

Presentation: Pain tracking

C. CHAVEZ KNOTT, S. MCBRIDE, J. SIDMAN, D. BAUER, W.A. ROGERS. **Requirements for pain tracking and management tools.** *Gerontechnology* 2012;11(2):158; doi:10.4017/gt.2012.11.02.364.00 **Purpose** Osteoarthritis is one of the most prevalent diseases among older adults¹ and is the major cause of chronic knee and hip pain leading to difficulty in walking, climbing stairs, exercising, and performing other daily activities. As a growing number of older adults prefer to “age in place”, it is critical to find effective tools and methods to manage chronic pain such as arthritis. However, self-management is often complicated by the many factors that mediate pain. The goal of this study was to determine the requirements for a chronic pain management system that supports a patient-centered approach and enables self-management and shared medical decision-making. Such an approach has been shown to lead to better health outcomes². **Method** We conducted a capabilities needs assessment and identified requirements for a pain tracking and management tool that promotes a patient-centered approach to managing chronic arthritis pain. Our assessment included a review of the relevant literature and semi-structured interviews with patients and healthcare providers to determine knowledge requirements for successfully managing arthritis pain. **Results & Discussion.** Results suggest that understanding the relationships between pain and its mediators is critical to successful pain management, but that older adults often lack this critical knowledge (*Table 1*). It is important for patients to develop this knowledge; likewise, healthcare providers can be informed by tracking these data. These two contexts demand different interactions with patient data. For patients, a pain management tool must reveal relationships between pain and mediators in an educational and intuitive way, e.g., a calendar affords intuitive interactions such as viewing pain trends over time (days, weeks, morning vs. evening). For providers, a calendar display can provide a common reference point to enable discussions with patients; however, the display must also allow access to data in more analytical ways, e.g., scatter plots, line graphs, configural displays. These requirements and critical age-related cognitive and perceptual accommodations³ for designing effective pain management tools for older adults are discussed.

References

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Table 1. Perception of patient and health care provider of factors in the management of arthritis pain

Relevant factor	Quotes	
	Patient	Health care provider
Attitude / Sense of pain control	I’m not in control about when it comes and goes. We’ve never been able to figure out what the catalyst is, nor what makes it go away.	I don’t think they understood the next step to make change. [Patients seem] resigned to it.must have a positive attitude about your chronic pain or disease.
Sleep quality	No, I haven’t [noticed that my sleep affects my pain]	Yes, absolutely, [sleep affects pain]
Exercise	Activity a more strenuous activity, does bring it on and makes it a little more tender. You know, if you don’t do anything, it doesn’t bother you.	There used to be this belief that if you’re in pain / have arthritis you shouldn’t go out and exercise, ... we’ve tried to shift that to ‘Exercise is the best medicine’.
Affect / mood	Gee, I never thought about that [how mood affects pain], I don’t think it does. I don’t really believe it does	People don’t understand that mind-body connection. Patients tend to be plagued with depression; I think that’s a real key contributing factor