

BACKGROUND

Through professional networking clinical nurses in the perioperative areas at Carle heard that major hospitals use recliners for post-op recovery.

LITERATURE REVIEW FINDINGS:

A single study was found involving recovery of patients in a recliner after laparoscopic surgery. Patients experienced fewer problems with:

- Pain
- Ambulation
- Voiding
- Consciousness

Also, females who under-went laparoscopy and used a recliner during recovery had significantly shorter length of stay times.

(Agodoa et al,2002, p.323)

RESEARCH QUESTION

To determine if subjects who recover in a recliner chair following scheduled laparoscopic cholecystectomy experience shorter recovery time vs. those who recover in a traditional hospital bed during phase 2 of post-operative recovery.

DESIGN/METHODS

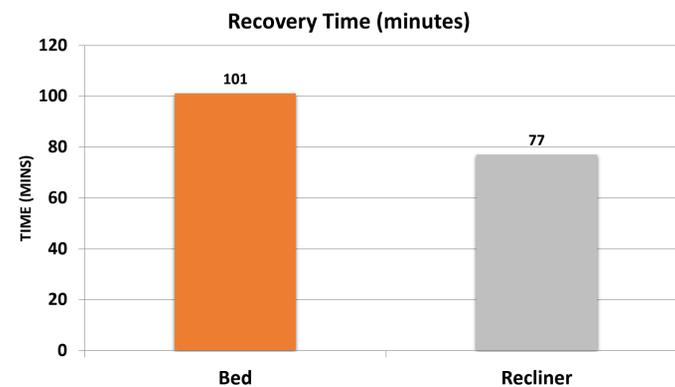
In order to pursue this research question staff decided to conduct their own research study after finding limited information and research available on the topic.

- In 2009, the IRB approved the research study, which replicated much of the Agodoa study. 151 adult patients scheduled for laparoscopic cholecystectomies consented to participate in the study, which ended in 2015.
- Patients were randomly assigned by coin toss to a traditional hospital bed or a recliner chair. After the patient completed phase 1 of recovery they were then transferred accordingly.
- Patients were assessed using the Diagnostic Laparoscopy Recovery Scale (DLRS) to determine readiness for discharge. Patients were assessed at 15 minute intervals.

RESULTS

BED VS. RECLINER

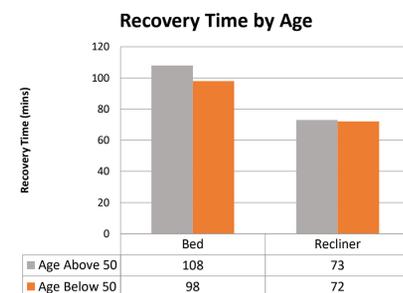
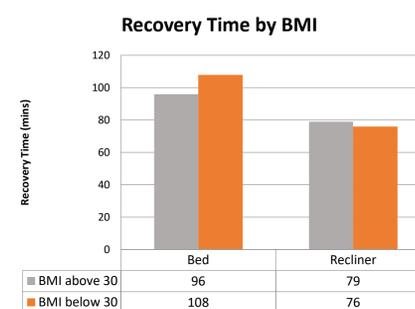
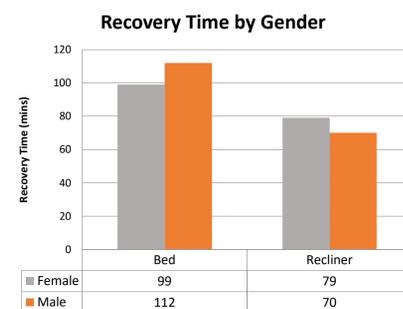
A highly significant correlation was found in overall recovery time for patients in recliners vs. hospital beds. Patients in the study recovered an average of 24 minutes faster in the recliners.



Average Recovery time in Bed: 101
Average Recovery time in Recliner: 77

P-Value = .0003

RESULTS ANALYZED BY GENDER, AGE, AND BMI



When recovery time was analyzed specifically for gender, age < and > 50, and BMI < and > 30, no significant differences were noticed.

CLINICAL IMPLICATIONS

BENEFITS

The 24 minute reduction in recovery time could provide:

- Improved Patient outcomes
- Cost savings

	Base Rate cost	Each additional 15 min cost	Average LOS	Average total cost
Traditional Hospital Bed	\$680	\$94	101	\$1,338
Recliner	\$680	\$94	77	\$1,115
Total savings per patient				\$188

- Increase room availability for additional patient volume
 - Shorter LOS allows 4.4 additional patients per day
 - Increase in revenue \$5,175/day and \$1,345,500/annually

HOW CARLE IMPLEMENTED CHANGE

