

How to Evaluate for Transplantation

Learning Objectives:

1. Understand the process of listing a patient for transplantation and the psychiatrist's role within the care team.
2. Know the components of a comprehensive pre-transplant psychiatric evaluation.
3. Synthesize recommendations based on listing criteria, contraindications, and patient-specific factors that may affect outcomes.

Introduction

Psychiatrists play a significant role in the evaluation and care of organ transplant candidates and living organ donors both before and after transplantation. For transplant candidates, the psychiatrist functions as a transplant team member assisting in transplant candidate evaluations and selection. After listing, psychiatrists may be asked to provide direct care to patients awaiting transplant, perioperative consultation, and longer post-transplant maintenance.

The primary goal of the pre-transplant psychiatric evaluation is to determine whether there are psychiatric or psychological factors that may interfere with the patient's ability to cope with the demands of transplantation. Substance use disorders, mood and anxiety disorders, and neurocognitive impairment are common in this population and can have a significant impact on post-transplant outcomes.

Because demand for organs always exceeds supply, there are many areas in which equity may be a substantial concern. Given the common goal of ensuring that donated organs are put to optimal use, there may often be ethical questions about selecting a patient with severe mental illness as a recipient. Institutional practices can vary widely in what types of psychiatric disorders are considered exclusionary. Other sources of inequity relate to the differential accessibility of services for people of different races, ethnicities, locations, and socioeconomic statuses.

Although patients and treatment teams may see the psychiatrist as a “gatekeeper” or “detective” who will weed out candidates at high risk for poor outcomes, the psychiatrist should aim to enhance patient candidacy whenever possible. This can translate to referrals for further evaluation (such as neuropsychological testing) or recommendations for interventions such as pharmacotherapy, psychotherapy, or addiction treatment programs.

If a patient is receiving community mental healthcare outside of the transplant center, the psychiatrist may serve as liaison, helping both the transplant team and community practitioner understand the specific needs of the patient for optimal outcomes.

Step 1: Clarifying the clinical status and the urgency

- How soon does the patient need to be listed?
- Has the patient and family received education about transplantation?
- Has the patient agreed to transplantation and the required preliminary evaluations?

In cases of acute organ failure, the acuity is high and a decision must be reached within hours to days. When a patient experiences worsening of chronic disease, there is more time to perform a thorough evaluation. The patient and family should be thoroughly educated about the entirety of the transplantation process as early as possible.

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Step 2: Become familiar with the center's listing criteria and processes

- Selection criteria in the transplant setting varies widely between programs. Indications for psychiatric evaluation may also vary.
- Most programs require 6 months of abstinence from alcohol or substances of abuse before listing.
- Standardized instruments to measure psychosocial risks are often used, such as the Stanford Integrated Psychosocial Assessment for Transplant (SIPAT), which assesses the patient's readiness for transplant, social support system, psychiatric stability, and substance use behaviors.
- Other mental health professionals (psychologists, social workers, etc) may often be involved in the transplant evaluation process, so delineation of roles and responsibilities is important when there may be overlap.

Step 3: The pre-transplant psychiatric evaluation

- Goals of the pre-transplant psychiatric evaluation:
 - Diagnose current or past psychopathology
 - Assess efficacy of current treatment
 - Consider interactions between psychiatric medications and other pharmacological agents related to transplantation (many of which are lifelong)
 - Understand how psychiatric symptoms or disorders may interfere with patient's ability to adhere to the treatment plan post-transplantation
 - Evaluate risk of recurrence of psychiatric illness and ability of the patient to participate in treatment should that occur
- Throughout the evaluation process, the psychiatrist may also provide the patient with education so that their candidacy for transplantation is optimized.
- It is standard to use all available sources of information: patient interview, family interview, review of medical records, and discussion with other clinicians who can comment on the patient's clinical status and medical adherence.
- The psychiatric interview of a potential transplantation candidate is generally equivalent to the comprehensive evaluation indicated for most new patients that psychiatrists see. However, there are 3 additional areas to assess:
 - Adherence to medical treatment plans
 - Care support
 - Understanding the transplant process – the patient must have adequate information and decision-making capacity to provide informed consent (the psychiatrist may also provide education on this topic, especially the psychiatric risks of transplantation, to improve the patient's understanding)



Figure 1. Components of a comprehensive pre-transplant psychiatric evaluation

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- In patients who have a history of substance use disorder (SUD) or patients whose transplant is directly related to substance use, a thorough and nuanced substance use evaluation must be conducted. The patient must understand that someone who has pathologic substance use or organ failure as the direct result of substance use is expected to practice lifelong sobriety. Important components of a substance use evaluation include:
 - Use patterns – first use, last use, heaviest use, most recent use, periods of abstinence
 - Treatment history – trials of medications, SUD treatment programs, psychosocial interventions, relapse prevention skills
 - Insight – negative impacts of substance use, motivation to remain sober, factors that increase risk for relapse, relapse prevention plan

Step 4: Evaluate patient's understanding of the transplantation process

- The patient must understand the transplant process to appropriately participate in care and maintain adherence to recommendations.
- Patient education is the basis for ensuring that patients have adequate capacity to provide informed consent for transplantation.
- Because of the frequency and intensity of medical care, patients who are well-informed often move through the pre-transplant process smoother and recover with better outcomes.
- General questions about the transplant process and the patient's expected outcomes can reveal their understanding, level of health literacy, and ability to appreciate different outcomes possibilities.
- Treatment teams provide patients with educational information and reading material to further improve their understanding. Patient resistance to self-education may be a red flag indicating potential problems with adherence, behavior, and maladaptive coping. However, treatment teams must also ensure that educational materials are appropriate to the patient's language, culture, health literacy, and level of intelligence.

Step 5: Evaluate patient ability and willingness to participate in pre- and post-transplant treatment to ensure a good outcome

- After transplant and for the rest of the patient's life, they will be required to take immunosuppressive medication to prevent graft rejection. Strict adherence to medications and medical recommendations is paramount.
- A patient's previous treatment adherence can indicate much about their likelihood of post-transplant adherence, so review of prior medical records can provide very helpful information. A history of poor medication adherence, leaving the hospital against medical advice, and a high rate of missed appointments could be reason to exclude a patient from transplant candidacy.
- It is also important to evaluate the patient's process of taking their medications (how do they organize pills and ensure that they are taken in correct doses and frequencies?). Ask directly how frequently medications are missed in a typical week or month. The patient's ability and willingness to plan solutions for managing complex medication regimens can provide insight into their executive function and investment in the transplant process.
- A lack of *care support* is a contraindication to transplant. Organ transplantation involves intensive surgeries, medication management, and postoperative care. Patients may be

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hospitalized for weeks to months. At discharge, they may require assistance with transportation, medications, and activities of daily living.

- Transplant programs generally require that patients have 24/7 access to their care support person. This can significantly improve outcomes and reduce risk of graft rejection and death.
- In evaluating a patient's care support, questions about length and nature of relationship, conflicts in the relationship, and level of investment is important. Speaking directly to the anticipated care support person is vital to ensure that all parties are on the same page regarding expectations and requirements.
- Other important social considerations to be evaluated include stable housing near the medical center, transportation to and from appointments, and adequate finances or insurance to ensure long-term coverage of medications and follow-up care.

Step 6: Educate the patient about psychiatric risks of transplantation and healthy coping skills

- Transplantation can be conceptualized as an extreme stressor. It therefore incurs an increased risk of precipitating psychiatric illness, especially in the setting of prior psychiatric illness. Patients must be educated about this risk and can often benefit from creating contingency plans for how to handle recurrence of psychiatric symptoms or illness.
- Helping patients understand positive health behaviors (especially diet, exercise, and sleep) before transplant can improve the transplant process and outcomes. The psychiatrist's skills in motivational interviewing can be especially helpful in this context.
- Because transplant patients receive high volumes of information, repetition of education and follow-up can help solidify new knowledge and behaviors.

Step 7: Discuss the findings of the evaluation with the Review Committee

- Consider how the transplant team integrates the psychiatric evaluation—some centers prefer a risk stratification (low, moderate, or high risk) while other centers expect a binary decision (recommendation for or against listing for transplant).
- Indicate the psychiatric diagnoses, severity, stage of illness (e.g., acute exacerbation vs sustained remission), and treatment responsiveness.
- State how the patient's psychiatric status or history might affect the transplant outcome.
- Review past behavior that may indicate the patient's likelihood of adhering to their treatment plan. Patient strengths may also be relevant to this discussion.
- When applicable, discuss the recommended treatments to improve the patient's likelihood of positive transplant outcomes.

References:

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