

Appendix

TABLE E-1 Questionnaire as Disseminated in this Study

Section I: Training and Practice Background
Question 1: Please tell us what best describes your current position:
Attending surgeon at an academic institution and/or university affiliate
Attending surgeon in private practice and/or at a community hospital
Hand surgery fellow
Orthopaedic surgery resident
Plastic surgery resident
Question 2: If an attending surgeon or fellow was selected for Question 1*, please describe your training background prior to fellowship. If resident was selected for Question 1*, please select your current level of training.
Residency in orthopaedic surgery
Residency in plastic surgery (with or without general surgery)
Residency in general surgery (without plastic surgery)
Other (please specify)
PGY-1
PGY-2
PGY-3
PGY-4
PGY-5
PGY-6 or higher resident (includes all residents in independent plastic surgery programs who have already completed an ACGME-accredited surgical residency)
Question 3: If attending surgeon was selected for Question 1*, how many years have you been in practice?
≤5 years
6 to 10 years
11 to 15 years
16 to 20 years
>20 years
Section II: Procedure-Specific Practices (For the following series of questions, there will be a common surgical procedure listed at the top of your screen. Please answer the question as it pertains to the initial prescription written for that particular surgical procedure. If you do not have experience with that particular procedure, please leave the pertinent questions blank.)
A. Carpal Tunnel Release
Question 1: For the above procedure, which medication are you most likely to prescribe:
Hydrocodone (Vicodin, Lortab, Norco, Vicoprofen, Lorcet, Hycodan)
Oxycodone (Percocet, Roxicet, Roxicodone, Oxycontin, Percodan)
Codeine (Tylenol 1-4, Paracod, Co-Codaprin, Nurofen Plus)
Tramadol (Ultram)
Other opioid not listed above (please specify drug[s] and dosage[s] below)
Other non-opioid(s), please specify
Question 2: If an opioid was selected for Question 1*, what is the opioid content that you would prescribe (in milligrams) for this medication per dose? If a non-opioid was selected for Question 1*, please provide the name and dosage of medication you typically prescribe for this surgical procedure postoperatively.
Question 3: How many pills do you typically prescribe of this medication postoperatively after this procedure?
Questions 1 through 3 then repeat for*
B. Trigger finger release
C. Thumb carpometacarpal arthroplasty
D. Distal radial fracture open reduction and internal fixation
Section III: Prescriber Perceptions and Influencing Factors
A. Basis of Prescription Preferences

<p>Question 1: Which of the following factors are most influential in your postoperative analgesic prescribing behaviors? Please rank options in order of importance to your particular preference, with (1) being most important, (2) being second most important, and so forth. You may rank all options, but please rank at least 1. If a choice does not play a role in your decision, click NA (not applicable) on the right side to eliminate that choice from your ranking options.</p>
Personal experience with the procedure performed
Maximize patient satisfaction and minimize dissatisfaction
Current evidence or literature relative to procedure performed
Attending surgeon preference (for trainees) or the manner in which you were trained (for attending surgeons*)
The same medication, dosage, and number of pills prescribed for all patients undergoing a given surgical procedure
Material and/or financial support provided by pharmaceutical company
Concern that patient will run out of medication or to avoid having to re-prescribe prior to the next visit
B. Patient Medication Adherence
<p>Question 1: On average, how much of their total dispensed pain medications do you believe your patients are taking?</p>
Most to all (81% to 100%)
More than half (61% to 80%)
Roughly half (41% to 60%)
Less than half (21% to 40%)
Little to none (0% to 20%)
Unsure
<p>Question 2: When patients do not take all of their dispensed medications, what do you believe best describes what they do with leftover medications? Please select all that may apply.</p>
Returned to pharmacy or health-care provider
Disposed of by the patient
Saved or stored in case pain occurs in the future
Given to family member or friend
Abused or used recreationally or inappropriately
Sold for profit
C. Attending-Trainee Communication
<p>Question 1: If attending surgeon was selected for Question 1, Section I*: Do you or have you had explicit conversations with your residents and fellows specifically regarding postoperative pain management guidelines?</p>
Yes
No
Not applicable; I do not work with surgical trainees
<p>Question 2: If resident or fellow was selected for Question 1, Section I*, have you had explicit conversations with your supervising attending surgeon(s) specifically regarding postoperative pain management guidelines?</p>
Yes
No
<p>Question 3: If resident was selected for Question 1, Section I*, have you had explicit conversations with your supervising residents specifically regarding postoperative pain management guidelines?</p>
Yes
No

*The text was presented solely to illustrate the adaptive nature of the questionnaire and was not visible to respondents.

TABLE E-2 Linear Data Transformation for Opioid Prescriber Influencing Factors* (Shown in Figure 1)

Questionnaire Response	Scaled Score
1 (most important)	100
2	85.7
3	71.4
4	57.1
5	42.9
6	28.6
7 (least important)	14.3
_ (blank; NOT a factor)	0

*Respondents were asked to rank the most influential factors on their prescribing behavior, with a total of 7 possibilities (1 = most important, 2 = second-most important, 3 = third-most important, 4 = fourth-most important, 5 = fifth-most important, 6 = sixth-most important, 7 = least important, but still of some influence). Respondents also had the option of leaving any factors blank that had no influence on their behavior whatsoever. A linear data transformation of the rankings from each respondent was performed using a multiplier of 100/7 to obtain a score scaled from 0 (minimum) to 100 (maximum) for each of the 7 potential factors as shown in the table. The scaled scores were then averaged for each group to obtain the scores depicted in Figure 1. For example, Respondent 1 ranks personal experience as the most important influence, and respondent 2 ranks it fourth-most important. The mean scaled score is $(100 + 57.1)/2 = 78.6$. Of 10 respondents, 1 respondent ranked drug company support as the second-most important influence, and the remaining 9 respondents left it blank, indicating that it played no role in their behavior. The mean scaled score was $(85.7 + [0 \times 9])/10 = 8.6$. Note that a mean score of 100 could only be obtained if all respondents of a given subgroup ranked a factor as the most important influence on their behavior.