

# Clinical Pathways in Organ Transplantation

## The Problem

The care of organ transplant recipients is provided in a variety of locations (outpatient clinic, inpatient unit, operating room, intensive care unit, etc.) by numerous team members, some of whom are permanently affiliated with the transplant center, and rotating staff, such as residents and fellows. The potential for non-adherence to established protocols or care plans for kidney, liver or pancreas transplant recipients (or kidney and liver live donors) in the pre-, peri- and post-operative period is greater, potentially resulting in variations in delivery of care that can adversely affect outcomes.

## Aims

By creating and publishing clinical care pathways, we aimed to improve efficiency, effectiveness and quality of patient care delivered in the transplant center and in the inpatient transplant unit. We also sought to improve the consistency of the delivery of care, minimize protocol deviations, and to decrease our length of stay after transplantation both in ICU and in hospital.

## The Team

Transplant surgery, transplant nephrology, transplant hepatology, anesthesia, transplant nursing staff (Farr 10, SICU, PACU, OR), transplant coordinator staff (LMOB 7), clinical resource management team, transplant center administrative staff, surgical and medical housestaff and fellows.

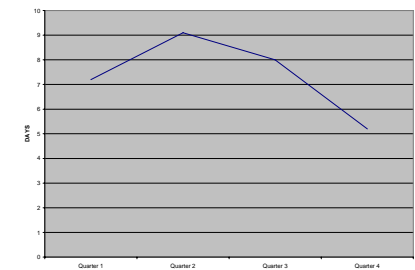
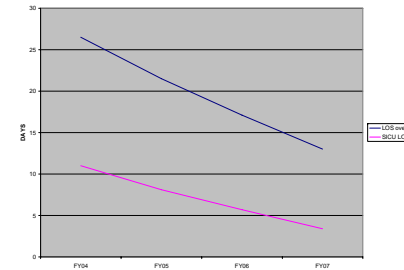
## The Interventions

We created 25 clinical pathways during consensus building sessions designed to concisely state agreed upon and, when possible, evidence based approaches to patient care in the pre-transplant evaluation, pre-operative and intraoperative period, surgical intensive care unit stay, inpatient transplant unit stay, and post-transplant follow up. We also developed an inpatient patient pathway outlining their expected post-operative course. These pathways were then printed and hung in inpatient's rooms, attached to outpatient charts and referred to in patient management.

## Results- Progressive decline in transplant LOS

Liver Transplant FY04-FY07

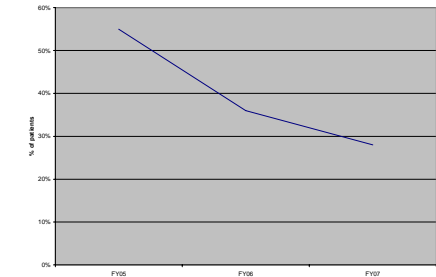
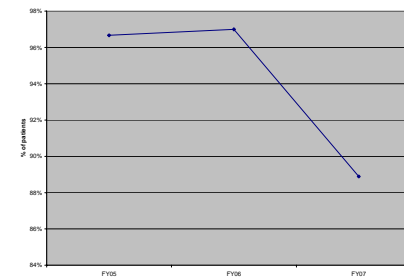
Kidney Transplant FY07



## Progressive decline in RBC transfusions

Liver Transplant FY05-FY07

Kidney Transplant FY05-FY07

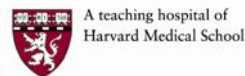


## Lessons Learned/Next Steps

An important part of clinical pathway development was the discussions about patient management plans and protocols. The expectation was that everyone had a stake in the protocol development and that they would be implemented consistently. The check list format makes important aspects of care not overlooked. The availability of a detailed care plan has been positively received by all care-givers, patients, and their families. As the results above show it has had a positive impact on length of stay for both the kidney and liver transplant recipients and blood product use. We believe implementation of these pathways has led to more consistent care, fewer protocol deviations and errors, and improved patient and family satisfaction. We plan to publish these pathways for use by other programs.



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