

Table E-1

Sample Size Calculation

$$\begin{aligned}n/\text{grp} &= 2[(Z\alpha + Z\beta)^2 \sigma^2]/\delta^2 \\&= 2[(1.96 + 0.84)^2 (5.3)^2]/5.1^2 \\&= 16.93\end{aligned}$$

This number was inflated by 15% to account for patients who may drop out, cross over, or be lost to follow-up. The final number needed for each group was 20, and the total study sample included 42 subjects.

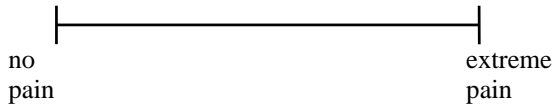
Table E-2

The WESTERN ONTARIO OSTEOARTHRITIS OF THE SHOULDER INDEX (WOOS)*

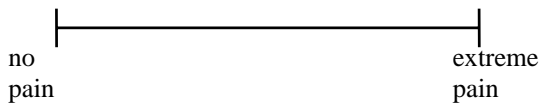
Section A: Physical Symptoms INSTRUCTIONS TO PATIENTS

The following questions concern the physical symptoms you have experienced due to your shoulder problem. In all cases, please enter the amount of the symptom you have experienced in the last week. (Please mark your answers with a slash “/”.)

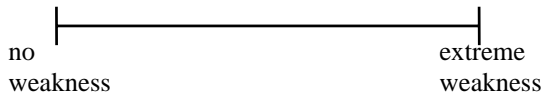
1. How much pain do you experience in your shoulder with movement?



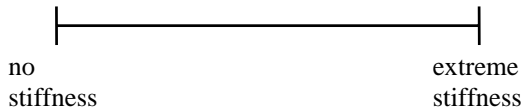
2. How much constant, nagging pain do you have in your shoulder?



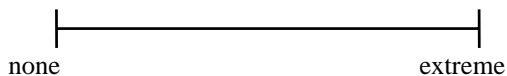
3. How much weakness do you experience in your shoulder?



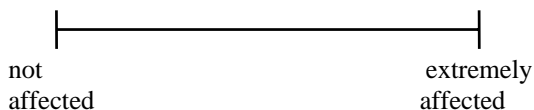
4. How much stiffness do you experience in your shoulder?



5. How much grinding do you experience in your shoulder?



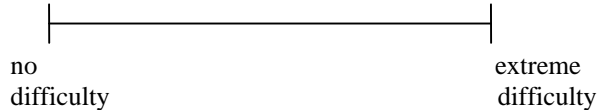
6. How much is your shoulder affected by the weather?



SECTION B: Sports/Recreation/Work INSTRUCTIONS TO PATIENTS

The following section concerns how your shoulder problem has affected your sports or recreational activities in the past week. For each question, please mark your answers with a slash “/”.)

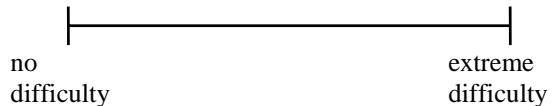
7. How much difficulty do you experience working or reaching above shoulder level?



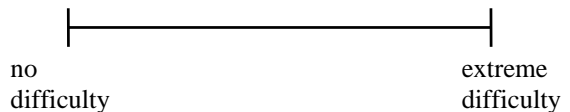
8. How much difficulty do you experience with lifting objects (eg. grocery bags, garbage can etc.) below shoulder level?



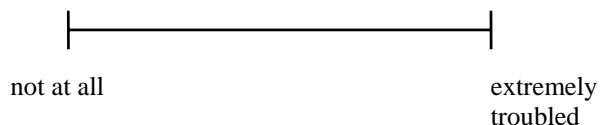
9. How much difficulty do you experience doing repetitive motions below shoulder level such as raking, sweeping or washing floors because of your shoulder?



10. How much difficulty do you experience pushing or pulling forcefully because of your shoulder?



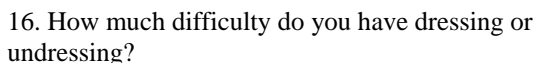
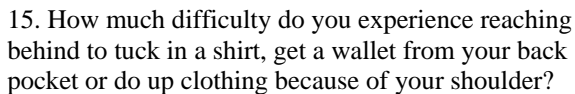
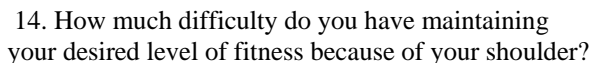
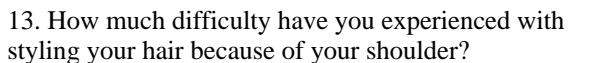
11. How troubled are you by an increase in pain in your shoulder after activities?



***On the actual form the lines are 100-mm long.
(This form is reproduced by permission of the
Fowler Kennedy Sport Medicine Clinic.)**

SECTION C: Lifestyle

12. How much difficulty do you have sleeping because of your shoulder?



SECTION D: Emotions

17. How much frustration or discouragement do you feel because of your shoulder ?

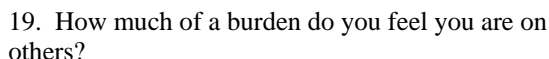
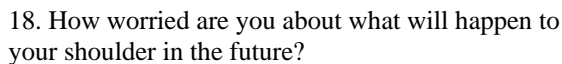


Table E-3: All Outcomes in Patients Following Hemiarthroplasty or Total Shoulder Arthroplasty at 2 Years Follow-up Using Intention to Treat and Efficacy Analysis

Evaluation Tool	Intention to Treat p value	Efficacy p value
Total WOOS	0.42	0.63
Physical Symptoms	0.37	0.51
Sports/Recreation/Work	0.58	0.87
Lifestyle	0.16	0.24
Emotions	0.33	0.61
McGill Pain	0.59	0.76
McGill VAS	0.44	0.74
SF-36 Mental	0.72	0.54
SF-36 Physical	0.63	0.92
ROM	0.75	0.81
ASES	0.53	0.62
Constant	0.83	0.54
UCLA	0.11	0.42

Legend

WOOS = Western Ontario Osteoarthritis of the Shoulder Index

McGill Pain = McGill Pain Questionnaire

McGill VAS = McGill Pain Visual Analogue Scale

SF-36 Mental = SF-36 Mental Component Scale

SF-36 Physical = SF-36 Physical Component Scale

ROM = range of motion

ASES = American Shoulder and Elbow Surgeons Evaluation Form

Constant = Constant Score

UCLA = University of California at Los Angeles Shoulder Rating Scale