

HEALTHGRADES®

Transplant Excellence Award™ and Outcomes 2012 Methodology

To help consumers evaluate and compare more than 200 U.S. hospital transplant centers, HealthGrades used risk-adjusted data for transplant recipients, distributed by the Scientific Registry of Transplant Recipients (SRTR) Program, to identify the top organ transplantation centers for the following four organs: heart, kidney, liver and lung.

Data Source

Outcomes for all solid organ transplants in the U.S. are compiled by the Scientific Registry of Transplant Recipients (SRTR) through its collaboration with the Organ Procurement and Transplantation Network (OPTN). HealthGrades Transplant Excellence Awards™ and transplant recipient outcomes are based on the most recent SRTR/UNOS data:

- Patient and Graft Survival Outcomes include three-year and one-year survival outcomes:
 - Three-year patient and graph survival outcomes are based on inpatient data for transplantations between July 1, 2005 and December 31, 2007.
 - One-year patient and graph survival outcomes are based on transplants that occurred between January 1, 2008 and June 30, 2010.
- Waitlist Mortality is based on inpatient data from January 1, 2010 through December 31, 2010.

Risk-adjusted data for kidney and liver transplantations are for transplant recipients and does not include outcomes for live donors. Graft survival rates refer to whether a graft (the organ itself) is still functioning at a certain time after the transplantation; it does not refer to the live donor. Graft survivial ratings are not used to determined award recipients but this measure of quality is available on the HealthGrades hospital profiles. HealthGrades considers overall patient outcomes regardless of age, does not designate separate ratings by age, and does not currently evaluate children's hospitals for transplant ratings.

Designating Transplant Excellence Awards

HealthGrades Transplant Excellence Awards identify hospitals that are among the best in the nation in transplantation for each of four organs. To be considered for a HealthGrades Transplant Excellence Award, a transplant center had to meet the following qualifications using SRTR data:

- Three-Year Patient Survival Hospital must have a "Statistically Higher" Three-Year Patient Survival rate than expected (HealthGrades rating *Better than Expected*).
- Waitlist Mortality Rate Hospital must have a Waitlist Mortality rate that is "Statistically Lower" or "Not Statistically Different" than expected (HealthGrades rating Better than Expected or As Expected).

Transplant Outcomes Ratings

HealthGrades used risk-adjusted data distributed by Scientific Registry of Transplant Recipients (SRTR) Program to report outcomes for transplant recipients. Risk adjustment is important because patients differ from one another with respect to their health status, demographics, and type of procedure performed. Risk adjustment takes these factors into consideration to make fair and accurate comparisons of hospitals based upon the types of patients treated.



Based on a risk-adjusted methodology, the **predicted** (expected) outcome is estimated and compared to the **actual** outcome. For example, looking at a three-year patient survival outcome, a *Better than Expected* rating means that more transplant recipients survived at the three-year mark than expected.

In general, each hospital receives one of the following ratings for each outcome (except Waitlist Mortality):

- Better than Expected Outcomes are statistically higher/better than expected.
- As Expected Outcomes are not statistically different than expected.
- Worse than Expected Outcomes are statistically lower/worse than expected.

For Waitlist Mortality, each hospital receives one of the following ratings:

- Better than Expected Outcomes are statistically lower/better than expected.
- As Expected Outcomes are not statistically different than expected.
- Worse than Expected Outcomes are statistically higher/worse than expected.

Outcomes presented on HealthGrades Transplant Program Profiles include:

- Total Transplants
- Transplant Rate
- Waitlist Mortality
- One-Year Patient Survival
- Three-Year Patient Survival
- One-Year Graft Survival
- Three-Year Graft Survival

Total Transplants

Total transplants is the total number of the specific organ transplants (e.g., heart, kidney, liver, or lung) performed at the hospital for the most recent 12-month data period.

Transplant Rate

The total number of patients who received a transplant divided by the total number of patients on the waitlist.

- Better than Expected More patients than expected received a transplant.
- As Expected About the same number of patients as expected received a transplant.
- Worse than Expected More patients than expected received a transplant.

Waitlist Mortality

A waitlist is a list of patients who need an organ transplant. Waitlists are specific to both the geographic area and the organ type. After evaluation by a team of transplant professionals, a qualified patient is added to the national waitlist. Each time a donor organ becomes available, the national computer generates a list of potential recipients based on genetic similarity, organ size, medical urgency, and the amount of time the patient has been on the waitlist.

Waitlist mortality is a measure of the number patients who died while waiting for a transplant. Waitlist mortality rate accounts for the amount of time patients are waiting. It is calculated as the number of patient deaths per 1,000 patient years on the waiting list. Each hospital receives one of the following ratings for waitlist mortality:



- Better than Expected Less patients than expected died while waiting for a transplant (e.g., mortality rate is statistically lower).
- As Expected About the same number of patients as expected died while waiting for a transplant (e.g., mortality rate is not statistically different).
- Worse than Expected More patients than expected died while waiting for a transplant (e.g., mortality rate is statistically higher).

Patient Survival

Patient survival refers to whether a transplant patient is alive at a certain time after receiving an organ transplant. The time points measured include one year and three years. Each hospital receives one of the following ratings for one-year patient survivial and for three-year patient survivial:

- Better than Expected More patients than expected survived after one year or after three years.
- As Expected About the same number of patients as expected survived after one year or after three
 years.
- Worse than Expected Less patients than expected survived after one year or after three years.

Based on a risk-adjusted methodology, the **predicted** (expected) value for paitent survival is estimated and compared to the **actual** patient survival. A *Better than Expected* rating means that more transplant recipients survived at the one-year mark or the three-year mark than expected.

Graft Survival

Graft survival refers to whether a graft (the transplanted organ) is still functioning at a certain time after transplantation. The time points measured include one year and three years. Graft survivial ratings are not used to determined award recipients but this measure of quality is available on the HealthGrades hospital profiles. Each hospital receives one of the following ratings for one-year graft survivial and for three-year graft survivial:

- Better than Expected More grafts survived than expected after one year or after three years.
- As Expected About the same number of grafts survived as expected after one year or after three
 vears.
- Worse than Expected Less grafts survived than expected after one year or after three years.

Based on a risk-adjusted methodology, the **predicted** (expected) value for graft survival is estimated and compared to the **actual** graft survival. A *Better than Expected* rating means that more transplanted organs were still functioning at the one-year mark or three-year mark than expected.

