 50% of U.S. adults over age 65. Patients often do not receive guideline-recommended care.

Objectives

Assess if shared medical visits (SMVs) incorporating guidelinerecommended care and delivered by a multidisciplinary team of health care providers:

- 1. are well-accepted by patients with KHOA
- 2. improve self-reported and objectively-measured patient outcomes

Description

SMV content provides all guideline-recommended care.

Patients committed to attending two 90-minute SMVs (+/- an optional 30-minute exercise session) per month for 3 months.

Care team: internist, physical therapist, dietitian, health psychologist.

During visits, patients shared progress and challenges, learned about managing OA in an interactive format, set personal treatment goals.

Outcome measures:

- Quality of life: Veterans Rand 12-Item Health Survey (VR-12) physical and mental subscales
- Objectively-assessed function: 30-second Chair Stand Test, Timed Up and Go (stand walk 10 feet return sit)
- Weight loss
- Patient satisfaction, knowledge, confidence (0-10 Likert scales)
- Qualitative comments

Findings

| Table 1. Patient baseline characteristics | n= 27 |
|---|---------------|
| Female | 25 (93%) |
| Age | 59.8 ± 8.4 |
| $BMI > 40 \text{ kg/m}^2$ | 19 (70.4%) |
| 5+ comorbid health conditions | 16 (59.2%) |
| VR-12 Physical Health Score low | 26.60 ± 8.35 |
| VR-12 Mental Health Score | 48.41 ± 12.16 |

| Table 2. Change in obj months | ective testing over 3 |
|----------------------------------|-----------------------------|
| 30-Second Chair Stand | + 2.2 chair rises |
| Timed Up and Go (TUG) | - 5.3 seconds |
| VR 12 Physical Health Score | + .22 Cohen's d effect size |
| VR 12 Mental Health Score | + .24 Cohen's d effect size |
| | |

| Table 3. Weight loss at 6-12 months post-SMVs | | |
|---|--------------|--|
| 10% weight loss | 6/27 (22.2%) | |
| 5-10% weight loss | 4/27 (14.8%) | |

| Table 4. Patient satisfaction, knowledge, and confidence | | |
|--|-------------------|--|
| Average visits attended | 4.6/6 [range 2-6] | |
| Highly recommend to a friend | 9.16 ± 0.80 | |
| Increased confidence in managing OA | 7.8 ± 1.61 | |
| High level of knowledge gained | 8.6 ± 1.76 | |

"I felt empowered to be able to control OA long term."

"I learned more due to being in a group visit vs. an individual." "I loved this group. It helped me focus on my exercise routine at the gym. I gained strength and learned to focus on my problems to solve them rather than punish myself."

"To learn about OA and what it takes to live with it has been very helpful and gives me a realistic understanding of what I'm dealing with."

Key Lessons

SMVs for patients with KHOA have the potential to:

- improve physical functioning
- enhance patient knowledge and confidence in OA and its management
- facilitate weight loss

VR-12 changes were small, possibly due to the short treatment period.

SMVs are highly rated by participants and 97% (26/27) attended at least 50%.

Clinic implementation and feasibility:

- New work flows for scheduling
- Easy patient recruitment
- Unchanged documentation and billing
- High provider satisfaction
- No improved patient access
- SMVs now integrated part of clinic due to high patient/provider satisfaction

Future steps:

- Determine the minimum number of visits necessary to provide all guideline-recommended care.
- Use a checklist of guidelinerecommended care to determine if patients perceive receiving such care.

Contact: Kathryn.Miller2@uwmf.wisc.edu