

# KIDNEY TRANSPLANT RECIPIENT CANDIDATE EVALUATION CLINICAL PATHWAY

This Clinical Pathway is intended to assist in clinical decision making by describing a range of generally acceptable interventions and outcomes. The guidelines attempt to define practices that meet the needs of most patients under most circumstances. However, the ultimate judgment must be made based on circumstances that are relevant to that patient and treatment may be modified according to the individual patients needs.

	Pre-visit Interview	Initial Visit (within 2 wks of interview)	Review of Chart (when results available)	Presentation #1 (Multi-Disciplinary Selection Committee)	Surgery Evaluation	Presentation #2 (Multi-Disciplinary Selection Committee)	Follow-up
<b>CONSULTS</b>	<ul style="list-style-type: none"> <li>Transplant coordinator calls patient within 24h of referral to either conduct or schedule an interview.</li> <li>Interview information entered into OTTR</li> <li>Obtain names of all care providers; data entry staff to enter into OTTR</li> </ul>	<ul style="list-style-type: none"> <li>Transplant nephrology</li> <li>Transplant coordinator</li> <li>Surgical consult appointment arranged</li> <li>SW follow-up appointment made if unable to be seen this visit.</li> <li>Letters to all providers, requesting they send information on patient that could affect candidacy, now or in the future</li> <li>Note: Recipient coordinator, nephrologist, surgeon, and social worker are different than donor coordinator, nephrologist, surgeon and social worker</li> </ul>	<ul style="list-style-type: none"> <li>Nephrologist reviews results</li> <li>Surgical consult appointment arranged</li> <li>Additional consults: <ul style="list-style-type: none"> <li>ID (foreign born, prior severe infection, HIV)</li> <li>Cardiology (significantly abnormal cardiac stress test)</li> <li>Urology (elevated PSA)</li> <li>Hepatology (Hep C positive)</li> <li>Oncology (history of cancer)</li> </ul> </li> </ul>	<p><b>1st presentation: New evaluations</b></p> <ul style="list-style-type: none"> <li>Nephrologist presents to Multidisciplinary Selection Committee</li> <li>Consensus reached on advisability of proceeding further</li> <li>First ABO verification done at meeting and filed in chart. If not done, OTTR reminder generated to complete</li> <li>Review of potential donors, remaining tests/evaluations to be performed</li> </ul>	<ul style="list-style-type: none"> <li>Transplant Surgery evaluation</li> </ul>	<p><b>2nd presentation: Candidate updates</b></p> <ul style="list-style-type: none"> <li>Nephrologist re-presents case</li> <li>Consensus reached on advisability of activation on transplant list</li> <li>Results of discussion recorded in minutes.</li> <li>Second ABO verification done</li> </ul>	<ul style="list-style-type: none"> <li>Nephrology follow-up alternating with surgery</li> <li>Follow-up every 3 months for ECD candidate or every 6 months for all others.</li> <li>Letters to all providers, requesting they send information on patient that could affect candidacy, now or in the future</li> </ul>
<b>BEHAVIORAL HEALTH</b>		<ul style="list-style-type: none"> <li>Psychosocial evaluation by transplant social worker including financial assessment and assess need for home based live donor kidney transplant education</li> <li>If applicable, "Patient Responsibility Agreement" (for substance abuse) reviewed with patient and signed</li> </ul>	<ul style="list-style-type: none"> <li>Transplant psychology evaluation if identified need for: <ul style="list-style-type: none"> <li>Smoking cessation</li> <li>Weight loss</li> <li>Live donation counseling</li> <li>Compliance</li> <li>Relapse prevention</li> <li>History of known mental disorder</li> <li>History of substance abuse or dependence within last 2 years</li> </ul> </li> </ul>		<ul style="list-style-type: none"> <li>QOL assessment</li> <li>Social work and or psychology follow-up and re-evaluation as needed.</li> <li>Integrate into appropriate behavioral health intervention pathway as needed <ul style="list-style-type: none"> <li>Smoking cessation</li> <li>Weight loss</li> <li>Compliance</li> <li>Relapse prevention</li> <li>Caregiver burden</li> </ul> </li> </ul>		<ul style="list-style-type: none"> <li>QOL assessment</li> <li>Social work and or psychology follow-up and re-evaluation as needed.</li> <li>Integrate into appropriate behavioral health intervention pathway as needed <ul style="list-style-type: none"> <li>Smoking cessation</li> <li>Weight loss</li> <li>Compliance</li> <li>Relapse prevention</li> <li>Caregiver burden</li> </ul> </li> </ul>
<b>CORRESPONDENCE COORDINATION COMPLIANCE</b>	<ul style="list-style-type: none"> <li>Release of records permission mailed or faxed to patient.</li> <li>Transplant coordinator will obtain relevant physician notes, op notes, path reports and discharge summaries. Compile in chart or in OTTR under "evaluation".</li> <li>Must have patient release prior to obtaining records.</li> </ul>		<ul style="list-style-type: none"> <li>Transplant coordinator compiles all results in OTTR under "evaluation"</li> <li>Discuss recipient evaluation with donor coordinator to coordinate timeline of completion of both evaluations</li> </ul>	<ul style="list-style-type: none"> <li>Minutes of discussion recorded and filed</li> <li>Patient added to UNOS list if appropriate</li> </ul>		<ul style="list-style-type: none"> <li>Minutes of discussion recorded and filed</li> <li>Patient added to UNOS list if appropriate</li> <li>If turned down or activated, letter to patient, with copy of letter to dialysis center and referring MD including request for monthly specimens (if activated).</li> </ul>	<ul style="list-style-type: none"> <li>Letter to patient, PCP, and referring MD must be sent if removed from list or suspended within 10 days of status change</li> <li>Patient/family meeting or phone call from nephrologist to review decision and letter before letter sent</li> </ul>
<b>LAB TESTS</b>		<p>Lab tests to be completed at initial visit:</p> <ul style="list-style-type: none"> <li>CBC, Diff, PT, PTT, INR, Chem 7, Alb, AST, ALT, Alk Phos, T Bili, Phos, lipid profile if fasting</li> <li>Type and Screen for 1st ABO test</li> <li>HCV Ab, HBsAg, HBsAb, HBcAb (IgG)</li> <li>HIV Ab, EBV Panel, CMV (IgG)</li> <li>If male &gt;50 years: PSA</li> <li>If HBsAg positive: HBV DNA</li> <li>If HCV Ab positive: HCV RNA and genotype</li> <li>If HIV Ab positive: CD4 count and HIV VL</li> </ul>			<ul style="list-style-type: none"> <li>2nd ABO test for verification with first surgical consult</li> <li>Order flow PRA if patient is high immunologic risk</li> </ul> <p><i>High Risk:</i> history of pregnancy, prior transplant, PRA&gt;20%, blood transfusions</p>		<ul style="list-style-type: none"> <li>Obtain updated serology testing q 2years</li> <li>Order flow PRA if not done in past 2 years in high immunologic risk patients</li> <li>Monthly serum sample sent to BWH HLA lab for PRA</li> </ul>
<b>RADIOLOGY AND PATHOLOGY</b>		<ul style="list-style-type: none"> <li>Obtain AP and Lateral Chest X-ray. (To be scheduled within 2 weeks).</li> <li>If female, obtain PAP results and, if &gt;40 yrs old, obtain mammogram results within past year.</li> <li>Obtain pathology results of any malignancy and file in paper chart and enter diagnosis and date in OTTR problem list.</li> </ul>					<ul style="list-style-type: none"> <li>Obtain results of yearly Mammograms and PAP smears. Results reviewed by nephrologist</li> </ul>
<b>HISTOCOMPATABILITY</b>	<ul style="list-style-type: none"> <li>Obtain history of prior transplants, pregnancies, and transfusions.</li> <li>Document in OTTR under ALERTS if patient high risk (see HLA protocol).</li> </ul>	<ul style="list-style-type: none"> <li>Obtain prior donor HLA antigens and HLA antibody specificities. Document in OTTR.</li> </ul>		<ul style="list-style-type: none"> <li>Determine and document if high immunologic risk (see below). If yes, patient will need flow cross-matching with any potential donor and flow PRA testing once.</li> </ul> <p><i>High Risk:</i> history of pregnancy, prior transplant, PRA&gt;20%, blood transfusions</p>	<ul style="list-style-type: none"> <li>Document any detected anti-HLA antibodies, peak and current PRA, and flow PRA percentages in all correspondences and in Alert section of OTTR.</li> </ul>		<ul style="list-style-type: none"> <li>Document any detected anti-HLA antibodies and calculated PRA in all correspondences</li> </ul>
<b>CARDIAC TESTING</b>	<ul style="list-style-type: none"> <li>Transplant coordinator to obtain any recent relevant cardiac testing</li> </ul>	<p><u>EKG on everyone</u></p> <ul style="list-style-type: none"> <li>EKG only in patients with no DM, age &lt;30, no abnormalities on exam</li> <li>If EKG abnormal or valve abnormalities on exam, order Echo</li> </ul> <p><u>Cardiac Stress test with nuclear imaging</u></p> <p>(Exercise or pharmacologic if on beta blockade or unable to walk)</p> <ul style="list-style-type: none"> <li>In non diabetic if 2 or more risk factors (see below)</li> <li>If history of prior revascularization</li> <li>In any diabetic over age 30</li> </ul> <p><i>Risk factors:</i> smoking, HTN, LDL &lt;40, family history CHD (in male relative &lt;55, female &lt;65), older age (men &gt;44, women &gt;54).</p>	<ul style="list-style-type: none"> <li>If positive cardiac stress test, schedule cardiology consult and/or left heart catheterization</li> </ul>				<p><u>Cardiac Stress test with nuclear imaging</u></p> <p>(Exercise or pharmacologic, if on beta blockade or unable to walk)</p> <p>Frequency:</p> <ul style="list-style-type: none"> <li>every year in diabetics or patients who have had re-vascularization procedures (CABG, stenting), known MI, new onset of chest pain or EKG abnormalities</li> <li>every 3 years in all others</li> </ul>
<b>BONE</b>		<ul style="list-style-type: none"> <li>Bone mineral density scan</li> </ul>					
<b>MEDICATIONS</b>	<ul style="list-style-type: none"> <li>Obtain list of current medications</li> </ul>	<ul style="list-style-type: none"> <li>Review current medications</li> </ul>			<ul style="list-style-type: none"> <li>Review current medications</li> </ul>		<ul style="list-style-type: none"> <li>Review current medications</li> </ul>
<b>CONSENTS</b>		<ul style="list-style-type: none"> <li>Discuss/Consent Extended Criteria Donor (ECD) listing if applicable</li> <li>Discuss/Consent for research studies if applicable.</li> </ul>			<ul style="list-style-type: none"> <li>Discuss/Consent for Extended Criteria Donor(ECD) list if applicable</li> <li>Discuss/Consent for Research Studies if applicable</li> </ul>		<ul style="list-style-type: none"> <li>Discuss/Consent for Extended Criteria Donor(ECD) list if applicable</li> <li>Discuss/Consent for Research Studies if applicable</li> </ul>
<b>EDUCATION</b>	<ul style="list-style-type: none"> <li>Review importance of living donation, New England Paired Kidney Exchange (NEPKE) program</li> <li>Send information book to patient</li> <li>Ask patient to attend to 1st visit with family/friend/potential donor</li> </ul>	<ul style="list-style-type: none"> <li>Review advantages of live donation</li> <li>Review NEPKE</li> <li>Donor coordinator to see and arrange follow up for potential donors.</li> <li>Review risks and benefits of transplant surgery</li> <li>Review regional and national allocation</li> <li>Review Hep C allocation if applicable</li> <li>Review ECD listing if applicable</li> <li>Review skin cancer prevention and screening, importance of smoking cessation.</li> <li>Review risks of immunosuppression (infection and malignancy) and importance of compliance</li> </ul>			<ul style="list-style-type: none"> <li>Review live donation options including NEPKE.</li> <li>Donor coordinator to see for any potential donors</li> <li>Review risks and benefits of transplant surgery</li> <li>Review regional and national allocation</li> <li>Review Hep C allocation if applicable</li> <li>Review ECD listing if applicable</li> <li>Review skin cancer prevention and screening importance of smoking cessation</li> <li>Review risks of immunosuppression (infection and malignancy) and importance of compliance</li> </ul>		<ul style="list-style-type: none"> <li>Review live donation options including NEPKE.</li> <li>Donor coordinator to see for any potential donors</li> <li>Review risks and benefits of transplant surgery</li> <li>Review regional and national allocation</li> <li>Review Hep C allocation if applicable</li> <li>Review ECD listing if applicable</li> <li>Review skin cancer prevention and screening importance of smoking cessation</li> <li>Review risks of immunosuppression (infection and malignancy) and importance of compliance</li> </ul>