

## ARTICLE

## Curating Care: The Design and Feasibility of a Partnership Between an Art Museum and an Academic Pain Center

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**ABSTRACT** This qualitative study describes the design and feasibility of a partnership between an art museum and an academic pain center (Art Rx) to address chronic pain. The research team used semi-structured stakeholder interviews with participating health care providers and museum staff to develop an understanding of the perceived complexity, risk and opportunity associated with the partnership. Results suggest that it is possible to align the missions of both types of organizations in a partnership felt to be beneficial to individuals with chronic pain. Interviewees identified a number of important factors for success including a collaborative organizational culture, partnership champions in both organizations, and a quality improvement process that incorporates stakeholder feedback into the partnership's continued development. This paper concludes with a recommendation that public health partnerships with museums to address chronic pain may be feasible and of unique value to both health care providers and museum staff in furthering their respective organizations' missions.

### BACKGROUND

The Institute of Medicine (2011) estimates that 100 million Americans suffer with chronic pain, more than those suffering with heart disease, cancer, and diabetes combined (Gaskin and Richard 2012). Chronic pain is a complex biopsychosocial phenomenon (Gatchel et al. 2007; Hadjistavropoulos et al. 2011; Merskey and Bogduk 1994; Turk and Monarch 2018) and in spite of great advances in our understanding of pain's impact on its host, both

physiologically and psychologically, the social context in which pain is suffered remains relatively less studied (Blyth et al. 2007; Hadjistavropoulos et al. 2011). The dynamic interplay between the social environment and the individual in whom pain is experienced can greatly impact pain outcomes (Craig 2015; Hadjistavropoulos et al. 2011; Williams and Craig 2016). Several experimental studies have demonstrated that social connection may be analgesic (Eisenberger et al. 2011; Master et al. 2009; Younger et al. 2010), but steps to

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translate these findings into clinical practice remain unclear.

Museums, while traditionally outside of the public health sector, may be valuable partners in the effort to alleviate isolation and facilitate a sense of social connection (Chatterjee and Noble 2016; Todd et al. 2017). Indeed, a field of study and practice within museology called *Museums in Health* aims to promote museums as resources for improving health and well-being (Chatterjee and Noble 2016). A number of museums already offer programming that explicitly address various health related issues including but not limited to mental health problems, cancer and dementia. Camic and Chatterjee (2013) provide an overview of several of these programs as well as a thorough rationale for museums and art galleries as potential public health partners. Several characteristics of museums that are amenable to their use as public health partners in general, may be particularly helpful when developing interventions for individuals with chronic pain. For example, museums may be less stigmatizing than health care organizations because they do not diagnose or treat medical and mental health problems (Camic and Chatterjee 2013); Given the stigmatization of chronic pain, both internally (Waugh et al. 2014) and from health care providers (Cohen et al. 2011), this attribute may be advantageous when constructing an intervention for individuals with chronic pain. Museums' practice of offering free or reduced admission fees for special populations reduces impediments to access and supports regular attendance, two more characteristics that are advantageous for public health efforts (Camic and Chatterjee 2013). Finally, museums create contexts in which various communities can reexamine attitudes and behaviors to reduce socially exclusionary practices and increase social inclusion (Camic and Chatterjee

2013; Sandell and Nightingale 2013; Silverman 2009; Sommer 2013; White 2009), which in return may reduce the burden of chronic pain.

The cultural and organizational differences between museums and health care organizations may make potentially beneficial partnerships challenging, yet few detailed reports of successful partnership development exist to help navigate these differences (Camic and Chatterjee 2013) and clear guidance on successful methods for integration with conventional health care is lacking. This paper addresses these gaps in the literature by first describing the development of Art Rx – an innovative public health partnership between the Crocker Art Museum, an American Disability Act compliant museum and regional leader in public programming in Sacramento, California, and the Center for Pain Medicine at the University of California, Davis (UC Davis) – and then by assessing the feasibility of this unique partnership through semi-structured stakeholder interviews with participating health care providers and museum staff. Specifically, stakeholder perspectives are solicited regarding the feasibility of the partnership and its perceived impact on chronic pain. Previous work by our group explored the feasibility of this program from the perspective of individuals with chronic pain. Pilot data from a single group quasi-experimental mixed-methods study analyzed survey data collected pre-Art Rx museum tour, immediately post-tour and at three weeks post-tour ( $n = 54$ , 59 mean age [SD 14.5], 64.8% female). In addition, 14 participating individuals with chronic pain were interviewed. Preliminary effectiveness data from this study suggest that docent led tours in an art museum for individuals with chronic pain are feasible and may provide relief from perceived social disconnection and pain (Koeberner et al. 2018).

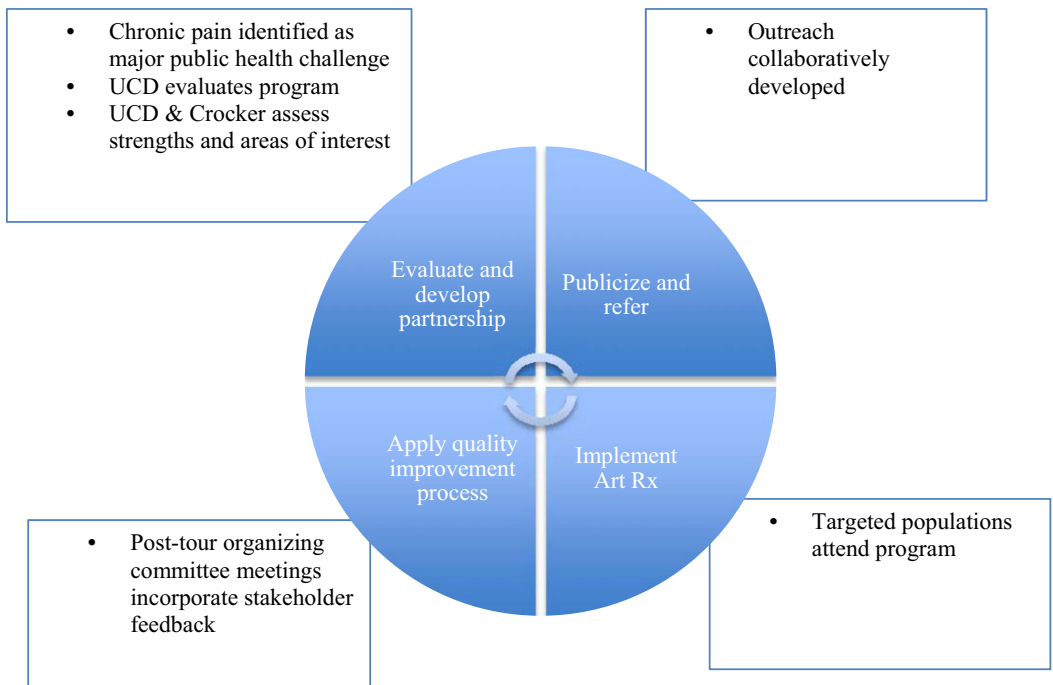
**PROGRAM DESCRIPTION**

**Intervention Development**

The following section details the initiation and development of Art Rx, including program design, structure, leadership and outreach. The Director of Integrative Pain Management (DIPM) within the UC Davis Center for Pain Medicine and lead researcher (IJK) initiated Art Rx through dialogue with leadership at the Crocker Art Museum to assess preliminary interest in developing a program targeting individuals with chronic pain. Once preliminary interest was established, the DIPM used an adapted framework for museums and art galleries as partners for public health interventions to guide the program’s development (See

Figure 1 – Art Rx Partnership Framework) (Camic and Chatterjee 2013). An organizing committee was formed, including the DIPM, the Adult Education Coordinator (AEC) at the Crocker Art Museum and several rotating museum docents (between 3 and 8 at any given meeting). Initial committee meetings focused on intervention design for individuals experiencing chronic pain. The Director of Pain Psychiatry and Behavioral Sciences, a pain management psychiatrist, provided consultation to the organizing committee to address challenges confronting individuals with chronic pain as well as any concerns that the AEC or docents had regarding working with this population.

Over the course of three meetings the organizing committee agreed to conduct free,



**Figure 1.** Art Rx partnership framework.

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**Figure 2.** Gallery photo courtesy of the Crocker Art Museum. [Color figure can be viewed at [wileyonlinelibrary.com](http://wileyonlinelibrary.com)]

docent-facilitated, one-hour monthly tours of the museum for any individual with chronic pain as well as his or her family members and/or friends. These Art Rx tours took place in one gallery and concentrated on dialogue about 3–5 art objects preselected by the Art Rx museum docents, thereby focusing on quality interactions with art objects rather than quantity of objects viewed (Figure 2). The tours' emphasis on the viewers' experience rather than the viewed objects aimed to facilitate a sense of inclusivity, a common approach among museum programs for marginalized or vulnerable populations (Camic and Chatterjee 2013; Mayer 1998; O'Neill 2010; Todd et al. 2017). In addition, docents and Crocker Art Museum staff emphasized inclusivity and accessibility by

highlighting that the museum is a public institution and encouraging and validating all perspectives on the art objects discussed. At least two docents facilitated each tour, rotating the responsibility among themselves. The lead docents for any given tour chose its content; the agency to choose the artworks on view encouraged docent engagement and participation. Changing the art objects viewed each tour helped to broaden the program's accessibility by appealing to and including multiple aesthetic sensibilities. For example, tours from 2017/2018 included "Women at the turn of the 20th century through the eyes of American painters," and "Hopes Springing High: Gifts of Art by African American Artists." Other tours have focused on objects from the museum's ceramics,





Gallery photo courtesy of the Crocker Art Museum. [Color figure can be viewed at [wileyonlinelibrary.com](http://wileyonlinelibrary.com)]

drawings, contemporary art and antiquities collections. Finally, all participants who were not in wheelchairs were provided with light-weight stools to facilitate accessibility and optimize comfort. Tours began in October 2014 and are ongoing at the time of this writing.

Following the initial pilot phase of six tours, a reassessment was planned to determine if the program should continue. In addition, from the outset of the program a quality improvement process was developed in which the organizing committee met after every tour to assure that stakeholder feedback was regularly and continuously addressed and incorporated into the program's development. Examples of incorporating stakeholder feedback as a result of organizing committee meetings include the suggestion to opt out of, versus into, using one of the museum's light-weight stools to minimize the potential for

embarrassment, requests to block off the gallery used on any given tour to the general public in order to provide a greater sense of intimacy among the Art Rx group and reduce ambient noise, and creation of a maximum number of participants (30) based on docent comfort level and informal participant feedback. Therefore, an inherent design feature of the program was adaptability based on feedback and expectations from all stakeholders, including participants, museum staff, and healthcare providers.

### **Program Outreach**

Both the museum and the Center for Pain Medicine shared outreach responsibilities. An initial launch event was hosted at the museum one month prior to the first tour. UC Davis health care providers from various departments

that treat individuals with chronic pain (e.g. Center for Pain Medicine, Physical Medicine & Rehabilitation, and the Primary Care Network), museum docents, museum leadership and staff, as well as the general public were invited to attend. The event consisted of an introductory presentation which outlined the intention of the pilot program as well as a mock Art Rx tour for attendees. Since the program was unique, an effort was made by both UC Davis and the museum to over-communicate its design and development to various stakeholders. Both the Crocker Art Museum and the Center for Pain Medicine created webpages to publicize the program. Art Rx was also regularly publicized in Crocker Art Museum marketing materials. In addition, the DIPM made regular invited presentations to various clinics throughout the UC Davis Health System to inform them of the program. Finally, flyers, both electronic and paper, were made available to health care providers from various departments for distribution to their patient populations. Therefore, the design and marketing of Art Rx was both referral based, in which health care providers suggested the program to patients, and open to the general public.

Art Rx drew from O'Neil's research (O'Neill 2010) recommending a programmatic culture that was intentionally friendly and committed to quality improvement. For example, both the DIPM and AEC were easily accessible, designated Art Rx champions. Their contact information was made available to the general public, participants, health care providers, and museum staff. Large simple signage was developed to welcome and direct participants at the museum. Signage was visually appealing to invite attention but had no information pertaining to pain or illness. The intention of this design choice was to promote the program while mitigating any potential stigma associated with

participation. Museum staff, starting with those who collected tickets, were trained on the program and instructed to be welcoming and helpful to participants.

The registration process was designed to be simple and included the availability of same-day registration. Participants registered for Art Rx tours via telephone, email, or an online system set-up and managed by the AEC. Registration in advance of the tours helped the organizing committee to determine the number of docents needed for any particular tour. However, no participants or guests were turned away if they had not registered in advance. Participants who provided an email address received an email reminder one week prior to the tour with instructions on directions, parking, and arrival time, as well as restating contact information for further information. Whenever possible, either the AEC or DIPM also called registered individuals one to two days prior to the tour to confirm attendance and address any questions or concerns. The organizing committee decided that two docents would facilitate each tour, with a maximum of 30 participants per tour. Docents met prior to each tour to plan its route, the art to be viewed, potential topics of discussion, and their roles. As mentioned, after each tour the organizing committee met to debrief and identify areas for improvement.

## METHODS

### Interview Participants

The UC Davis Institutional Review Board approved this study. Interviewees included all museum staff and health care professionals from the Center for Pain Medicine who were involved with Art Rx, as well as one

participating physical therapist from within the larger UC Davis health system; all interviewees were English-speaking, older than 18 years of age, and provided informed consent. Interviews took place over four months beginning after the initial set of pilot tours was completed.

### Data Collection and Analysis

The lead researcher (IJK) conducted semi-structured interviews with all participants. The semi-structured interview format allowed relevant predetermined topics to be covered, while also allowing new concepts to emerge (Creswell et al. 2011; Lofland and Lofland 2006). Audio recordings of interviews were transcribed verbatim. The lead research (IJK) and a second researcher (DP), a medical sociologist and expert in qualitative methods uninvolved in the Art Rx tours, analyzed the transcripts for recurring themes related to the experience and feasibility of Art Rx using a thematic analysis framework (Boyatzis 1998) and the qualitative analysis software package MAXQDA 12 (VERBI Software 2017). These two coders iteratively categorized and subcategorized transcripts into more detailed themes focusing on issues of feasibility and developed a codebook with definitions and text examples from interviews (Maxwell 1992).

## RESULTS

Eighteen individuals were interviewed, 7 from the Center for Pain Medicine, 1 from the larger UC Davis health system, and 10 from the Crocker Art Museum. The Center for Pain Medicine is composed of a multidisciplinary team of health care providers. Interviewees represented the diversity of the Center's providers and leadership, and included physicians with specialty training in internal medicine,

psychiatry, physical medicine and rehabilitation, and anesthesiology, as well as non-physician staff trained in psychology and physical therapy. A total of 10 museum stakeholders were interviewed including 7 Art Rx docents and 3 members from museum leadership. Through qualitative thematic analysis, transcript segments were conceptually grouped into 4 overarching and interdependent themes pertaining to the program's feasibility: (1) innovation; (2) perceived programmatic impact; (3) views on the programmatic partnership; and (4) assessment of programmatic success.

### Program Feasibility

#### Innovation

Both museum staff and health care providers found Art Rx to be an innovative program aligned with their organizational mission, albeit for some differing reasons. Museum staff tended to focus on the added value of the program's research component, and how Art Rx helped to lower barriers to attendance and increase museum access by targeting a non-traditional audience. Museum personnel found the research overlay of the program to be unobtrusive and the scientific exploration of the museum's therapeutic potential to be "cutting edge," as it was viewed as uncommon within museum practice. Furthermore, interviewees from the museum found the suggestion that a museum may be of measurable therapeutic benefit to its constituents to be personally and professionally validating. For example, one museum staff member stated, "the idea of, in my job, having some small role in making [Art Rx participants'] lives a little bit better...felt so innovative and exciting." Generally, the program, while novel, was felt to be aligned with the museum's mission and a meaningful contribution to its robust and diverse efforts, as one

museum staff member expressed it, “to be of value and relevant within the community.”

In comparison, health care providers tended to identify the research overlay of the program as more essential than innovative, and instead focused on the uniqueness of the public health partnership itself and of a socially-based intervention for chronic pain. While providers uniformly felt the program had face validity in terms of its potential to address the isolation and social disconnection often experienced by individuals with chronic pain, many felt outcomes data would help to assure the program’s sustainability and providers’ continued engagement.

#### Perceived programmatic impact

Interviewees felt the perceived impact of the program for individuals with chronic pain fell into four general domains: facilitating social connection, mitigating isolation, creating opportunities for learning and offering a meaningful distraction from pain. Among the health care providers interviewed there was widespread recognition that social connection has a “powerful impact on mood, wellbeing, and pain.” Providers not only acknowledged the social component of chronic pain in their interviews, but also noted their difficulty in addressing it. One provider stated, “The most appealing part [of Art Rx] to me is breaking down the isolation that is inherent in chronic illness and pain; that I can’t usually do.” Interviewees regularly noted the isolating nature of pain, its ability to decrease an individual’s emotional, physical and social range. One health care provider described the relationship between isolation and chronic pain as follows: “[Pain is] made to get your attention, so when your attention is drained, it is hard to be connected to the world, so isolation becomes an intrinsic part of the problem of chronic pain.” Health care providers felt Art Rx

extended their practice and ability to care for their patients more completely. One interviewee said that offering Art Rx to his patients was like saying, “Hey, we care about you not just clinically, but outside the clinic too.” Another provider noted, “People live in the community, they do not live in the clinic, they do not live in the hospital, so [Art Rx] is a way to reach them out there.”

The social dynamics inherent to Art Rx were perceived by several health care providers to offer additional learning opportunities for Art Rx participants: “I think that the second treatment component is learning from others, watching, looking at others.” Finally, Art Rx was often perceived to be a very low risk intervention that could provide a meaningful distraction from pain. One health care provider said, “If you are able to distract yourself, even for a moment, away from pain or the perception of physical or emotional pain, that right there is a way to . . . cope with the existing pain.” Taken together with the opportunity for Art Rx participants to learn, this distraction analgesia was felt to have the potential for sustained impact, “I think that momentary or incremental improvement, certainly can lead to long term improvement [in their management of pain and its symptoms].”

Several health care providers acknowledged that individuals with chronic pain often report negative or marginalizing experiences with the healthcare system, and felt that Art Rx could provide a positive complementary experience. For example, one provider noted that pain patients may feel “invalidated” by their health care providers and that his patients reported that the experience of Art Rx facilitated “feeling heard, feeling seen, feeling that they matter in this world.” Providers identified Art Rx’s potential for validation, normalization and distraction from pain as factors that may benefit



individuals with chronic pain. A provider noted, “one of my patients mentioned that ‘it was just so nice for me to get out and forget about my pain and be a normal person.’” Finally, several health care providers felt that Art Rx reflected positively on the pain service as exemplified by the following quotation, “[Art Rx is] a really nice addition [to the pain service], it has extended us in a way that makes us look better. . . .that we are doing things that others are not doing that are thoughtful, and I think that’s shared by the leadership at UC Davis.”

Generally museum staff felt the program benefited participants, but were less likely to suggest potential mechanisms. One interviewee simply stated, “I like to think of museums as places of possibility.” While another said:

I’m not going to make a determination that X work of art, or X experience is going to be the one that sticks with somebody, or changes their life. I’m also not going to be the person that says a transformative meal in our cafe isn’t as valid a transformative experience as one in our gallery. It’s just that I want to provide an opportunity for the person, for all sorts of different people, to find what inspires them here.

However, several museum staff members, reflecting on the power of art and their own experiences with pain offered specific ideas on how Art Rx may be helpful for individuals with chronic pain. One museum staff person suggested that, “Art can transport people to different places. . . .experiences they can never have in their corporeal selves, and I think opening their eyes and letting people see, really see, something that they might not otherwise, can have great restorative effects.” While another staff member, drawing from her personal experiences with chronic pain, felt that Art Rx might provide a meaningful respite stating, “I have family

members who are dealing with pain, so I think I have come to value just how important it is for people to have even just a minor opportunity to be distracted from what becomes an all-encompassing, all day long experience.”

### Views on the programmatic partnership

Individuals from both organizations voiced appreciation for the collaboration and recognized the other organizational stakeholder as a reputable entity whose “brand” reflected positively on their own. Close physical proximity between the two organizations allowed for easy and regular in-person contact between those involved in the program. Importantly, both organizations share a culture that values collaboration. The Center for Pain Medicine has a number of ongoing interprofessional (Fishman et al. 2013) and community collaborations, and the multidisciplinary faculty reflects a core belief that chronic pain management requires diverse partnerships. Similarly, the Crocker Art Museum has a strong commitment to community engagement, and as one member of the museum’s leadership stated, “we are a collaborative institution [that] believes strongly in partnering with other institutions.”

Museum staff held “UC Davis in really high regard, particularly in regards to the sciences” and felt the partnership reflected positively on the museum. Museum staff noted that because the public health partnership, the program, and the study of the program were all innovative and unexpected ventures, they could expand the “horizons on how a museum has value to a community and why they are essential.”

The value of the partnership from the health care provider perspective was, in part, grounded in recognition that chronic pain represents an enormous public health problem, and

that there is an urgent need for safe and effective treatment options that may require “out of the box” thinking. Art Rx was felt to represent a safe, potentially effective, and novel response to the largely unaddressed social component of chronic pain. As one provider stated, “we desperately need to find effective treatments [for chronic pain]. I think [Art Rx] has a lot of potential. . . I think it only adds to the Center for Pain Medicine.” All of the health care providers interviewed knew of and had positive associations with the Crocker Art Museum. The museum partnership was felt to add “a very positive note to the reputation of the Center,” and extend the Center’s work beyond conventional care.

Interviewees from both organizations felt the partnership was adaptive and responsive to stakeholder feedback. One museum staff member reflected on the ease of the program’s development by saying, “It has been much more organic than what I expected, I thought it might have to be more prescriptive.” The partnership as a whole and the individual stakeholders involved with it were commonly viewed as “very altruistic,” service-oriented, and trying “to increase the value that people hold for their lives by using our resources.” The perception of a sincere intention to serve was identified as a sustaining feature of the program and partnership as well as an appreciated quality of the other organizational stakeholder.

#### **Assessment of programmatic success**

Museum staff focused on the program’s potential to increase access, engage non-traditional populations, and to scientifically explore the therapeutic potential of the museum. In addition, Art Rx was described as an easily understood narrative for museums’ social value that could be used to garner support. One museum staff member said Art Rx is “very

understood by potential supporters, politicians, elected officials, the press, and others that the museum has made a difference in people’s lives.” Participant narratives were cited as a standard metric to determine a program’s success, yet there was an openness and interest in developing more formal evaluation measures. As one staff member said, “Just people telling us that their lives have improved because of their experiences at the museum, it makes us feel good and happy about what we do everyday.”

Several health care providers underscored the need for outcomes data to determine success. For example, one provider said, “outcomes would make me feel much more comfortable prioritizing this as an intervention.” Providers identified pain, function and quality of life as outcomes of particular interest. However, perhaps due to the program’s perceived low risk, many providers noted that testimonials or indicators that do not directly measure pain relief, such as patient satisfaction, would be sufficient for them to offer ongoing support: “I have had patients tell me that they enjoyed it and I would still feel like it was a success if there wasn’t any quantitative data.” Providers also felt outputs, such as the number of participants, the number of returning participants, and the number of participants who brought guests were important factors in evaluating the program’s success. Finally, both health care providers and museum staff identified program champions as important factors in Art Rx’s development and success. As one museum staff member stated, “what makes the number one determination of whether or not something can actually get tried and continues is whether or not there is a staff champion that really wants to continue to do it.” In fact, several interviewees identified the UC Davis and Crocker Art Museum champions’ “commitment” and “dedication” to Art Rx as key to its sustainability and success. Generally,



Gallery photo courtesy of the Crocker Art Museum. [Color figure can be viewed at [wileyonlinelibrary.com](http://wileyonlinelibrary.com)]

interviewees felt informed about Art Rx, however, as a novel program, lack of awareness is a potential threat as reflected by one health care provider who stated simply, “I forget that we have the program.”

## DISCUSSION

This study describes the development and demonstrates the feasibility of a unique museum-based public health partnership to address chronic pain. The UC Davis Center for Pain Medicine and the Crocker Art Museum developed and sustained a partnership based on a shared commitment to interdisciplinary collaboration, public service and innovation. Health care providers and museum staff found the partnership practicable and aligned with their respective organization’s mission. Beginning the partnership via a pilot program and an

ongoing quality improvement process that actively incorporated stakeholder feedback were identified as factors contributing to the partnership’s success. Mutual respect for one another’s organizations, the perception of altruistic intentions, as well as partnership champions from both organizations facilitated the program’s development and sustainability. Stakeholders from both organizations found the evaluation and research components of the program to add value to the partnership.

The health care providers interviewed in this study embraced the biopsychosocial model of chronic pain, but felt it was difficult to address the social component of pain in their clinical practices. Art Rx was viewed as a safe and welcomed attempt to operationalize a socially-based intervention for the patients that they serve. Health care providers and museum staff supported several assertions made in the

literature that suggest museums may be beneficial public health partners (Camic and Chatterjee 2013). Health care providers spoke of the stigma and marginalization often experienced by individuals with chronic pain (Cohen et al. 2011; Waugh et al. 2014), and felt museums may provide an alternative and validating context for these individuals. In addition, the views expressed by the health care providers interviewed in this study aligned with those of referrers to a similar arts on prescription program; both found social prescribing feasible and beneficial for their patients, citing the additional treatment option as valuable when helping individuals with complex social problems (Stickley and Hui 2012). Museum staff underscored their commitment to making the museum an inclusive and accessible space for everyone, and voiced an active interest in targeting non-traditional audiences such as those with chronic pain.

This study has several limitations. Generalizability is restricted due to its small and qualitative nature. Further study is needed to determine if the results of this study are applicable to different museum types and across settings. In particular, museums with collections containing difficult and provocative content (e.g. holocaust museum), while potentially valuable partners, may invoke negative cognitive and emotional processes among participants that should be considered in program and research design (Lehrer et al. 2011). Museums with difficult collections and healthcare organizations considering collaboration may wish to include specialists in their efforts, such as art therapists or psychologists, to help assure the constructive use of the collections in question. That said, the program described in this paper may be easier to replicate and be less stigmatizing since it did not involve those who treat or diagnosis medical or mental health problems

(Camic and Chatterjee 2013). Limited resources required the program's champion from UC Davis (IJK) to also serve as interviewer, which could have unintentionally influenced respondents' comments. To mitigate the potential for biased responses and/or analysis a second researcher (DP) uninformed in program implementation co-developed the interview guide and assisted with data analysis. In addition, several interview questions were designed to explicitly elicit critical feedback and to challenge the program's feasibility and significance. Nevertheless, interviewees' comments were largely positive; the most critical feedback pertained to the need for outcomes data and being more adequately informed about the program. Challenges facing novel integrative medicine programming can be uptake and buy-in by stakeholders (Perard et al. 2015; Witt et al. 2015); and in spite of intentional efforts to over-communicate about the program, some health care providers still felt uninformed about it or did not think to refer patients during clinical encounters.

Several strengths of this study warrant mention. We believe the partnership and program described in this paper is the first between a museum and a healthcare organization to address the social dimension of chronic pain. Given the limited resources available to navigate the cultural and organizational differences between museums and health care organizations (Camic and Chatterjee 2013), the program description and stakeholder feedback provided in this paper may be helpful for those wishing to develop initiatives of their own. In response to the dual public health crises of chronic pain and opioid analgesic abuse, the Institute of Medicine has called for a "cultural transformation" in pain management (Committee on Advancing Pain Research, Care, and Education, Institute of Medicine

2011). The partnership and program detailed in this paper represent a safe, potentially effective and innovative complement to existing models of care for individuals with chronic pain. The partnership has created a scaffolding between two seemingly disparate organizations committed to public service that has led to further programming including a mindfulness meditation program in the museum's galleries and a study that explores the effectiveness of the existing Art Rx tours to decrease caregiver burnout for individuals offering palliative care. Also, as noted earlier, Art Rx tours are now a fully integrated program in the museum's portfolio offered continuously since 2014. The success of the initial programming for individuals with chronic pain and the early adoption of a quality improvement process laid the ground work for an adaptive partnership that can iterate and experiment based on stakeholder feedback. Importantly, the partnership described in this paper establishes a mechanism for developing programming that may be of value to populations beyond individuals with chronic pain. The museum may be a place to treat the social isolation that is inherent to chronic illness as well as the social exclusion experienced by other marginalized members of society. While future clinical effectiveness research is needed to determine what value this kind of partnership may have for individuals with chronic pain, our hope is that this paper has demonstrated that the effort required to develop such a partnership is acceptable to the various stakeholders and may enhance their organization's value proposition. We can envision that in other contexts the partnership described here between a health care organization and a museum may be adaptable to other civic organizations including but not limited to botanical gardens, performing arts centers, restaurants and sporting venues.

The widely endorsed definition of pain put forth by the International Association for the Study of Pain (IASP), "An unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage" (Merskey and Bogduk 1994), grounds pain as a subjective experience with psychological features. While this definition is an important advance over an understanding of pain as solely sensory, it does not recognize pain's sociality (Williams and Craig 2016). Indeed, Williams and Craig (2016) have called for an updated definition of pain to include explicit reference to its sensory, emotional, cognitive and *social* components. Beyond acknowledgement, it is paramount to address the social component of pain. This is ever more important as the US deals with the social contradictions implicit in a major public health crisis marked by nearly 1 in 3 Americans afflicted by chronic pain (Committee on Advancing Pain Research, Care, and Education, Institute of Medicine 2011), prevalent abuse of pain medicine despite a high prevalence of pain (Okie 2010), and an insufficiently prepared healthcare workforce (Fishman et al. 2013, Committee on Advancing Pain Research, Care, and Education, Institute of Medicine 2011).

## CONCLUSION

Museums have long held that part of their mission is to serve as, "agents of human well-being and social change." (Silverman 2009, p. 4) This study furthers that mission by demonstrating the feasibility of a novel public health partnership between an academic tertiary care pain center and a public art museum intended to facilitate social connection and alleviate pain among individuals with chronic pain. The detailed program description provided in this



paper may assist others to initiate, structure and implement similar initiatives in the future.

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## CONFLICT OF INTEREST

Drs. Koebner, Fishman, Paterniti, Sommer, Ward, and Joseph have no potential conflicts of interest to report. **END**

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