Emory University Hospital
Solid Organ Transplant Rotation
Kidney/Pancreas Transplant

Preceptor: Erika Meredith, PharmD
Office: EUH E923
Email: erika.meredith@emoryhealthcare.org
Pager: 16941
Office: 2-5352
Personal Cell: 847-736-5948

General Description:

The Emory Transplant Program is one of the largest solid organ transplant programs in the southeast offering transplantation for kidney, kidney/pancreas, liver, heart, lung, and islets. The goal of this 4 week rotation will be to provide the resident with the knowledge and skills to care for solid organ transplant patients, with a focus on kidney and pancreas transplant. Both the kidney/pancreas and liver transplant patients are primarily located in a 29 bed unit on 7G, but may also be located in 5EICU when intensive care is warranted.

The Renal/Pancreas Transplant Service is a multi-disciplinary service comprised of surgeons, nephrologists, mid-level practitioners, nurses, pharmacists, dietitians, and social workers. The team is responsible for care of both new transplant patients and transplant patients admitted many years after transplantation who have complications. Patient load varies widely, from 8-25 patients with approximately 2-3 kidney or pancreas transplants per week.

The resident will be responsible for participating on rounds, therapeutic drug monitoring, daily medication review, and patient educational activities including medication history and discharge counseling. Medication therapy issues should be resolved through good communication and interaction with other team members. Documentation in the electronic medical record is required for all post-transplant education and whenever else appropriate. An educational presentation to the team or nursing staff as well as a formal journal club is required during the learning experience.

Disease States:

Common disease states in which the resident will be expected to gain proficiency through literature review, topic discussion, and/or direct patient care experience may include, but are not limited to:

- Organ transplantation/immunology: pharmacotherapy, wait list, allocation, sensitization, cross-match, rejection
- Complications of end stage renal disease: Hyperparathyroidism, hyperkalemia, anemia, acidosis, uremia, cardiovascular disorders
- Causes of end stage renal disease: PCKD, SLE, FSGS, GN, HTN, DM, reflux nephropathy, etc.
- Infectious complications: Prophylactic strategies, UTI, pneumonia, skin and soft tissue infections, bacteremia, EBV, CMV
- Cardiovascular disorders: Hypertension, hypercholesterolemia, stroke, heart failure
- Endocrine disorders: Diabetes, new-onset diabetes after transplant (NODAT)
**Goals Selected:**

Goals selected to be taught and evaluated during this learning experience include:

Goal R1.4: Demonstrate ownership of and responsibility for the welfare of the patient by performing all necessary aspects of the medication-use system.
Goal R2.1: As appropriate, establish collaborative professional relationships with members of the health care team.
Goal R2.2: Place practice priority on the delivery of patient-centered care to patients.
Goal R2.3: As appropriate, establish collaborative professional pharmacist-patient relationships.
Goal R2.4: Collect and analyze patient information.
Goal R2.6: Design evidence-based therapeutic regimens.
Goal R2.7: Design evidence-based monitoring plans.
Goal R2.8: Recommend or communicate regimens and monitoring plans.
Goal R2.9: Implement regimens and monitoring plans.
Goal R2.10: Evaluate patients’ progress and redesign regimens and monitoring plans.
Goal R2.12: Document direct patient care activities appropriately.
Goal R5.1 Provide effective medication and practice-related education, training, or counseling to patients, caregivers, health care professionals, and the public.

**Activities**

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<thead>
<tr>
<th>Activity</th>
<th>Goal</th>
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<tbody>
<tr>
<td>Accurately gather, organize, and analyze patient specific information prior to pre-rounds with preceptor</td>
<td>R1.4 R2.2 R2.4 R2.6 R2.10</td>
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<tr>
<td>Review pertinent patient information in Powerchart such as: microbiology, reason for transplant, date of transplant, immunosuppressive levels, CMV status, pre-transplant baseline labs such as PTH, HgA1c, and lipid profile. Ensure all medication orders are appropriate.</td>
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<tr>
<td>Review patient findings with care provider (MD, PA, NP) and implement plan. Provide at least 5 recommendations per day. Communicate patient concerns with the care provider. Provide concise, accurate drug information to providers. Develop and adjust medication regimen in accordance with transplant team.</td>
<td>R1.4 R2.1</td>
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<td>Actively participate in transplant morning huddle and afternoon transplant team rounds</td>
<td>R1.4 R2.1 R2.4 R2.6 R2.8 R2.9 R2.10</td>
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<td>Present patient to preceptor in the mornings/afternoons – employ evidence based medicine gained via independent reading and learning</td>
<td>R1.4 R2.4 R2.6 R2.7 R2.10</td>
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<td>Provide review of primary literature through formal journal club</td>
<td>R5.1</td>
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<td>15 to 20 minutes in length. Topic and presentation date should be decided by the middle of the second week and approved by preceptor.</td>
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<td>Provide educational in-services to nurses, pharmacists, or transplant team as requested by preceptor</td>
<td>R5.1</td>
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<tr>
<td>A practice presentation should be presented to preceptor at least 3 business days prior to presentation</td>
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Provide and document education to all patients and caregivers post-kidney or pancreas transplant. Formulate and provide a medication list to patients from MedActionPlan. Utilize various teaching techniques to promote adherence.

Documentation should occur in Powerchart and should be in SOAP format. Documentation should include a brief history, medication list, medication reconciliation, pertinent lab data, assessment, pharmacotherapy plan, summary of patient’s education and assessment of understanding.

Ensure patients have their medications accurately reconciled on admission by performing medication histories. Ensure patients have medication accurately reconciled at discharge and are provided with appropriate prescriptions.

Lead at least one topic discussion per week and participate in at least one additional topic discussion. Read at least one primary literature article per week and apply to patient care.

Provide pharmacokinetic monitoring services for patients receiving drugs requiring monitoring including, but not limited to, aminoglycosides and vancomycin.

Initiate monitoring plans or medication therapy changes as per protocol or verbal orders.

Weekend and day off sign-out for PK patients. Complete documentation.

Document at least two ADRs and 20 interventions in Pharmacy One Source by the end of the rotation.

Document medication variances in STARS Event Reporting System.

Serve as co-preceptor for pharmacy students when applicable.

Balance patient care and other residency responsibilities.

Preceptor Interaction

Daily:
- Preceptor available from 0800 to 0830 and 0900 to 1100 for pre-round and questions
- Team huddle from 0830 to 0900 in 7G conference room
- Daily teaching rounds at 1500 in 7G conference room
- Daily rounds at 1530
- Preceptor available to patient presentation, review of notes, and/or topic discussions from 1300-1500

Non-Daily Activities/Expectations:
- Attend weekly kidney conference on Wednesdays at 11AM in clinic building B, 6th floor
- Attend weekly transplant noon conference on Wednesdays at noon in College of Medicine
- Attend kidney leadership meeting held on Wednesdays at 9:30 in clinic building B, 6th floor
- 2 to 3 topic discussions per week
- Provide formal journal club presentation during rotation
- Provide one in-service to nurses, pharmacists, or transplant team

Expected progression of resident responsibility on this learning experience:

Day 1 @ 0900: Preceptor to review learning activities and expectations with resident.
Week 1: Resident to work up patients and present to preceptor after morning huddle. Preceptor may attend and participate in team rounds (modeling pharmacist’s role on the health care team).
Week 2: Resident to work up patients and present select patients to preceptor after morning huddle. Preceptor may attend and participate in team rounds (coaching the resident to take on more responsibilities as the pharmacist on the health care team).
Week 3-4: Resident to work up patients and present select patients to preceptor after morning huddle. Preceptor may attend and observe the resident’s participation on, and/or may expect a summary report from the resident regarding rounding activities and use of recommendations made by the resident. Preceptor will always be available for questions and will follow patients independently to monitor resident skill development in all aspects of the learning experience (facilitating the resident as the pharmacist on the health care team).

Note: the length of time the preceptor spends in each of the phases of learning will depend BOTH on the resident’s progression in the current rotation and when the rotation occurs in the residency program

**Evaluation Strategy**

ResiTrak will be used for documentation of formal evaluations. Evaluations should be completed prior to meeting to discuss. All evaluations will be discussed in person between the resident and preceptor. This discussion will provide feedback both on their performance of the activity and the accuracy of the self-assessment. Formative evaluation will also occur as verbal or written feedback on a daily basis.

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<tr>
<th>What</th>
<th>Who</th>
<th>When</th>
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<tr>
<td>Midpoint Summative Evaluation</td>
<td>Preceptor</td>
<td>Week 2</td>
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<tr>
<td>Summative Self-Evaluation</td>
<td>Resident</td>
<td>End of learning experience – deadline to be signed and submitted by 1300 the day following rotation completion.</td>
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<tr>
<td>Summative Evaluation</td>
<td>Preceptor</td>
<td>End of learning experience – deadline 7 days post final day of rotation to meet with resident to discuss.</td>
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<tr>
<td>Preceptor Evaluation</td>
<td>Resident</td>
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<tr>
<td>Learning Experience Evaluation</td>
<td>Resident</td>
<td>End of learning experience – deadline 7 days post final day of rotation.</td>
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