

***Cost Effectiveness Study
Personal Belongings Case
LGH Healthcare System, Main Campus
April 1, 2010 - June 30, 2010
Report composed by Mildred Hoppe, Finance Department Manager
June Lockhart, Patient Services Coordinator***

October 11, 2010

Executive Summary

The Emergency Department has been successful in supporting proactive measures to ensure the safety of our patient's personal belongings. At the request of the Finance Department and Patient Services, they were invited to analyze the cost effectiveness of utilizing a patient belongings container for a cross section of our patient population.

The recommendation is to implement a transparent container able to accommodate various patient personal belongings keeping these items safe from physical damage and being lost in transit between sections of the hospital. The cost of the container is approximately \$2.15 each.

The benefits of using a patient belongings container are numerous. Fewer lost and damaged patient items resulting in fewer claims filed for replacement costs, less time spent by hospital staff searching for items and time spent documenting the loss or damage, higher patient satisfaction survey scores and a more convenient way for patients to store their personal items while they are in our care.

Introduction

This Cost Effectiveness Study was authorized by Mildred Hoppe, Finance Department Manager and June Lockhart, Patient Services Coordinator. The study began on April 1, 2010.

The study Project Leader was Laura Jones, Director, Corporate Records; primary study Coordinators were Nancy Seton, Emergency Department Manager, Roger Dallon, General Admissions Manager and Mary Lesser, Patient Advocate.

Prior to initiating this study, the Personal Belongings Case was approved for use in our system by the New Product and Services Evaluation Committee.

Scope and Purpose

The study was conducted on the Emergency Department. The purpose of the study was to:

1. Determine the feasibility of using a patient belongings container
2. Reduce hospital expenditures for lost and damaged patient personal belongings
3. Reduce the amount of nursing and ancillary hours dealing with item 2
4. Increase the time and satisfaction of nursing and ancillary staff in caring for the patient
5. Increase patient satisfaction survey scores

Methodology of the Study

The Policies and Review Committee approved a 12 week study beginning on April 1. The study took place on the Emergency Department beginning April 1 and ending June 30. It included all department personnel, including 2 managers, four supervisors and 24 support staff.

Methods employed to gather data were: interviews, loss and damage claims reports, satisfaction survey results and Finance Department loss and damage expenditures.

Information on item damage and loss was used from this 12 week period and also compiled from the previous 12 months to reflect an accurate monetary amount based on real numbers not just estimates.

Recommendation

This report provides data and cost justification totaling \$110,760.00 in first year savings along with higher patient satisfaction survey results and less time documented by staff members spent dealing with patient personal belongings issues.

The cost savings data only reflects revenue saved in the Emergency Department. We feel that similar results can be duplicated in other departments of the hospital as well, resulting in a very cost effective way to enhance patient care, increase patient and staff satisfaction and increase revenue simply by decreasing loss.

To be able to continually achieve these goals, we recommend implementing The Personal Belongings Case as a regular part of patient admissions.

Justification

Hard Dollar Savings:

1. Reduction of claims for lost, broken or damaged items totaling \$100,000.00
2. Reduction of staffing hours dealing with #1 totaling \$2,275.00
3. Reduction of specialist fees (audiologist, optometrist, dentist) and transportation costs totaling \$27,065.00

Soft Dollar Savings:

1. Improved nursing and ancillary staff satisfaction and increased time spent on patient care
2. Increased patient satisfaction resulting in higher satisfaction survey scores
3. Increased convenience of storage for patient personal belongings (items can be put in PBC and placed on nightstand, in closet, on lavatory sink, etc.)

Overall Annual Savings of \$129,340.00
Less first year reorder cost <\$17,200.00>
Less initial cost <\$1,380.00>

Total First Year Savings.....\$110,760.00

Total Annual Savings.....\$112,140.00

Implementation

Complete implementation of The Personal Belongings Case should take approximately 6 months. We recommend that all Unit Managers be In-Serviced on the product during regular weekly In-Service meetings. Each Unit Manager is required to In-Service their immediate staff according to their regular individual department schedules. In-Service Guides, Nursing Guides, Patient and Hospital Policy and Procedure instructional templates are provided by the product manufacturer to assist in implementation.

Stocking of the product can use the supply rooms for each individual department. Patients that have one or more items (hearing aids, dentures, eye glasses) are issued a Personal Belongings Case upon admission to the unit and instructed on its use. Patient Policy Forms are given to and signed by each patient upon receipt of their PBC. Patient policy forms state that the patient is provided with a storage container for their personal belongings and that they are ultimately responsible for the safe keeping of their property. An adhesive Patient Identification Label showing patient name and identification number will be attached along the top portion of each PBC. If the unit is misplaced anywhere in the hospital it can easily be identified and returned to the patient. (Note that adhesive labels are already being printed when each patient is admitted)

Summary

The recommendation results in financial savings of \$112,140.00 annually in the Emergency Department. This savings will be multiplied with each department that institutes the product. Financial savings vary depending on department. We can expect similar savings throughout the hospital. These savings will be realized by eliminating the loss and damage that occurs to patient personal belongings.

It provides improved employee productivity and morale due to eliminating the frustration and time spent searching for and documenting the loss and damage to patient personal belongings. It will provide improved patient care by allowing staff more time spent with each patient increasing personal interaction. It allows for higher patient satisfaction survey scores due to fewer complaints about lost or damaged patient personal belongings.

We realize that the current process of using a Patient Belongings Bag is outdated and does not work. Patient belongings are lost or damaged throughout the patient care process and our Finance Department generally ends up paying for replacement items. This is an unacceptable expenditure that hurts the hospital financially and hurts the patient's perception of our care. We therefore attempted to remedy this situation by providing our patients with a container specifically designed to accommodate their personal items while they are in our care. From our study we concluded that this container is cost effective and convenient to use. It is FDA approved for use in medical applications and is designed specifically for our intended purpose.

We compliment the management of LGH for their open-minded approach to change and progress in support of our staff and patients. We would also like to thank the Emergency Department staff and management for their time and effort in implementing this study.

COST/LOST ITEM

	Hearing Aids	EyeGlasses	Dentures
Hospital Staff Costs	22.75	22.75	22.75
Transportation	200	200	200
Average cost per item	3000	350	850
Specialist costs per appt.	60	40	300
Total per ONE item	\$3,283	\$613	\$1,373

NOTES:

Above chart reflects total cost per item when all individual costs are calculated.

Hospital staff costs includes time spent searching for lost items and documenting losses and/or damages incurred to patient belongings.

Average time spent by staff member is 1.0 hours.

Average hourly wage per staff member is \$22.75.

Transportation costs include ambulance and private transportation costs of Nursing Home/Home Health patients to and from appointments for fitting and tests of above items.

COST FOR LOST ITEMS

	Hearing Aids	EyeGlasses	Dentures
COST PER ITEM	3283	613	1223
Plus additional costs			
TOTAL COST PER ITEM	3283	613	1223
ITEMS LOST PER QUARTER	5	14	6
QUARTERLY COST PER ITEM	16415	8582	7338
x4	4	4	4
ANNUAL COST PER ITEMS	\$65,660	\$34,328	\$29,352
ANNUAL TOTAL COST	<u>\$129,340</u>		

LGH Hospital Numbers

Notes

Sheet 1: D13 - F13

Administration, Insurance

LGH Hospital First Order Calculation

		Notes
Beds	200	LGH Hospital Beds
Case/bed x ___	3	Recommended
Total Stock	600	
Cost PBC/case	\$2.30	Popish Inc. Quote
Total Stock Cost	\$1,380.00	First Stock Cost

Notes

As in prior cost studies, we used the first

3 patients in each bed to compile data.

This provides us with a random cross section

of our patient population for our study.

LGH Re-order Calculation

Patients/quarter		2000
Cost PBC/case		\$2.15
Total Quarterly		\$4,300.00
	x4	4
Total Annual Cost		\$17,200.00

Notes

PBC costs lowered per unit due to bulk/large quantity purchase price negotiated with manufacturer.

PBC First Year Cost

Initial Stock

Beds	200
x PBC/bed	3
x PBC	\$2.30
TOTAL Initial Stock	\$1,380.00

LGH Bed Count
Recommended
Popish Inc. Quote

Re-order Calculation

Avg. quarterly Patients	2000
x PBC/patient	1
x cost/PBC	\$2.15
Total Quarterly Cost	\$4,300.00
x 4	4
Total Re-order Annually	\$17,200.00

LGH Average
Admission PBC
Popish Inc. Quote
Sheet 3, E10
Annually

Initial Cost	\$1,380.00
First year re-order	\$17,200.00
Total First Year Cost	\$18,580.00

COST SAVING COMPARISON

		<u>SAVINGS/COST</u>	
Lost Items	Annual Savings	\$129,340.00	Sheet 2, D15
PBC	Initial Order	-\$1,380.00	3/200 Beds
	Annual Re-order	-\$17,200.00	Sheet 4, E12
Total First Year Savings		\$110,760.00	
Total annual savings			
	after first year	\$112,140.00	

NOTES

Annual savings reflects items no longer being lost, broken or damaged. Also, revenue savings does not include items other than hearing aids, dentures and eye glasses. They are however, the most commonly lost and damaged items.

Note that patient satisfaction surveys received back have shown less patient complaints concerning lost or damaged items. This has resulted in higher overall patient satisfaction.

PBC Matrix

	<u>Hearing Aids</u>	<u>Eyeglasses</u>	<u>Dentures</u>
Cost per item	\$3,283	\$613	\$1,223
Lost/Broken/Damaged			
1st Quarter	5	15	7
2nd Quarter	7	12	8
3rd Quarter	3	16	4
4th Quarter	5	13	5
Annual Totals L/B/D	20	56	24
Annual Cost L/B/D per item	\$65,660	\$34,328	\$29,352
<u>TOTAL ANNUAL COST L/B/D</u>	<u>\$129,340</u>		
PBC			NOTES
Initial Cost	\$1,380		Sheet 3
Beds	200		(200 Beds)
Number of Admissions			LGH Avg.
1st Quarter	2000		
2nd Quarter	2000		
3rd Quarter	2000		
4th Quarter	2000		
Total Annual Admissions	8000		Avg. Annual Admission
Cost of one PBC	\$2.15		
Annual Cost of PBC Reorder	\$17,200.00		Does not include initial cost
COST OF L/B/D	<u>\$129,340</u>		
MINUS COST OF PBC	<u>-\$17,200.00</u>		
<u>ANNUAL TOTAL SAVINGS</u>	<u>\$112,140.00</u>		

Notes: L/B/D = Lost/Broken/Damaged