

**How to Evaluate for Transplantation**

**Learning Objectives:**

- 1) Understand the process involved in listing a patient for transplantation.
- 2) Evaluate a patient for transplantation.
- 3) Consider listing criteria, contraindications, and participation in the selection committee.

**Introduction:**

Psychiatrists play a significant role in the evaluation and care of organ transplant candidates and living organ donors—before and after transplantation. For transplant candidates, the psychiatrist functions as a transplant team member assisting in transplant candidate evaluations/selection. After listing, psychiatrists are asked to provide direct care to patients awaiting transplant, perioperative consultation, and longer post-transplant maintenance (1).

The main 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. There is extensive literature describing the prevalence of psychiatric disease in transplant candidates as well as the impact of psychiatric disorders upon post-transplant evolution and outcomes (2).

Although transplant teams may look to the psychiatrist as a “gatekeeper” or “detective” who will weed out candidates at high risk for poor outcomes, the psychiatrist should aim at enhancing patient candidacy whenever possible (3). This may require recommending formal addictions treatment, 12-step groups, psychotherapy, medications, neuropsychological testing, or referral to mental health providers in the community.

If a patient is receiving mental health care outside of the transplant center, the psychiatrist assists by providing communication, education, and care coordination between the team and outside provider or facility. When significant character pathology is present, the psychiatrist may help the transplant team develop coordinated approaches to reduce regressed behavior, such as splitting, which adversely affects the provision of effective medical care.

**\*Step 1: Clarifying the clinical status and the urgency**

- How soon does the patient need to be listed? Table 1 describes scenarios in which psychiatrists may be called to determine transplant candidacy and the urgency associated with these scenarios.

**Table 1: Scenarios for determining transplant candidacy**

<b>Acute Organ Failure</b>	The acuity is high and a decision must be reached within hours
<b>Exacerbation of chronic pre-existing disease</b>	Information about patient’s adherence with medical treatment must be sought
<b>Logistical reasons</b>	The level of acuity is less high and there is more time to implement treatment changes if necessary (could be due to travel, ease, etc).

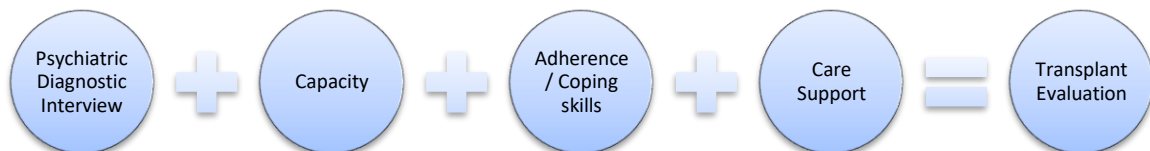
- Has the patient and family received education about transplantation?
- Has the patient agreed with the evaluation for transplantation and with transplantation if deemed recommended?

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

- Selection criteria in the transplant setting varies widely between programs
- Most programs require 6 months of abstinence from alcohol or addictive substances before listing
- Standardized instruments to measure psychosocial risks are often used (SIPAT)

### Step 3: The Pre-transplant Psychiatric Evaluation

- It is standard to use all the sources of information available: patient interview (often not possible in acute situations since the patient may be confused or non-verbal), family interview, review of medical records, outside mental health agencies, direct information from medical providers who can comment on patient's medical adherence and/or sobriety.
- In general, the evaluation of a patient for transplant has little deviation from a typical psychiatric diagnostic interview, including: psychiatric disease screening, psychiatric history, substance use history, social history, family history, medications, allergies, labs, and mental status exam. The exception to this is the addition of three main realms of additional evaluation: adherence, care support, and understanding of the transplant process. One more additional component of the psychiatric transplant interview is largely educational. Educating the patient about the potential risks that transplant poses to them from a psychiatric perspective can be integral to the patient's decision making in the transplant process.
- Formula



- Substance Use Disorder Evaluation
  - In select patients who have a history of a substance use disorder a very thorough and in-depth substance use evaluation should be conducted. It should be well understood that a patient who has pathologic substance use or organ failure as a direct result of substance use are expected to practice lifelong sobriety.
  - Obtain detailed evaluation of the addiction history - first use, last use, heaviest use, most recent use, periods of abstinence, negative impact of substance use
  - Review treatment history - trial of medications, relapse prevention skills
  - Assess insight regarding the following – triggers, relapse prevention plan in place, has the patient's life changed since abstinence, sober home/associates, motivation to remain sober
  - Consider various levels of chemical dependency care - inpatient, intensive outpatient, community recovery - that could be utilized to ensure long-term sobriety.
- Goals of the pre-transplant psychiatric evaluation

- Diagnosis of existing or past psychiatric disease.
- Assess efficacy of the current treatment
- Consider interference between psychiatric medications and other pharmacological agents during transplantation.
- Evaluate the risk of recurrence of psychiatric illness, resources, and ability of the patient to participate in treatment should a recurrence occur.
- Get a sense of how psychiatric illness may interfere with patient's ability to maintain healthy living post transplantation and adhere to the treatment.

### **Step 4: Evaluate patient's understanding of the transplantation process (Capacity Evaluation)**

- First and foremost a patient must have a reasonable understanding of the transplant process in order to appropriately participate in care and maintain adherence to recommendations. In the case of a patient with cognitive deficits, if there is an adequate lifelong-caregiver, exceptions can be made in this arena. Knowledge about the transplant process can help patients catch symptoms and disease processes that may not come to the awareness of providers until much later. Additionally, patients who are well-informed often move through the pre-transplant process and recover with better outcomes. Because of the frequency and intensity of medical care in a solid organ transplant, specific knowledge about transplant is a requirement.
- General questions about the transplant process and the patient's expectations of outcomes can reveal his/her understanding and level of medical literacy. This criteria is often readily remedied by encouraging patients to read the information provided by the transplant team. Resistance by the patient to educate him/herself can be a red flag indicating potential problems with adherence, behavior, and maladaptive coping that should be addressed prior to transplant.

### **Step 5: Evaluate the ability and willingness of the patient to participate in pre & post-transplant treatment in order to ensure a good outcome.**

- Adherence
  - After transplant for the rest of the patient's life, they will be required to take immunosuppressive therapy in order to prevent rejection of the graft. As a result, strict adherence to medications and medical recommendations is of utmost importance not just for the health of the graft but the life of the patient as well. Because organ donation is in short supply, it is the transplant team's ethical duty to ensure that every organ goes to a patient who will be able to fulfill the duties required to sustain the graft.
  - In general, past behavior predicts future behavior. From the medical record, a history of poor adherence to medications, leaving the hospital against medical advice, and a high no-show rate could be reason to exclude a patient from transplant candidacy. It is also important to evaluate the patient's process of taking his/her medications and to ask directly how frequently medications are missed in a typical week or month. Evaluating the patient's insight and understanding about taking medication can shed revealing information and help predict how he/she may behave in the future.

- Care-support
  - Solid organ donation involves very intensive surgeries, medication management, and postoperative care. Patients are in the hospital for weeks to months. Even at discharge, patients require assistance with transportation, taking medications, feeding, toileting, and numerous other daily tasks of living. In this process, social support is of utmost importance. Transplant programs require access to care-support 24/7 throughout this process. Ensuring that an individual has the support he/she needs after the transplant can significantly improve outcomes. Conversely, a lack of adequate care support frequently results in rejection of the graft and death of the patient.
  - In evaluating a patient's care support, questions about length of relationship, conflicts, 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 the expectations and requirements of this care-support. Included in this evaluation should be discussions regarding stable housing with a location near the medical center where the patient will undergo transplantation, transportation to and from appointments, and adequate finances/insurance to ensure long-term coverage of immunosuppressive medications. The lack of care support is a contraindication to transplant.

### **Step 6: Educate patient about the challenges of the transplantation and healthy coping skills.**

- Transplant can be conceptualized as an extreme stressor like any other that has increased likelihood of precipitating psychiatric illness, especially in the setting of historical psychiatric illness. Therefore patients should be educated about this increased risk. Patients can benefit from preparation by creating contingency plans if a psychiatric illness were to reoccur.
- Preparation in terms of minimizing pain medication use, substance use, and maximizing healthy behaviors (diet, exercise, and sleep) before transplant can improve the transplant process and outcomes.
- In most centers, transplant coordinators are nurses with advanced degrees who repeatedly educate the patient about the healthcare aspects of transplantation. However due to cognitive impairment or high level of anxiety, the retention of information can be low and information is to be repeated. It is helpful to be familiar with what the patient goes through in awaiting and receiving an organ.

### **Step 7: Discuss the findings of the evaluation with the recipient Review Committee**

- Consider how the transplant center integrates the psychiatric evaluation: Some centers prefer a risk evaluation (low risk/moderate risk/high risk), other centers expect a binary decision (list or not list, from the psychiatric perspective)
- Stay focused. Psychiatry is only a part of a multidisciplinary evaluation and the recipient review committee has to review a high volume of data
- Indicate the psychiatric diagnosis and the stage of illness (in sustained remission versus acute exacerbation).
- State if the disease is refractory and how it would interfere with the transplant outcome.

- If applicable, discuss the treatment recommended.
- When discussing the patient's ability to adhere to medical treatment, mention past behavior and patient's strengths.

### References

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- 2) Zimbrea PC, Proops N. Perioperative Psychiatric Problems in Organ Transplantation. In: Zimbrea PC, Oldham MA, Lee HB, editors. *Perioperative Psychiatry: A Guide to Behavioral Healthcare for the Surgical Patient*. Cham: Springer International Publishing; 2019. p. 173-93.
- 3) Maldonado JR. The Psychosocial Evaluation of Transplant Candidates. In: Sher Y, Maldonado JR, editors. *Psychosocial Care of End-Stage Organ Disease and Transplant Patients*. Cham: Springer International Publishing; 2019. p. 17-48.