# **Improvement Guide**



# Collaborative Innovation and Improvement Network (COIIN)



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### **Preface**

The following Intervention Guide reflects the learnings and understandings of key effective practices in the acceptance and utilization of moderate-to-high (50%-100%) KDPI (Kidney Donor Profile Index) kidneys within the Collaborative Innovation and Improvement Network (COIIN).

The aim of COIIN is to increase transplantation of moderate-to-high (50%-100%) KDPI kidneys. The sub-aim of the collaborative is to reduce risk avoidant behaviors associated with current kidney outcomes monitoring system by the Membership and Professional Standards Committee (MPSC).

The Intervention Guide is comprised of change concepts and specific interventions that support general notions of change. Interventions or changes can be tested using The Model for Improvement which includes rapid, small-scale tests using Plan-Do-Study-Act, thus resulting in improvements. The accompanying interventions are useful in developing and testing changes leading to increased acceptance and utilization of moderate-to-high KDPI kidneys.

Changes developed in a conference room often don't perform as designed in practice. By using an approach of sequential testing that starts with testing on a small scale, we can learn about the impact of the change and its side effects. Small scale is not equivalent to small change; rather the test is initially tried with one person, for a short time period, or with one component (such as a new form) of the change. The scale of the test is then increased as the ability to predict the results of a test improves. Once it becomes possible to predict the results of a change in different situations, consideration can be given to making the change permanent...

The Improvement Guide (p. 42)

Throughout the project's design year (*October 2015 – September 2016*), staff identified eleven Practice Model Hospitals (PMHs) based on acceptance and utilization of moderate-to-high KDPI kidneys. The identified kidney programs also maintained desired post-transplant patient and graft survival outcomes. In Spring 2016, project staff visited five PMHs and hosted ten hospitals at a two-day Think Tank at UNOS with the objective of learning and assessing key effective practices covering the continuum of the kidney transplant process (patient intake through discharge).

Based on key driver diagrams, interviews, and Think Tank break-outs, three themes emerged, and the change package was divided into the following affinity groups:

- Waitlist Management
- Organ Offer and Acceptance
- Care Coordination

To best utilize the interventions and changes, we recommend programs...

- 1. **Examine your kidney transplantation process.** Identify the key roles and responsibilities in managing your waitlist, kidney transplantation, and post-transplant discharge planning and follow-up. Host and facilitate a process mapping session; document your work processes, and validate it with your team.
- 2. **Identify opportunities for improvement.** Analyze your process map and look for ambiguous or problem areas. Review your baseline data what information indicates an area for improvement?
- 3. **Plan out small tests of change.** Use the interventions to identify the changes best suited for your center to test. It is best practice to start with small tests of change; for example, draft and test a protocol with one person in one setting. Write down questions you want to answer and collect data through process measures or observation.
- 4. **Carry out tests and analyze your results.** What have you learned from your intervention testing? Decide to adapt, adopt, or abandon the change. Continue testing and use your analyses to determine whether the changes or interventions are resulting in improvements within your populations.

5. **Implement improvements.** When you are ready, develop a plan for implementing a tested, proven change within your transplant program. Decide who will be responsible for communicating, tracking, and ensuring sustainability of improvement.

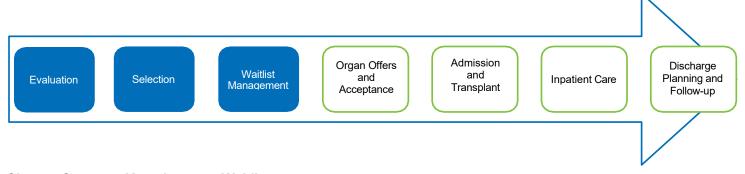
For more information about the Collaborative Innovation and Improvement Network, please visit <a href="https://optn.transplant.hrsa.gov/resources/coiin">https://optn.transplant.hrsa.gov/resources/coiin</a>.

COIIN is sponsored by the Health Resources and Services Association (HRSA) and designed, implemented, and evaluated by the United Network for Organ Sharing (UNOS) as the Organ Procurement and Transplantation Network (OPTN).

Disclaimer: Use of this Intervention Guide does not guarantee compliance with OPTN/UNOS policies, bylaws, or obligations.

# **Affinity Group 1: Waitlist Management**

The waitlist management affinity group involves work processes focused on the evaluation, selection, and management of potential and waitlisted patients. Roles and responsibilities often associated with these work processes are: referring dialysis centers, pre-transplant coordinators, physicians, and patient educators.



# **Change Concept: Knowing your Waitlist**

- Intervention 1: Refine and adhere to listing criteria based on patient population
- Intervention 2: Create protocols for re-evaluation based on patient characteristics
- Intervention 3: Maintain an active waitlist
- Intervention 4: Provide patients clear instructions, education, and expectations

# **Change Concept: Optimize Efficiency of Current System**

- Intervention 1: Evaluate patient access and set cycle time targets for evaluation
- Intervention 2: Establish standardized education competencies for newly hired coordinators

# Change Concept: Building Relationships and Enhancing Culture on the Pre-Transplant Side

- Intervention 1: Perform outreach with dialysis centers and referring Nephrologists
- Intervention 2: Educate and spread a consistent message about KDPI
- Intervention 3: Set clear expectations and ensure availability to the transplant center team
- Intervention 4: Engage the support person/caregiver in education

# **Change Concept: Knowing Your Waitlist**

# Intervention One – Refine and adhere to listing criteria based on patient population

# **Description**

Tailoring listing criteria and the structure of initial evaluations to patient population needs was identified by multiple hospitals as a key success for waitlist management. When defining listings, it is important to involve the entire team to increase efficiency with the initial screening process. By looking at your center's listing criteria, teams can also determine adequacy in serving the transplant population specific to particular demographics.

### **Considerations for Success**

- Size of your waitlist
- Coordination of staffing resources
- Patient travel consideration

### **Recommended Measures**

- Percent of patients listed who meet stated listing criteria
  - o Numerator: Number of listings compliant with listing criteria (in selected time frame)
  - o Denominator: Total number of new listings (in selected time frame)
  - o Inclusions: All new patient listings

# Intervention Two - Create protocols for re-evaluation based on patient characteristics

# **Description**

Having a structure to re-evaluate patients listed (including timing tests and scheduling necessary provider appointments) is critical for not only patient safety but increasing efficiency in the transplant process.

Re-evaluation may vary among hospitals. A hospital with a large waitlist might re-evaluate based on a risk-adjusted protocol, whereas a small center might re-evaluate annually. A hybrid of both models could be adopted where the full re-evaluation takes place on a two-to-three-year basis, with an annual social work evaluation, cardiac clearance, or follow-up by phone to touch base and note possible changes in the patient's current status

# **Considerations for Success**

- Size of your waitlist
- Coordination of staffing resources
- Patient travel considerations
- Health status of your waitlist population

- Percent of re-evaluations compliant with re-evaluation protocols
  - Numerator: Number of re-evaluations compliant with re-evaluation protocols (in selected time frame)
  - o Denominator: Total number of patients eligible for re-evaluations (in selected time frame)
  - Inclusions: All re-evaluations

# **Change Concept: Knowing Your Waitlist**

### Intervention Three - Maintain an active Waitlist

Maintenance includes running status reports to actively prioritize work for waitlist management, defining objective de-listing criteria, and adhering to it.

# **Description**

Keeping a waitlist current and up to date can be a struggle. To ensure an active list with patients ready for transplant, it is important for coordinators to prioritize workload. Having de-listing criteria and adhering to them is another successful practice in effective waitlist management. Successful management of this area will increase efficiency and reduce waste by successfully prioritizing staff time.

Current transplant databases may be used to build reports for different phases of the waitlist. Status reports can help coordinators know at-a-glance where to target efforts. The use of an administrative assistant to contact active patients to verify demographics, medical changes, or re-education on a quarterly or yearly basis has been an effective use of staff time.

### **Considerations for Success**

- Size of your waitlist
- Coordination of staffing resources
- Abilities of current database

### **Recommended Measures**

- Medical management and determination of transplant candidacy of Kidney, Kidney/Pancreas, or Pancreas candidates while on the OPTN waitlist
- Ratio of active vs inactive (declare a workable ratio or improvement aim based on center-specific needs)
- Run Status 7 reports at x intervals to evaluate inactive list and comply with de-listing criteria
- Percent of total list that is active
  - Numerator: Total number of active candidates
  - o Denominator: Total number of candidates
  - Inclusions: All kidney waitlist candidates

# Intervention Four - Provide patients clear instructions, education, and expectations

Give patients clear instructions on when to notify transplant center surrounding travel, health updates, insurance change, address change, etc. to address issues in real time and make appropriate status changes.

# **Description**

Waitlisted patients have identified open, honest communication and focused education as a positive experience. This includes setting clear expectations of how and when to communicate. Education should start at the initial referral and continue throughout the process.

Many patients are aware of the need to notify a center due to major health changes, but they may fail to notify centers when going out of town for the weekend. By spending time trying to contact a patient who is unavailable, centers may invariably add cold ischemic time to the organ, and be wasting resources during attempts to contact them.

# **Considerations for Success**

Readiness to learn

### **Recommended Measures**

Number of refusals related to candidate unavailability

# **Change Concept: Optimize Efficiency of Current System**

### Intervention One – Evaluate patient access and set cycle time targets for evaluation

# **Description**

Can patients who need an evaluation easily access care at your transplant center? By ensuring access to your system, you will increase efficiency as well as patient satisfaction. It is important to map your center's unique process and set realistic cycle times for each step. By doing so, programs can see opportunities to decrease waste and increase efficiency.

Patient access is very important. Transplantation is dynamic, has many variables, and the numbers of referrals can be unpredictable. Appointments after the initial evaluation appointment can also vary depending on who needs additional testing or clearance from different disciplines.

# **Considerations for Success**

- Coordination of staffing resources
- Administrative backing and support

### **Recommended Measures**

- Days to next available evaluation appointment
- Define cycle times (referral, intake, financial clearance, appointment scheduled); set a target for what they
  should be and implement process changes as needed, measure actual as compared to desire
- Time from referral to listing with goal to decrease referral to listing time

### Intervention Two – Establish standardized education competencies for newly hired coordinators

# **Description**

Ensure your team is process-dependent not people-dependent. While staff turnover is an issue throughout healthcare, the unique role of the transplant coordinator is essential to the efficiency and effectiveness of the transplant process. Turnover of a competent and experienced transplant coordinator is costly to a program.

### **Considerations for Success**

- Coordination of staffing resources
- Administrative backing and support

- Number of new coordinators with completed competencies
  - o Numerator: Number of newly hired coordinators with completed competencies
  - o Denominator: Total number of new hire coordinators
  - o Inclusions: All new coordinators
- Transplant coordinator vacancy rate
  - Numerator: Number of transplant coordinator positions hired
  - o Denominator: Number of budgeted transplant coordinator positions
- Turnover rate of transplant coordinators
  - o Numerator: Number of employee (coordinator) separations (in a defined period)
  - o Denominator: Number of active employees (coordinators) in the same period

# Change Concept: Building Relationships and Enhancing Culture on the Pre-Transplant Side

# Intervention One - Perform outreach with dialysis centers and referring nephrologists

### **Description**

Building relationships is critical in the transplant world. It is often said that transplant is a "team sport". Good communication and teamwork are essential for any strong team. For the transplant system to meet the needs of patients efficiently, the dialysis centers, referring nephrologists, and transplant teams need to work together. Educational outreach as well as information sharing is important to make sure all key players are on the same page.

Targeting communication with outside care providers during the evaluation phase helps to facilitate additional testing. Send scheduled weekly or monthly reports of patients' status to dialysis units and referring providers or develop policies or protocols to help facilitate follow-up. This increases efficiency of the transplant center and promotes patient safety and satisfaction. Allow nephrologists and dialysis centers to advocate for their patient's care.

# **Considerations for Success**

- Coordination of staffing resources
- Administrative backing and support
- Outreach budget
- Size of referral area
- Number of dialysis centers in your service area
- Number of transplant centers in DSA

- Percent adherence to scheduled and completed educational sessions in a defined time frame and set goals for growth based on program resources
  - o Numerator: Number of scheduled and completed educational sessions in selected time frame
  - Denominator: Goal number of educational sessions in selected time frame
  - o Inclusions: All outreach educational sessions with dialysis and nephrology groups
- Track referrals: number, sources, referring nephrologist, dialysis center; understand potential population for referral and set targets for growth

# Change Concept: Building Relationships and Enhancing Culture on the Pre-Transplant Side

# Intervention Two - Educate and spread a consistent message about KDPI

# **Description**

Transplant team members must be educated, understand, and be able to use common language regarding KDPI and moderate-to-high KDPI kidneys. When consistent language is used, the patients hear a clear message from team members. It is important to incorporate education about KDPI from multiple disciplines; this will empower the patient should they be offered a kidney with KDPI >85%.

Healthcare professionals should be advocates for patients. However, no one knows the patient as well as they know themselves. Patients know and understand their quality of life on dialysis and the risks to take to be transplanted. It is the job of the healthcare provider to educate and empower the patient. Education and ensuring patient understanding surrounding moderate-to-high KDPI kidneys are the avenues to achieve these results.

### **Considerations for Success**

- Coordination of staffing resources
- Culture of the transplant center
- Alignment of transplant goals

- Number of scheduled and completed educational sessions in X timeframe/set goal amount of educational sessions in defined timeframe
  - o Numerator: Number of scheduled and completed educational sessions in defined timeframe
  - Denominator: Goal number of educational sessions in defined timeframe
  - o Inclusions: Any identified educational sessions surrounding intervention
- Percent of prioritized waitlisted patients re-evaluated for mod-to-high KDPI kidneys (within defined timeframe)
  - Numerator: Number of prioritized waitlisted patients re-evaluated for mod-to-high KDPI kidneys (within defined timeframe)
  - o Denominator: Number of waitlisted patients due for re-evaluations within x timeframe
  - o Inclusions: All re-evaluations

# Change Concept: Building Relationships and Enhancing Culture on the Pre-Transplant Side

# Intervention Three - Set clear expectations and ensure availability to the transplant center team

# **Description**

In transplantation, it is integral to educate patients on your transplant center's contact information and team. It is also important to provide patients with clear expectations for all phases of the evaluation process. Centers must have a system that is accessible to enable patients to feel heard and valued.

Patients currently waiting for a transplant stress the importance of having a main contact and go-to person for addressing concerns. Phone numbers and emails are common approaches for contact. Providing information is one-half of the puzzle; you must be available to take calls and respond to your patients. Healthcare is dynamic and fast paced; messages can easily get missed or overlooked. It is important to set expectations and guidelines for contact and to share these expectations with the patients. If you are a main contact and will be out of office, ensure there is coverage and a back-up plan. When patients go days without a returned call, they no longer feel like a priority.

### **Considerations for Success**

- · Coordination of staffing resources
- Readiness to learn

### **Recommended Measures**

- Track number of no shows for evaluation appointments
- Track number of phone or messages and time to contact

# Intervention Four - Engage the support person/caregiver in education

### **Description**

Education should not only be provided to the patient, but also to the person that the patient identifies as their support person or main contact. Throughout the transplant process, complications and unanticipated issues can arise. It is important that the recipient has the emotional and physical support they may need. Some centers require patients to have a dedicated support person who attends educational classes and the social work evaluation.

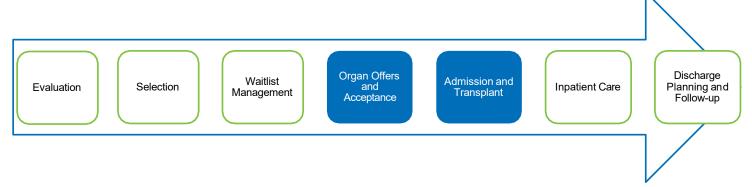
### **Considerations for Success**

- Coordination of staffing resources
- · Readiness to learn
- Availability of caregiver
- Education structure

- Percent adherence to process engaging the support person in education and identify benefits to the patient and the process
  - Numerator: Number of times staff adhere to process
  - Denominator: Number of times process is carried out
  - Inclusions: Educational sessions

# **Affinity Group 2: Organ Offer and Acceptance**

The organ offer and acceptance affinity group involves work processes focused upon the decision-making within accepting or declining an organ offer. Roles and responsibilities associated with these work processes include, but are not limited to, Organ Procurement Organizations (OPOs), primary call, procurement or pretransplant coordinators, and patient education and management.



# Change Concept: Develop a Consistent Approach in Developing Acceptance Criteria

- Intervention 1: Revise and define acceptance criteria
- Intervention 2: Perform a retrospective review of organ offers
- Intervention 3: Define kidney perfusion (pumping) expectations
- Intervention 4: Define biopsy expectations
- Intervention 5: Define cold ischemic time (CIT) criteria
- Intervention 6: Ensure timely and accurate response to offers
- Intervention 7: Ensure essential transplant program staff availability at time of offer

# **Change Concept: Build Relationships and Enhance Collaborative Culture**

- Intervention 1: Promote open and consistent communication between the OPO and transplant center
- Intervention 2: Develop trust surrounding waiver expectations
- Intervention 3: Define clear roles and responsibilities
- Intervention 4: Establish early communication of donor information to DSA

# Intervention One - Revise and define acceptance criteria

# **Description**

Revise and define criteria for organ offer acceptance to increase efficiency, and to improve relationships within the team and OPO. Involve key stakeholders in the evaluation of acceptance criteria to ensure buy-in from all team members.

# **Considerations for Success**

Coordination of staffing resources

### **Recommended Measures**

- Acceptance Criteria Variance
  - o Numerator: Number of accepted kidneys adhering to acceptance criteria
  - o Denominator: Total number of kidney transplants
  - o Inclusions: All kidney transplants
- Percent compliance with use of Acceptance Criteria by KDPI Screening Criteria
  - Numerator: Number of accepted kidneys adhering to KDPI screening criteria
  - o Denominator: Total number of accepted KDPI kidneys
  - Inclusions: All KDPI accepted kidneys
- Percent of kidneys imported from outside OPOs to the transplant center (regionally or nationally)
  - o Numerator: Number of kidneys imported from outside OPOs
  - o Denominator: Total number of kidneys transplanted
  - o Inclusions: All newly transplanted kidneys
- Percent refusal by KDPI (% declined based on KDPI but original consented for moderate-to-high KDPI)
  - Numerator: Number of kidneys declined by KDPI
  - Denominator: Number consented for KDPI
  - Inclusions: KDPI consented patients

### Intervention Two – Perform a retrospective review of organ offers

### **Description**

The Organ Offer Review is a retrospective look-back at the previous 120 days of organ offers. The review can be used to validate current processes, action plan development, and to provide support for modifying the offer acceptance process. Meeting cadences should be determined based on the needs of the team.

# **Considerations for Success**

- Coordination of staffing resources
- Number of organ offers

- Percent of declined kidneys that were subsequently transplanted
  - o Numerator: Number of kidneys declined that were transplanted elsewhere
  - Denominator: Total number of kidneys declined
  - o Inclusions: Kidneys declined

# **Intervention Three – Define kidney perfusion (pumping) expectations**

### **Description**

Pumping expectations can vary among transplant hospitals and within a transplant program. Defining expectations and ensuring a consistent approach increases efficiency. Communicating these expectations to the OPO increases efficiency and helps to decrease cold ischemic time.

### **Considerations for Success**

- Coordination of staffing resources
- Availability of OPO
- Individual's perceptions regarding pumping

### **Recommended Measures**

- Percent adherence to perfusion protocol
  - Numerator: Number of times staff adheres to protocol
  - Denominator: Total number of times kidneys are pumped
  - o Inclusions: All kidneys pumped

# **Intervention Four – Define biopsy expectations**

### **Description**

Biopsy expectations can vary among transplant hospitals and within a transplant program. Defining expectations and ensuring a consistent approach increases efficiency. Communicating these expectations to the OPO increases efficiency and helps to decrease cold ischemic time.

# **Considerations for Success**

- Coordination of staffing resources
- Availability of OPO
- Availability of pathologist
- Individual perceptions regarding biopsy

- · Percent adherence to biopsy screening criteria
  - Numerator: Number of times staff adheres to biopsy screening criteria
  - Denominator: Total number of times kidneys are screened using biopsy screening criteria
  - o Inclusions: All kidneys requiring biopsy screening

# Intervention Five - Define cold ischemic time (CIT) criteria

# **Description**

Cold ischemic time expectations can vary among transplant hospitals and within a transplant program. Communicating these defined expectations to the transplant team and the OPO ensures a consistent approach and increases efficiency.

### **Considerations for Success**

- Coordination of staffing resources
- Availability of OPO

### **Recommended Measures**

- Relational Coordination Survey Scores
- Median time from offer to acceptance/refusal
  - o Numerator: Time to accept or decline a kidney
  - o Denominator: Total time to accept or decline all kidneys during the same time-period
  - o Inclusions: All offers accepted or declined

# Intervention Six - Ensure timely and accurate response to offers

# **Description**

A timely and accurate response to offers helps to increase efficiency, builds positive relationships with the OPO, and helps to decrease cold ischemic time.

### **Considerations for Success**

- Coordination of staffing resources
- Patient availability

- Median time from offer to acceptance/refusal
  - Numerator: Time to accept or decline a kidney
  - o Denominator: Total time accept or decline all kidneys during the same time period
  - o Inclusions: All offers accepted or declined
- Number of provisional "yes" that turned into a decline
  - o Numerator: Number of provisional "yes" that turned into a decline
  - o Denominator: Number of provisional "yes"
  - o Inclusions: All provisional "yes"
- Number of refusals that exceeded policy-defined response time

# Intervention Seven - Ensure essential transplant program staff availability at time of offer

# **Description**

The entire transplant program availability, including surgeons, ORs, staff, and patients can impact whether an organ is placed. Availability is important for efficiency as well as decreasing cold ischemic time. Although practices vary among hospitals, (from dedicated transplant staff to the general surgery team performing kidney transplants), the effective practice ensures the program's key staff availability to perform the procedure at the time the offer is made.

### **Considerations for Success**

Coordination of staffing resources

### **Recommended Measures**

Number of refusals related to transplant team or facility unavailability

# **Change Concept: Build Relationships and Enhance Collaborative Culture**

<u>Intervention One – Promote open and consistent communication between the OPO and transplant</u> center

# **Description**

The need for open communication on a regular basis between the OPO and transplant center is a critical element in the transplant process. Reviewing delays and turndowns together can lead to a more efficient process and potentially decrease organ waste. Educational needs are met, outreach is established, and workshops can be available to provide needed information.

### **Considerations for Success**

- Coordination of OPO and transplant staff
- Willingness to participate

### **Recommended Measures**

- Relational Coordination Survey Scores
- Meeting cadence with OPO and transplant hospital and adherence to planned meetings
  - o Numerator: Number of meetings with OPO and transplant members present
  - o Denominator: Total number of meetings scheduled
  - o Inclusions: All meetings with a common agenda scheduled

# Intervention Two - Develop trust surrounding waiver expectations

# **Description**

Developing trust between a transplant center and an OPO is needed for the waiver process. In a trusting relationship, the transplant hospital will review the offer thoroughly prior to asking for a waiver.

### **Considerations for Success**

Open and Honest Relationships

### **Recommended Measures**

• Relational Coordination Survey Scores

# Change Concept: Build Relationships and Enhance Collaborative Culture

# Intervention Three - Define clear roles and responsibilities

# **Description**

Having clearly defined roles and responsibilities for all members of the transplant team and having identifying key stakeholders involved in the process builds a culture of trust.

### **Considerations for Success**

- Open and Honest Relationships
- Staffing resources (if restructuring)
- Leadership commitment

### **Recommended Measures**

Relational Coordination Survey Scores

# Intervention Four – Establish early communication of donor information to Donation Service Area (DSA)

# **Description**

The communication of donor information to the entire donation service area (DSA) early can help expedite the process and decrease cold ischemic time. The OPO and transplant center can choose to communicate information through the best available channel that suits their needs. General donor information is listed so that the transplant hospital can start preparing for potential offers.

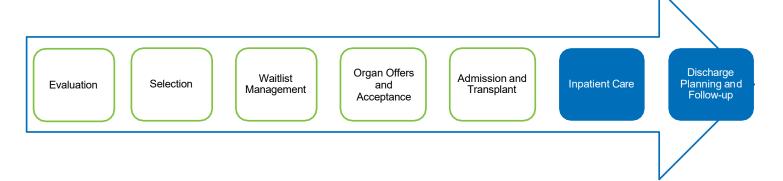
# **Considerations for Success**

- Technology Resources
- Willingness of OPO to participate

- Median time from offer to acceptance/refusal
  - Numerator: Time to accept or decline a kidney
  - o Denominator: Total time accept or decline all kidneys during the same time-period
  - Inclusions: All offers accepted or declined

# **Affinity Group 3: Care Coordination**

The care coordination affinity group involves work processes focused on inpatient care, discharge planning, discharge, and follow-up. Roles and responsibilities associated with these work processes are surgeons, dialysis centers, post-transplant coordinators, pharmacy, scheduling, physicians, and patient education and management.



# **Change Concept: Standard of Care**

- Intervention 1: Evaluate and update post-op protocols to define monitoring requirements, optimize patient flow, and support models of care that define nurse-to-patient ratios with specialty trained nurses
- Intervention 2: Establish length of stay goals based on recipient characteristics
- Intervention 3: Establish multidisciplinary rounding expectations

# **Change Concept: Medication Management**

- Intervention 1: Ensure medication availability at discharge for immediate patient use and adherence to prescribed regimen
- Intervention 2: Evaluate medication education practices to identify opportunities to optimize materials, and establish a process for education and follow-up

# **Change Concept: Discharge Planning and Follow-Up Expectations**

- Intervention 1: Begin discharge planning at selection with multidisciplinary assessment of needs
- Intervention 2: Establish a plan for delayed graft function management that supports length of stay goals, and is manageable with program's resources and structure
- Intervention 3: Standardize visit schedules with surgeon, nephrologist, and other disciplines for followup; Schedule initial appointments prior to discharge
- Intervention 4: Provide discharge education to patients and caregivers across the continuum of care

# **Change Concept: Standard of Care**

Intervention One – Evaluate and update post-op protocols to define monitoring requirements, optimize patient flow, and support models of care that define nurse-to-patient ratios with specialty trained nurses

### **Description**

It is important to have a standardized post-transplant patient flow to provide quality care. Whether these patients consistently go to the ICU or to another designated floor, there should be defined monitoring requirements and nurse-to-patient ratios to ensure effective management of this specialized population.

### **Considerations for Success**

- Bed management
- Staffing
- Patient population

### **Recommended Measures**

- Percent of clinical staff that have completed training successfully
  - o Numerator: Number of clinical staff that have completed training
  - o Denominator: Total number of clinical staff that care for kidney transplant patients
  - o Inclusions: All clinical staff that care for kidney transplant patients
- Percent adherence to protocols
  - Numerator: Number of discharged kidney transplant patients whose care aligned with written protocols
  - o Denominator: Total number of discharged kidney transplant patients
  - o Inclusions: All kidney transplant recipients

### Intervention Two – Establish length of stay (LOS) goals based on recipient characteristics

# **Description**

There is variation in length of stay (LOS) targets among various centers depending on organizational goals, patient population, outpatient resources and other clinical factors. A kidney transplant program can benefit from stratifying their kidney recipient population based on common risk factors. In addition, establishing different targets per group rather than having a common target for all the patients can be helpful.

### **Considerations for Success**

- Hospital length of stay goals
- Patient population
- Outpatient resources
- Staffing

- Percent of kidney transplant patients that met target length of stay
  - o Numerator: Number of patients that met target length of stay
  - o Denominator: Total number of kidney transplant patients
  - Inclusions: All kidney transplant patients

# **Change Concept: Standard of Care**

# **Intervention Three – Establish multidisciplinary rounding expectations**

# **Description**

Multidisciplinary rounding is an effective way to bring together the members of a patient's care team to share their plans and goals for the patient. This allows all the members of the team to collaborate and focus on the care delivered to the patient.

# **Considerations for Success**

- Schedules
- Team participation

- Relational Coordination Survey Scores
- Percent of rounds completed and documented
  - o Numerator: Number of patients with daily documented multidisciplinary rounds
  - o Denominator: Total number of kidney transplant patients
  - Inclusions: All kidney transplant patients

# **Change Concept: Medication Management**

<u>Intervention One – Ensure medication availability at discharge for immediate patient use and adherence to prescribed regimen</u>

# **Description**

Confirming that discharge medications are filled at the hospital pharmacy or are available and accessible at the patient's outside pharmacy reduces the risk that the patient will not have their medications available immediately upon discharge.

### **Considerations for Success**

- Hospital pharmacy services
- Insurance
- Discharge planning

### **Recommended Measures**

- · Adherence with medication plan
  - o Numerator: Number of patients with documented compliance to medication plan
  - o Denominator: Total number of kidney transplant patients
  - o Inclusions: All kidney transplant patients

<u>Intervention Two – Evaluate medication education practices to identify opportunities to optimize materials, and establish a process for education and follow-up</u>

# **Description**

A protocol for medication education with patient and caregiver will help improve adherence and reduce the risk of medication errors. Education should include multiple interactions for reinforcement, appropriate and understandable resources, assessment of understanding, tools to promote compliance and self-management, and a plan for follow-up.

### **Considerations for Success**

- Resources
- Staffing
- Pharmacy support
- Caregiver availability

- Adherence with medication plan
  - o Numerator: Number of patients with documented adherence to medication plan
  - o Denominator: Total number of kidney transplant patients
  - o Inclusions: All kidney transplant patients

# **Change Concept: Discharge Planning and Follow-up Expectations**

Intervention One – Begin discharge planning at selection with multidisciplinary assessment of needs

### **Description**

Selection committee meetings are a good time to identify any barriers that a potential kidney recipient may have upon discharge post- transplant. As psychosocial and medical histories are discussed, the multidisciplinary team can work together to identify resources that will need to be in place at discharge.

### **Considerations for Success**

- Multidisciplinary selection meetings
- Patient population
- · Community and hospital resources

### **Recommended Measures**

- Percent of listed patients with documented multidisciplinary discharge planning at selection meeting
  - Numerator: Number of listed patients with documented multidisciplinary discharge planning at selection meeting
  - Denominator: Total number of listed patients
  - Inclusions: All listed kidney transplant candidates

<u>Intervention Two – Establish a plan for delayed graft function (DGF) management that supports length of stay goals, and is manageable with program's resources and structure</u>

# **Description**

Planning for DGF management will prevent unexpected increases in length of stay. DGF management can be accomplished as an outpatient with the use of observation beds or infusion centers as well as utilizing hospitality centers or contracted hotels near the hospital. This allows for the care to be managed in a controlled environment and keeps the patient geographically close if they live far from the hospital.

### **Considerations for Success**

- Outpatient dialysis options
- Lodging options
- Resources

- Compliance with DGF management plan
  - o Numerator: Number of patients with documented compliance to DGF management plan
  - Denominator: Total number of kidney transplant patients with DGF
  - o Inclusions: Kidney transplant patients with DGF

# **Change Concept: Discharge Planning and Follow-up Expectations**

<u>Intervention Three – Standardize visit schedules with surgeon, nephrologist, and other disciplines for follow-up; Schedule initial appointments prior to discharge</u>

### **Description**

It is helpful for discharge planning and education to know what the patient's expected follow-up visit schedule will be. This ensures that the patient is being seen at appropriate intervals and allows for timely communication. Setting the appointments prior to discharge prevents delays related to appointment availability and allows for this to be a part of discharge education.

### **Considerations for Success**

- Scheduling Resources
- Technology

### **Recommended Measures**

- Compliance with follow-up visit schedule
  - o Numerator: Number of patients who have a scheduled follow-up visit at the time of discharge
  - o Denominator: Number of transplant patients discharged
  - o Inclusions: All transplanted patients

# Intervention Four - Provide discharge education to patients and caregivers across the continuum of care

# **Description**

Early initiation of discharge education allows the care team time to reinforce critical elements throughout the hospital stay. It also allows the patient time to absorb the information and ask appropriate questions. Including the caregivers in the educational efforts empowers them as knowledgeable participants in the patient's care.

### **Considerations for Success**

- Educational Resources
- Knowledge Gap Assessments

- Comprehensive and complete discharge plan
  - o Numerator: Number of transplant patients who received a comprehensive discharge plan
  - o Denominator: Total number of transplant patients discharged
  - Inclusions: All transplant recipients
- Frequency of support person(s) involved in comprehensive discharge planning
  - Numerator: Number of comprehensive discharge plans reviewed and discussed with patient's identified support person by transplant team member
  - o Denominator: Total number of transplant patients discharged
  - o Inclusions: All transplant recipients