

1 Supplemental Table 1. Illustrative Interview Participant Quotes Regarding Impacts of  
 2 Inadequately Managed Post-Operative Acute Pain

Theme	Illustrative Quote	Surgery Type
<b>Impacts of inadequate pain management</b>		
<b>Physical functioning</b>	<p>When I say that I literally sat on the couch with the remote—that’s all I did, because you couldn’t—I couldn’t even change you know, turn the page of a book because I couldn’t hold it and turn the page. (Participant 07)</p> <p>I mean, I still remember, you know, trying to walk on it, and they said, “Well you need to walk and exercise,” and I’m going, “Well heck, I can barely stand.” I mean, it hurt. (Participant 03)</p>	<p>Orthopedic (shoulder repair)</p> <p>Orthopedic (knee replacement)</p>
<b>ADLs</b>	<p>I couldn’t do almost anything for myself...I was in a recliner and sleeping in a recliner, but I couldn’t get up on my own out of the chair. I couldn’t sit on the toilet on my own. I could not shower on my own. I couldn’t get dressed on my own. (Participant 08)</p> <p>I would have to try to time those activities around [the pain medication]. Like I would have to try to time my shower, like, okay, “I’m gonna take my medicine, and then in like an hour, then I will be able to take a shower.” You know? And I did get a shower chair, so that I would be able to sit down while I was showering. (Participant 06)</p>	<p>Orthopedic (shoulder repair)</p> <p>Orthopedic (knee replacement)</p>
<b>IADLs</b>	<p>I couldn't go in the kitchen and cook, 'cause I couldn't stand. I tried using a chair, to just prop my leg up on—or my knee up on to hold my ankle in the air, but, that hurt too. (Participant 02)</p>	<p>Orthopedic (ankle repair)</p>

Theme	Illustrative Quote	Surgery Type
	<p>I actually relied on my husband to do a lot of these things [daily tasks]...I just—you know, just couldn't do it. I was in pain and then, you know, it was like overwhelming for me. It was too much for me. (Participant 10)</p>	<p>Orthopedic (hip replacement)</p>
<b>Mood/Emotions</b>	<p>You know, when someone's in pain...small things affect them...and you get mad easily, you know what I mean? (Participant 04)</p> <p>Like I was so unhappy—I would sit on the couch and sob and cry...Because...I was in so much pain, I was just walking in circles, just to try to distract myself of how incredibly painful it was. (Participant 07)</p> <p>I felt that I wasn't a good person to hang out with [laughs] because I was kind of angry from the pain. The pain turned into anger, I think. Because [the pain] incapacitated me. (Participant 15)</p>	<p>Abdominal (cholecystectomy)</p> <p>Orthopedic (shoulder repair)</p> <p>Abdominal (gastric bypass)</p>
<b>Sleep</b>	<p>I didn't get much sleep...It [the pain] was—ah, it was waking me up...so that I wasn't getting consistent sleep. I was waking up at odd hours of the night and not able to return to sleep, at times. Prior to this all I was...I didn't have any sleep problems. I was a very good sleeper. (Participant 05)</p> <p>I slept less, I will say instead of my normal 7 hours of sleep that I normally get, I would probably sleep about 3 or 4 hours and then get back up because of the pain. I just couldn't lay down for a long period of time. So, I would get up and sit up for a while then try to lay back down after a couple of hours. So, I was sleeping more or less in increments. (Participant 09)</p>	<p>Abdominal (cholecystectomy)</p> <p>Abdominal (caesarean section)</p>

Theme	Illustrative Quote	Surgery Type
<b>Work and productivity</b>	<p>I extended [my time off from work]. I actually could have worked from home but I, I just didn't feel that I could, you know, do my job well. So, I didn't wanna...I just figured it would be better to take off the time because I was distracted from the pain. (Participant 13)</p> <p>I originally took just 10 days [off of work]. I was really mistaken...I work a little bit out of the house right now...so I've been doing a little bit of that...I don't know if it's pain and drugs...but you just can't concentrate to the full extent, just because you're distracted by things, like not being comfortable or having to type one-handed or, you know, just adjusting. And it just is constant. And so it's really hard to keep focused, I would say. (Participant 07)</p>	<p>Abdominal (appendectomy)</p> <p>Orthopedic (shoulder repair)</p>
<b>Recovery from surgery</b>	<p>I—so they had me go in [to physical therapy] and...they tried to move me around and I sobbed through the whole thing. And so then they said, "Okay, we're gonna stop"...So, I haven't really started anything yet, just because the intensity of the pain has been so much that I can't—do anything at this point yet. (Participant 07)</p> <p>But I think also [the pain] really affected my ability to really do physical therapy to the full amount too. Because I was in a lot of pain to the point where one of the days, I had to call the therapist and just say, "There's just no way I can do the physical therapy today, we're gonna have to push it to tomorrow." (Participant 06)</p>	<p>Orthopedic (shoulder repair)</p> <p>Orthopedic (knee replacement)</p>
<b>Lack of education and unrealistic pre-surgery expectations</b>	<p>I don't think that there was ever the conversation until afterwards when I first saw the doctor and talked about how...horrible I was feeling and how I had no idea and he...said to me..."We probably should've talked about expectations because some people go through [the surgery] and they think it's not that bad, and some people have</p>	

Theme	Illustrative Quote	Surgery Type
	<p>this really high, elevated pain like what you're experiencing." And he...just wanted to assure me that everyone's journey was different 'cause I was so worried that there was something wrong, that it's a failed surgery. (Participant 07, orthopedic, shoulder repair)</p> <p>I don't know, I felt that I shouldn't feel the pain as much as I did...I should feel better. It should be better. Instead, it was very intense." (Pt 10, orthopedic, hip replacement)</p> <p>I expected pain and discomfort for a couple of days maybe. Um, but not for 2 weeks, the way I was." (Participant 15, abdominal, gastric bypass)</p>	

- 3 Abbreviations: ADLs, activities of daily living; IADLs, instrumental activities of daily living;
- 4 HCPs, healthcare providers; OTC, over-the-counter.

5 Supplemental Table 2. Post-Operative Pain Medication Side Effects Reported by Survey

6 Participants

	Overall Sample (N=323)		Inadequately Managed Pain Subgroup (n=122)	
	N	%	n	%
<b>Side Effect(s) From Medication<sup>a</sup></b>				
Constipation	170	52.6	67	54.9
Drowsiness	128	39.6	52	42.6
Dizziness	88	27.2	40	32.8
Nausea	86	26.6	45	36.9
Headaches	37	11.5	20	16.4
Vomiting	37	11.5	22	18.0
Abdominal pain/cramping	31	9.6	9	7.4
Diarrhea	25	7.7	13	10.7
Heartburn	11	3.4	5	4.1
Other	9	2.8	7	5.7
I did not have any side effects <sup>b</sup>	42	13.0	17	13.9

7 <sup>a</sup> Groups are not mutually exclusive unless otherwise specified.

8 <sup>b</sup> This group is mutually exclusive.