

Identifying Factors Underlying Variation in the Cost of Acetabular Labral Repair or Debridement during Hip Arthroscopy: A Time-Driven Activity-Based Costing Analysis

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Appendix Table 1. Time-Driven Activity-Based Costing (TDABC) Process Maps: Preoperative Phase

Task	Personnel	Duration (minutes)	Probability
Check-In/Registration	Receptionist/Registration Clerk	10	1
Pre-Op Room Preparation	Orderly	10	1
Anesthesia Machine Preparation	Anesthesia tech	5	1
Anesthesia ‘MSMAIDS’ Setup	CRNA	20	1
Registered Nurse Consult and Assessment (consent, IV placement, etc.)	Registered nurse	35	1
Preoperative Monitoring	Registered nurse	5/hour	NA*
Circulating Nurse Consult	Circulating nurse	8	1
Orthopedics Pre-Op Consult and Evaluation (Discussion of risks, benefits, post-op pain management, surgical site confirmation/markings)	Orthopedic surgeon	10	1
Surgical Team Consult and Assessment	Resident, Fellow, or PA	10	NA [†]
Anesthesia Consult with Pre-Op Evaluation (i.e., consent, history, physical, airway examination, post-operative pain management)	Anesthesiologist	15	1
CRNA Consult and Assessment	CRNA	3	1
Patient Transport from Pre-Op Holding to OR	Anesthesiologist	5	0.2
Patient Transport from Pre-Op Holding to OR	CRNA	5	0.8

*Number of occurrences/time interval derived from case-specific timestamps. [†]Member of team derived from operative note.

Abbreviations: Pre-Op, preoperative; MSMAIDS, machine/suction/monitors/airway/intravenous access/drugs/special; CRNA, nurse anesthetist; PA, physician's assistant/associate; OR, operating room.

Appendix Table 2. Time-Driven Activity-Based Costing (TDABC) Process Maps: Intraoperative Phase

Personnel	Duration before case (preparation time; minutes)	Start time*	Stop time*	Duration after case (preparation time; minutes)	Probability
Anesthesiologist	0	Anesthesia start	Incision	3	1
Circulating nurse #1	22	Wheeled into OR	Wheeled out of OR	15	1
Circulating nurse #2	22	Wheeled into OR	Wheeled out of OR	15	0.9
Medical device sales representative	0	Incision	Closure	0	0.1
Nurse anesthetist (CRNA)	30	Anesthesia start	Anesthesia stop	0	1
Scrub technician	30	Wheeled into OR	Wheeled out of OR	10	1
Resident, Fellow, or PA	0	Wheeled into OR	Wheeled out of OR	3	NA [†]
Orthopedic surgeon	20	Incision	Closure	5	1
Radiology technologist	15	Wheeled into OR	Closure	0	1

*Time interval derived from case-specific timestamps. [†]Member of team derived from operative note.

Abbreviations: PA, physician's assistant/associate; OR, operating room.

Appendix Table 3. Time-Driven Activity-Based Costing (TDABC) Process Maps:
Postoperative Phase

Task	Personnel	Duration	Probability
Sign out to PACU team	Resident, Fellow, or PA	5	NA*
Clean room	Orderly	15	1
Clean after anesthesia	Anesthesia tech	5	1
Monitor patient in PACU	Registered Nurse	6/hour	NA [†]
Post-Op visit	Orthopedic Surgeon	5	1
Post-Op visit	Anesthesiologist	3	1
Discharge	Registered Nurse	20	1
Surgical documentation	Orthopedic Surgeon	12	1

*Member of team derived from operative note. [†]Number of occurrences determined from case-specific timestamps.

Abbreviations: PACU, post-anesthesia care unit; PA, physician's assistant/associate; Post-Op, postoperative.