

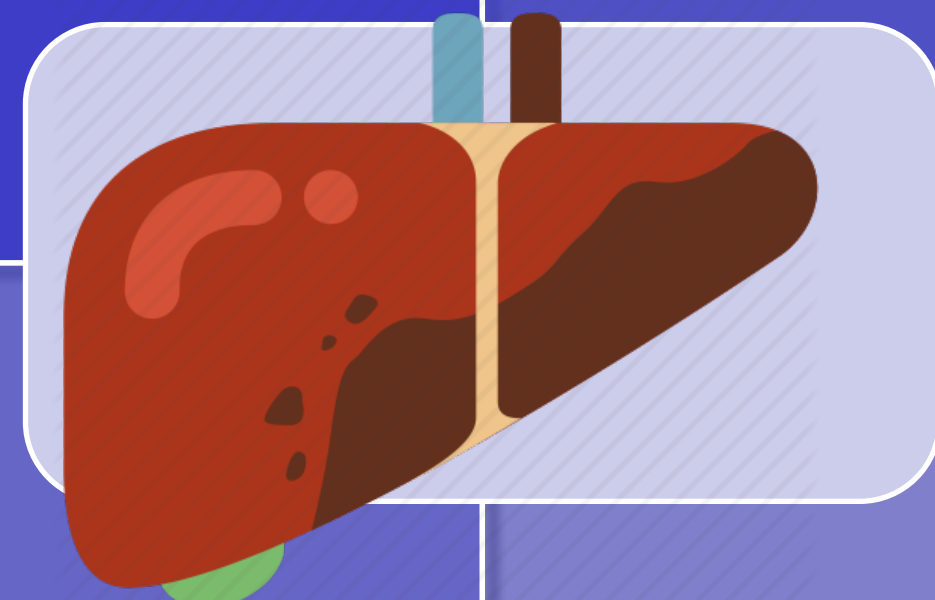
Justin Boike MD, MPH

Division of Gastroenterology & Hepatology, Department of Medicine, Northwestern University

What Does The Liver Do?

Synthesis & Storage of:
Proteins, Vitamins, Fat

Detoxification of Drugs
& Alcohol



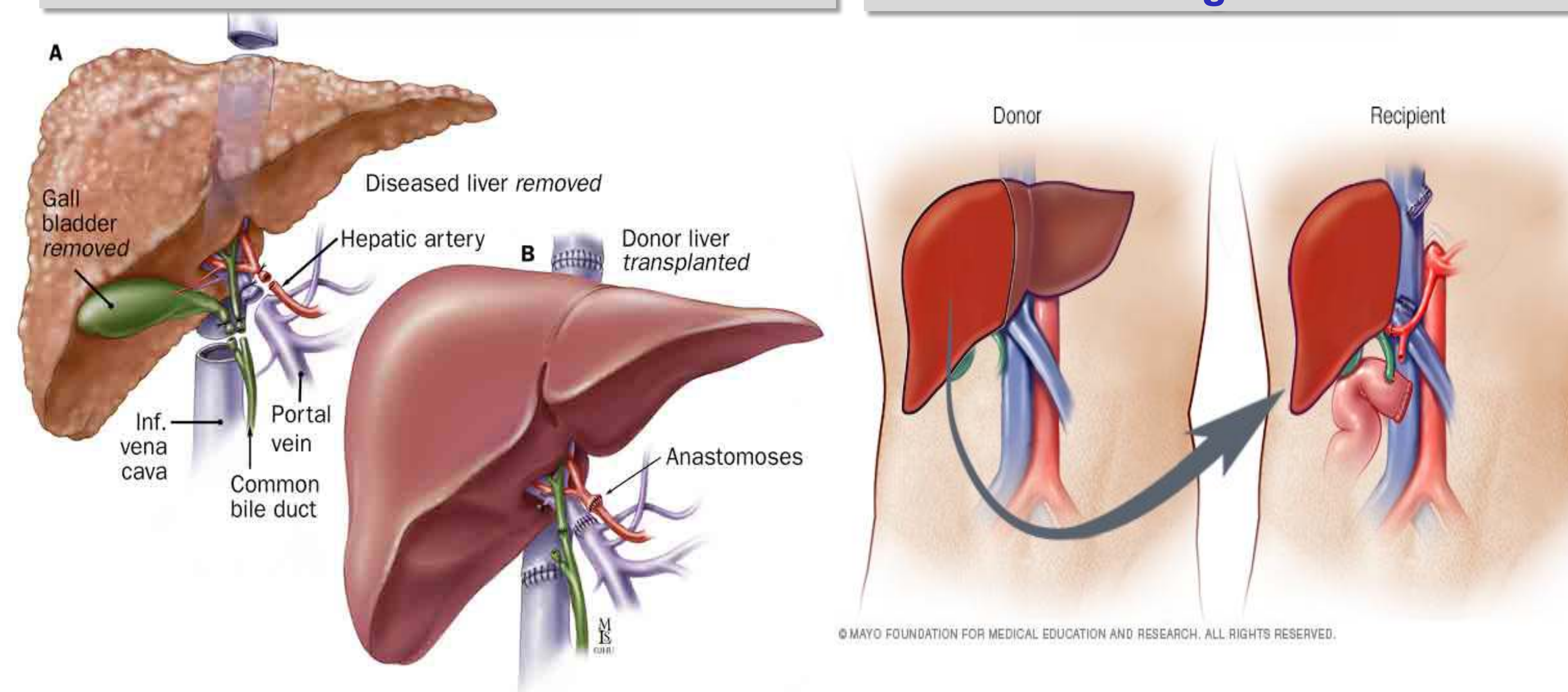
Bile Synthesis and
Drainage

Blood Glucose
Regulation

What Is A Liver Transplant?

Deceased Donor

Living Donor



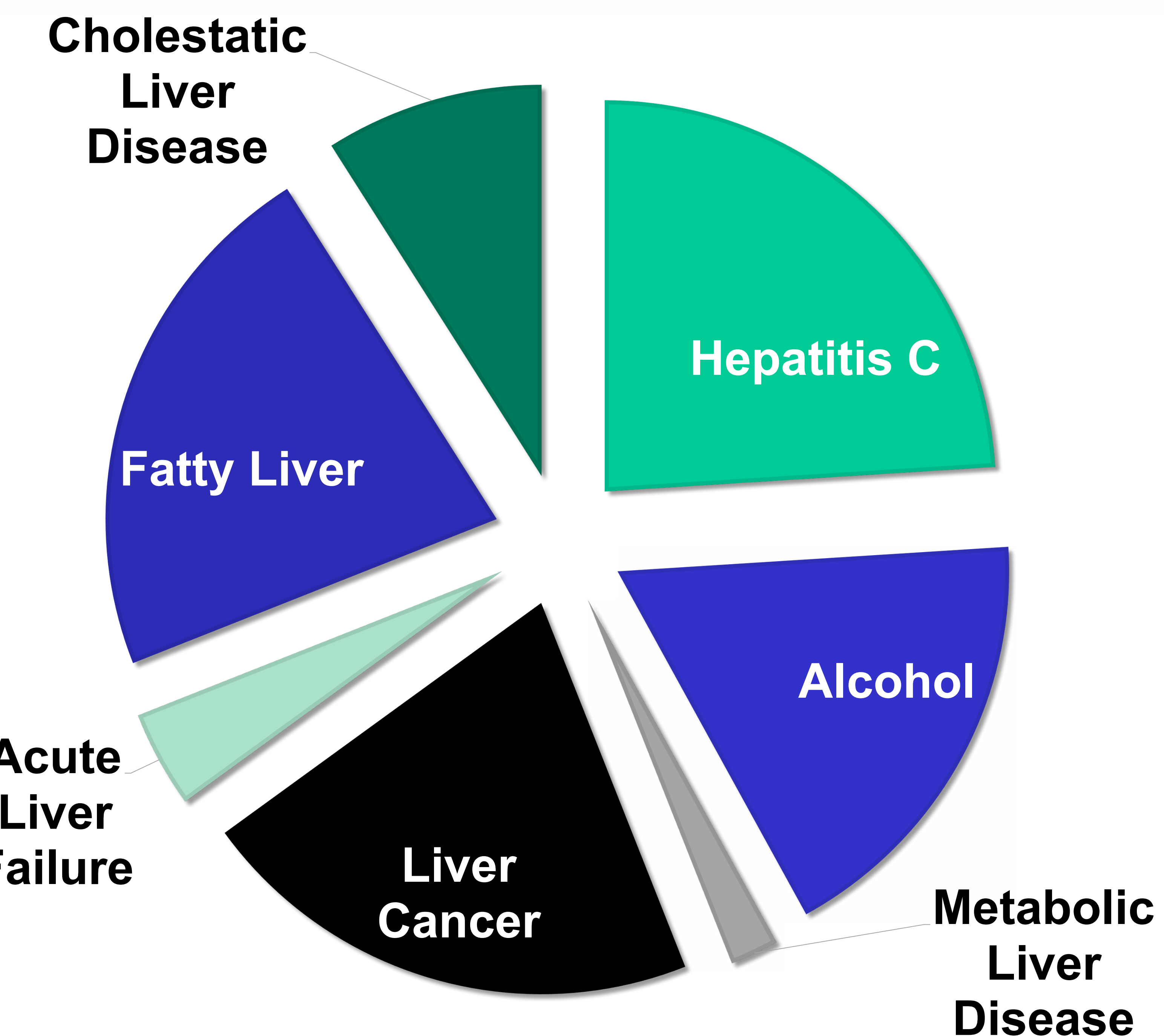
How To Be Listed For Liver Transplant?

- A transplant team meets with potential recipients to review their candidacy for transplantation
- The multidisciplinary team includes transplant surgeons, hepatologists (liver specialists), psychiatrists, dieticians, social workers, case managers and transplant coordinators
- Each center has its own set of guidelines for listing patients
- If approved by the committee, the patient is placed on a national waitlist to obtain an organ from a deceased donor
- The Organ Procurement and Transplantation Network (OPTN) links all the transplant centers with donors and coordinates availability of organs within a geographic region

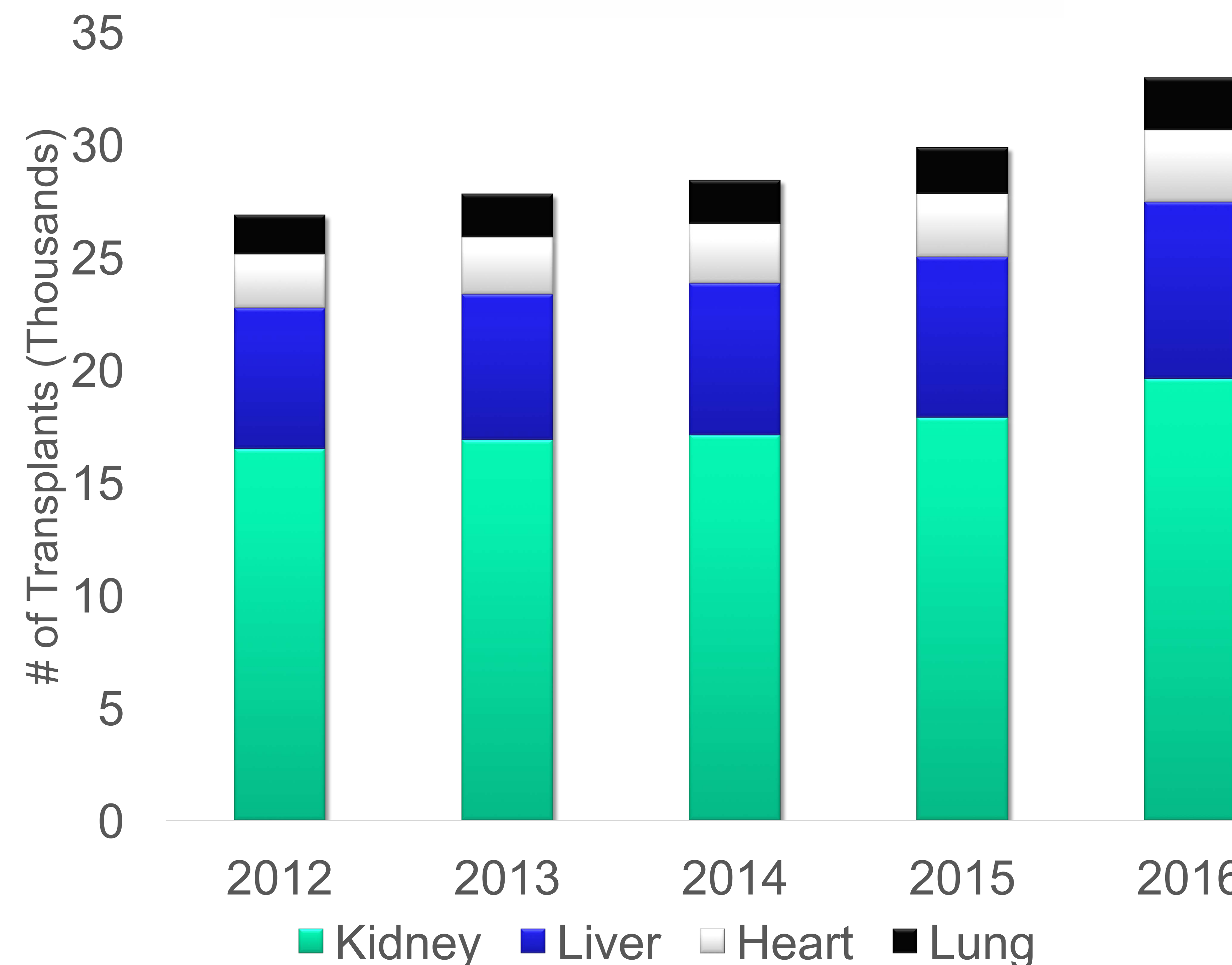
How Does The List Work?

- A patient may be on the list for several days or even years
- When an organ becomes available, factors determining allocation include blood type, body size and then severity of illness; i.e. the sickest patients have highest priority
- Severity of illness is calculated by a scoring system called: **Model for End-Stage Liver Disease (MELD)**
- MELD score is determined by several factors from routine blood tests that are associated with the function of the liver
- A higher MELD scores correlates to shorter wait list time

What Are Reasons For Liver Failure?



What Is A Liver Transplant?



Life After Liver Transplant

| Time Since Transplant | Organ Survival | Patient Survival |
|-----------------------|----------------|------------------|
| 1 Year | 90% | 92% |
| 3 Years | 81% | 84% |
| 5 Years | 73% | 76% |

Advances In Liver Transplant At NW

- Increasing access to liver transplant among select patients with recent alcohol use who were previously "high risk" candidates (Dr. Priya Maddur)
- Reducing post-transplant complications by limiting immunosuppression medications and the associated long-term complications related to their use (Drs. Lisa VanWagner and Josh Levitsky)
- Development of tissue scaffold matrix technologies allowing for organogenesis (Dr. Jason Wertheim)
- Improvements in transplant surgical safety among liver donors (Dr. Daniela Ladner)