

How a compensation system for organ donors will work in practice

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Introduction

- Persistent excess demand for organ transplants.
- Loss of life while waiting.
- Reduced quality of life while waiting.
- The malfunctioning of the kidney transplant market has not only continued over time, but has become much worse.
- What to do about it?
- Many discussions of reforms of the present system:
 - **Mild:** Better allocation, implied consent, etc.
 - **More Radical:** Pay for organs.

Introduction

- Most analysts recognize that the only way to eliminate the large queues in the market for kidney transplants is by significantly increasing the supply of kidneys.
- The shortage has become so severe that many transplant experts and organizations have started to reexamine donors' motivations.
- Past initiatives:
 - Main Concentration on cadavers.

Introduction

- Our proposal instead will focus on living donation for the following reasons:
 - Living donors are the largest pool of potential donors.
 - Live transplant already account for over 40% of the kidney transplants.
 - With deceased donation it would be difficult to establish the role of the family in the decision to donate.
- We consider and evaluate a basic framework of compensation programs of organ procurements.
- Using this basic framework, we consider three different models of organ procurement.
- The most important features in the proposed compensation systems of organ procurement are common to all three models and rely heavily in the current system.

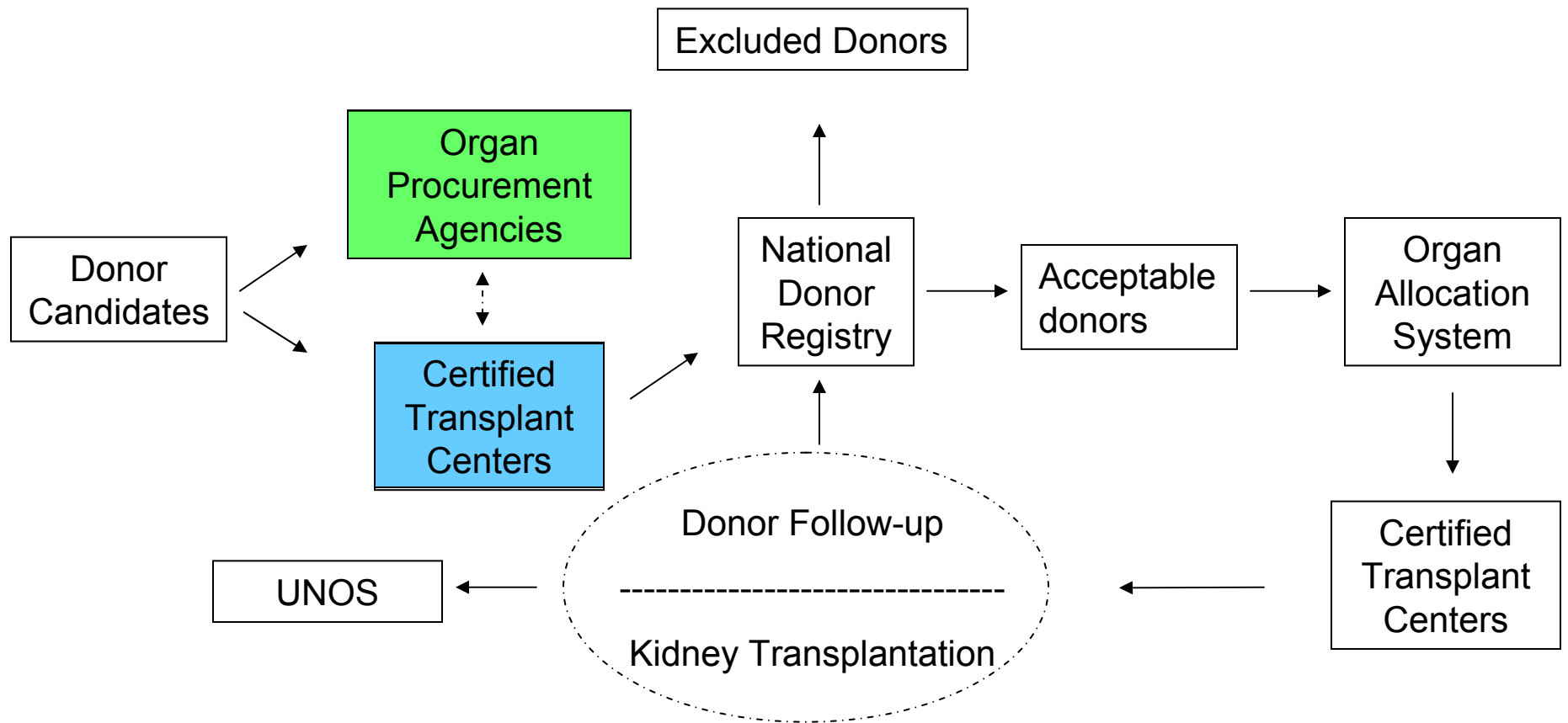
Introduction

- We do not enter into the many complex and unsolvable ethical and moral issues involved in the financial incentives for living organ donors.
- We do discuss the role of the physician and transplant centers in the proper screening and selection of donors, in post-transplant care, and in other steps of the process of organ procurement.

Basic Framework

- Programs of financial compensation for living organ donors can take many forms.
- We begin by presenting a basic structure for the process of living organ donation with financial incentives.

Basic Framework



Donor Screening and Selection

- The safety of living donors needs to be at the core of any proposed kidney transplant network.
- The main feature of the current system of living organ donation is that the screening process is performed by the transplant centers.
- In order to preserve current standard in terms of the donor screening process, organ procurement agencies, whether working in a centralized system or not, will refer donor candidates to certified transplant centers.

Donor Screening and Selection

- Donor candidates will be evaluated medically and psychologically at certified transplant centers with the standard medical criteria for organ donation.
- All potential paid donor evaluations will need to be standardized across transplant programs who have been certified to participate and perform paid donation kidney transplant.

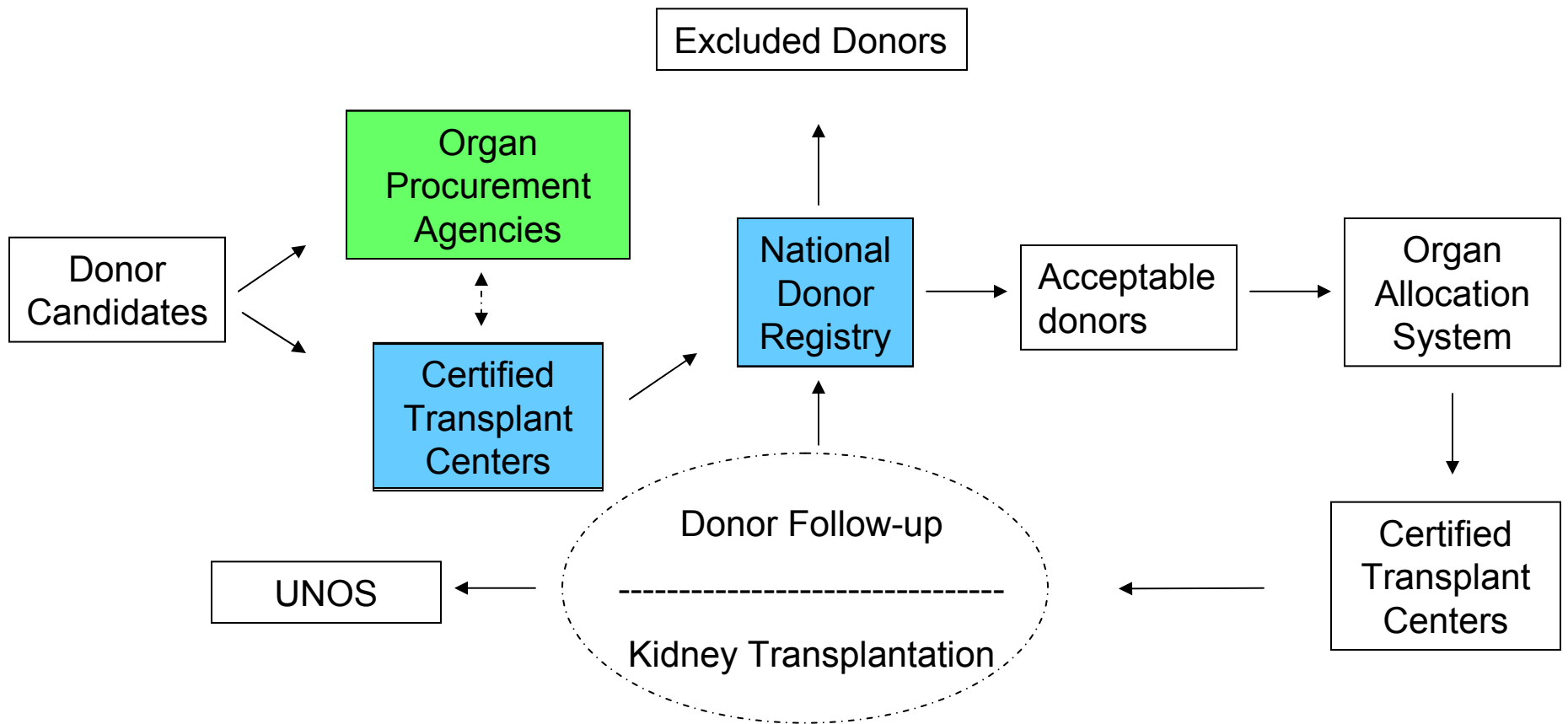
Donor Screening and Selection

- If the tests indicate that the donor candidate is not medically, or psychologically, eligible for organ donation, the transplant center will:
 - Stop the process.
 - Report the donor status of the candidate to the organ procurement agency.
 - Pass the information of the candidate to a national registry so that they cannot misrepresent themselves to another organ procurement agency or transplant center.

Donor Screening and Selection

- When a potential donor is identified, the transplant center will :
 - Transfer all the relevant information to a national donor registry.
 - The donor status of the candidate will be reported to the organ procurement agency.

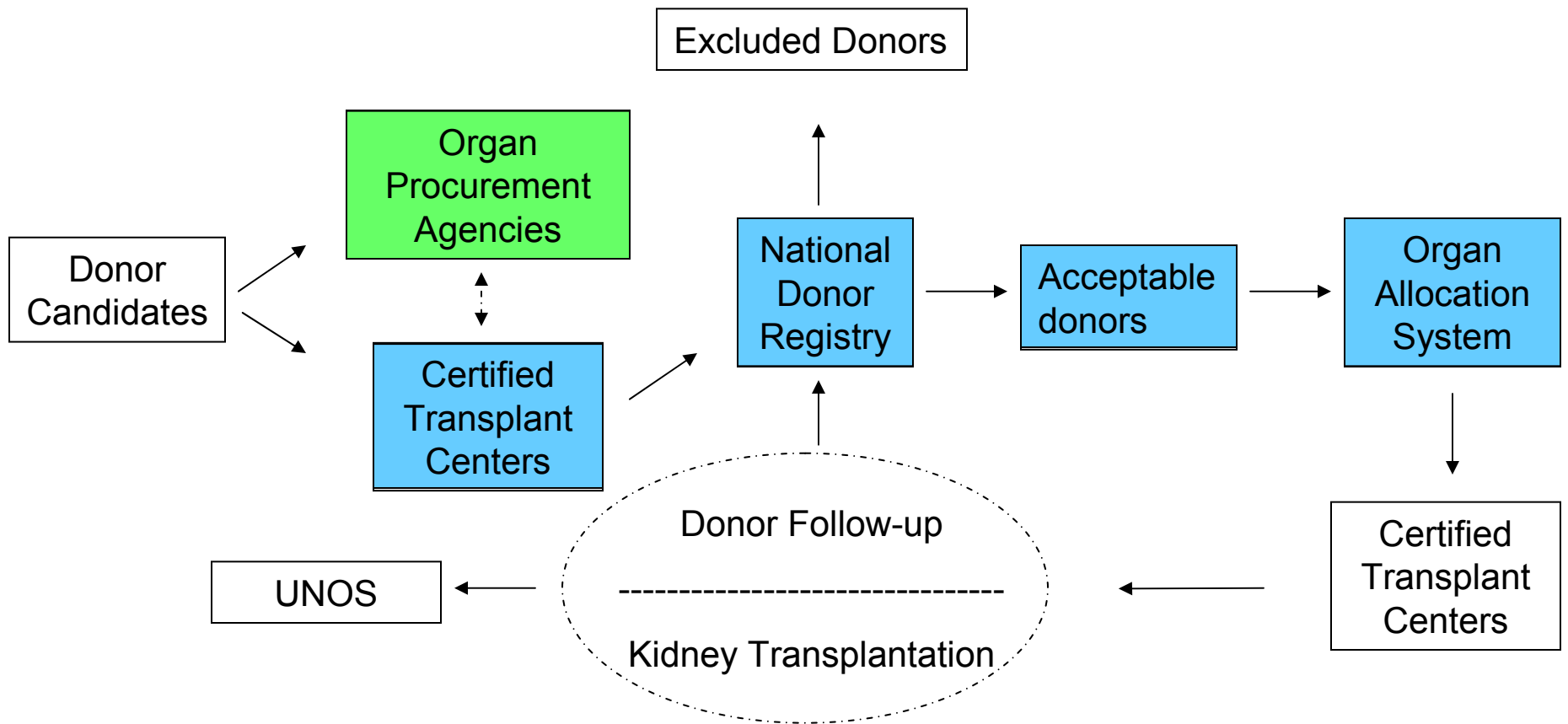
Basic Framework



Donor National Registry

- All acceptable donors will be added to a computer data base.
- A national registry of potential donors will need to be assembled.
- The donor registry will be government sponsored.
- All donor evaluations will be submitted to the donor registry.
- The registry of potential donors will need to include:
 - Blood type data.
 - Tissue type data.
 - Geographical location of the potential donor.
 - ...

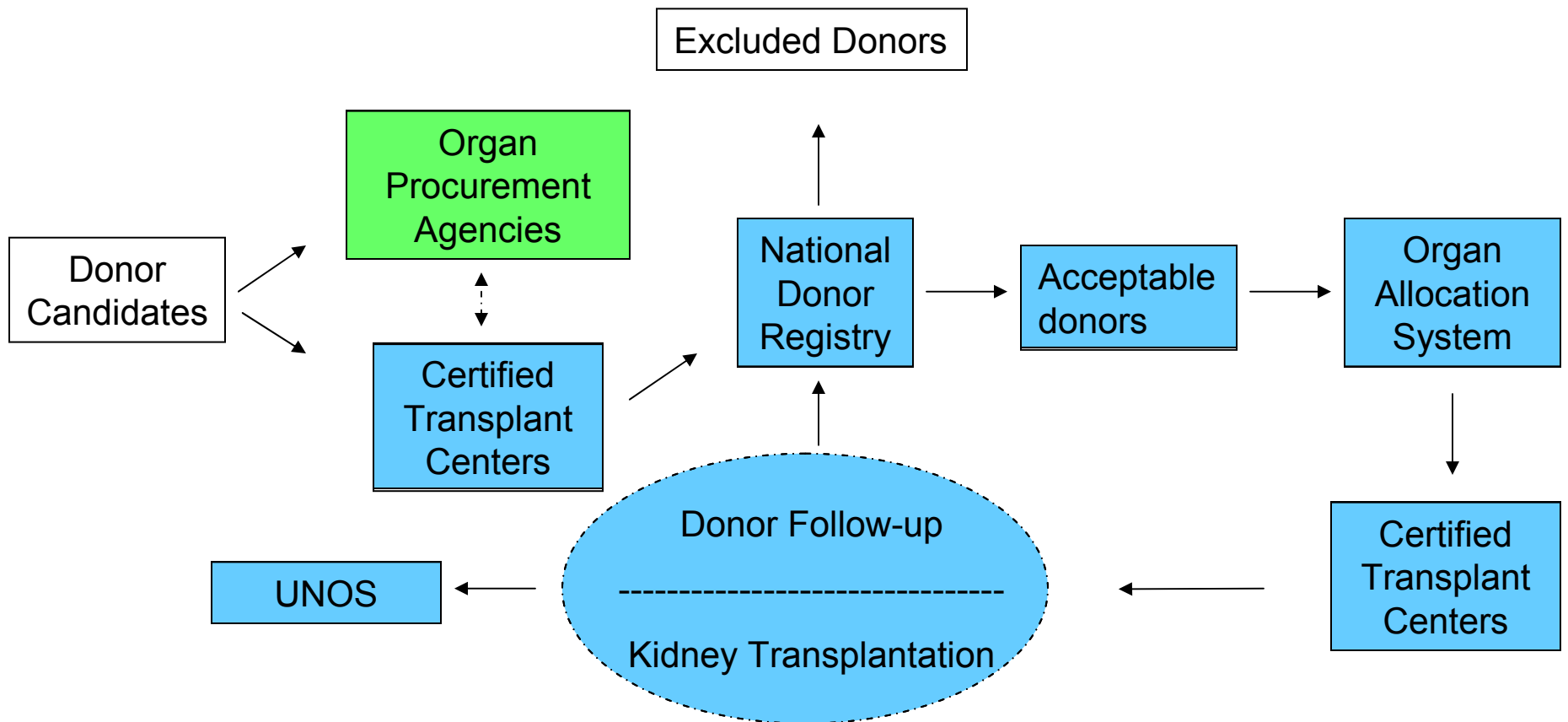
Basic Framework



The Organ Allocation Process

- When an acceptable donor is identified and entered in the donor national registry:
 - A computer program will generate a list of potential recipients.
 - The priority of each potential recipient will be determined using a matching algorithm that will be based on medical and other criteria.
 - The donor and intended recipient will be matched and the certified transplant center will be alerted for the transplant.
 - Once the organ donor is accepted, the usual procedure of Living Donor Kidney Transplant will follow.

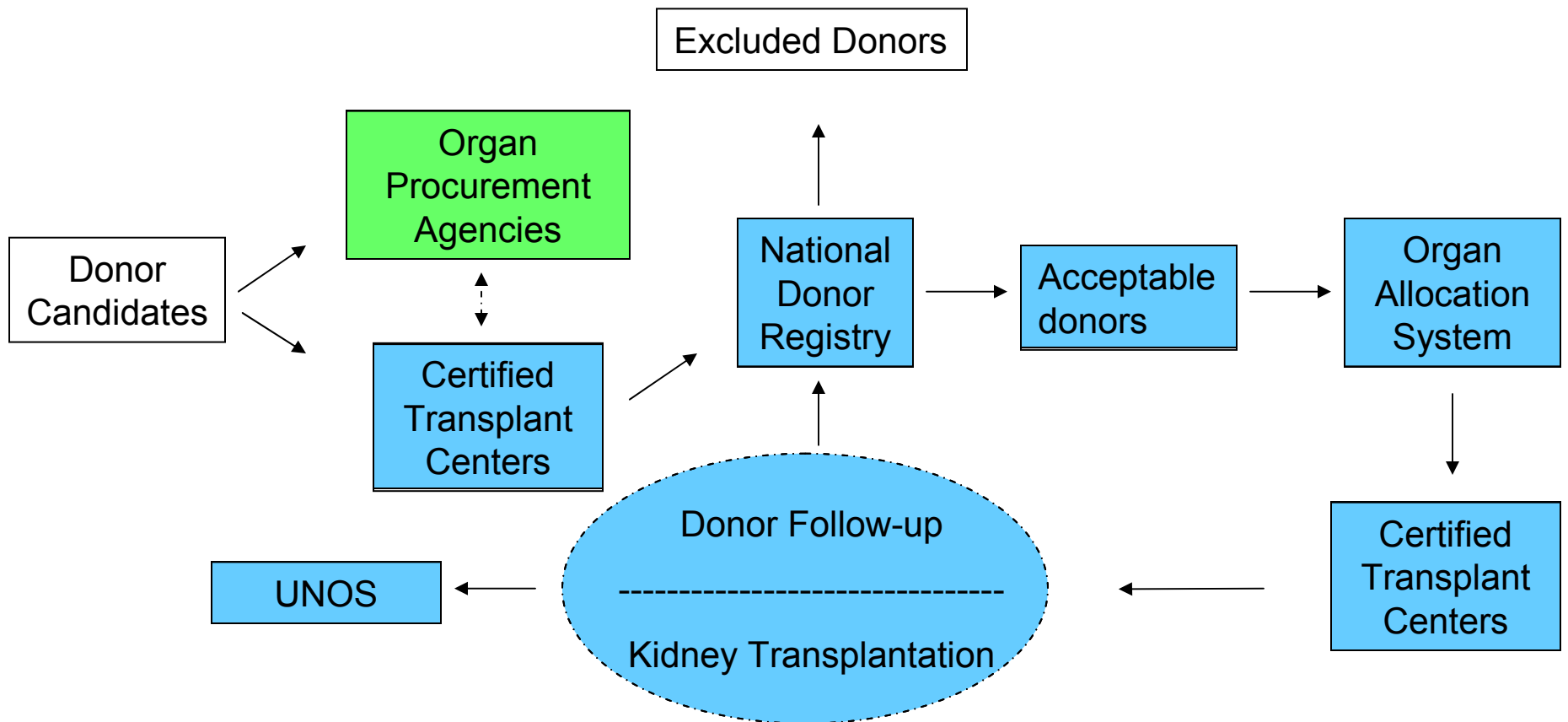
Basic Framework



Transplantation and Donor Follow-Up

- Usual procedure of Living Donor Kidney Transplant.
- The data and follow-up for the donor will be sent to the donor registry and is the responsibility of the transplant center performing the transplant.
- The recipient information will follow current requirements and reported to UNOS.
- **Donor Regret before Transplantation:** at any time in the process, the potential donor can walk out at no cost for her.

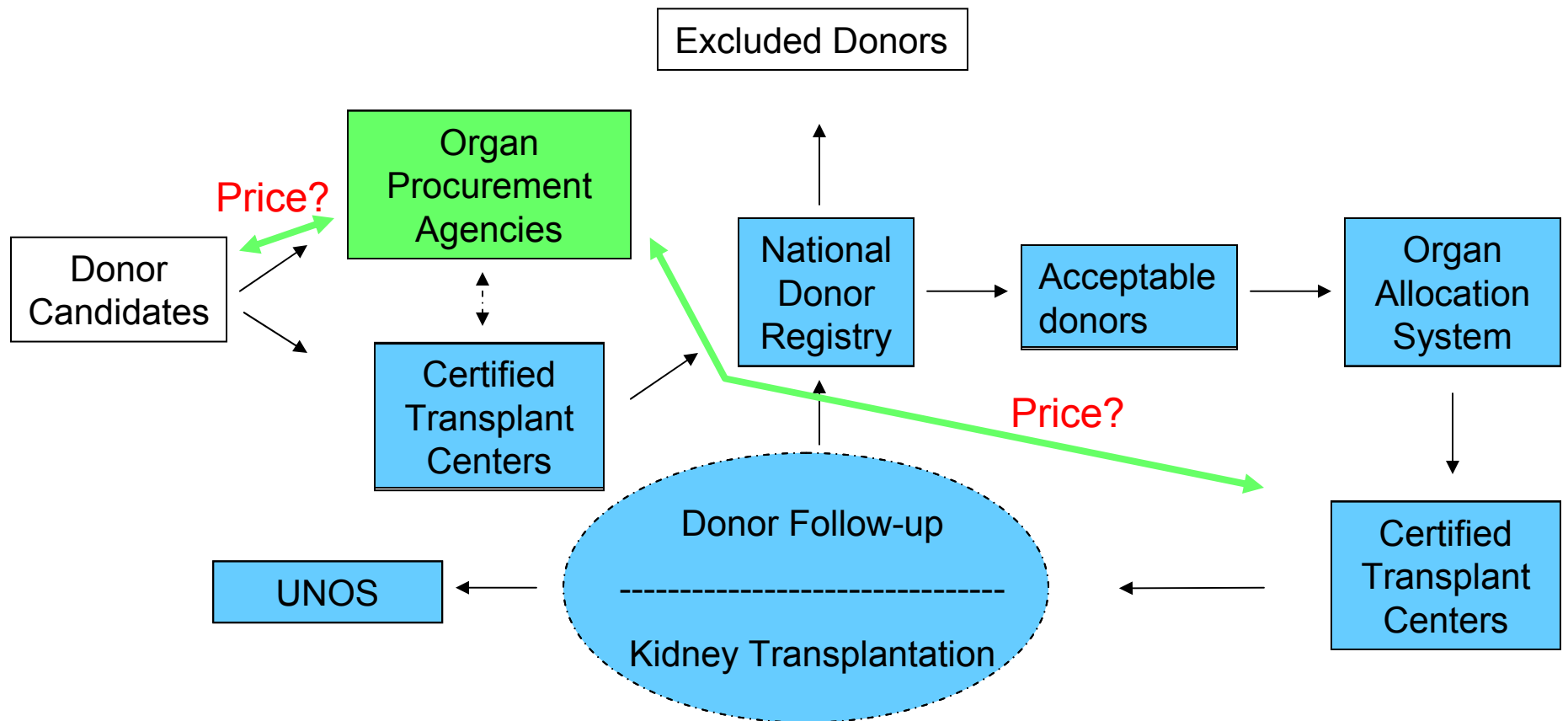
Basic Framework



Organ Procurement Agencies

- Organ procurement agencies will be the first point of contact between the donor candidate (the public) and the transplantation network.
- Independently of the market structure, organ procurement agencies will have similar functions and responsibilities, mainly:
 - Performing basic screening (Blood type and HLA) of donor candidates and donor information.
 - Referring donor candidates to transplant centers for screening.
 - Covering the cost of donor screening and selection (?).
 - Paying the organ donor if the transplant is performed.
 - Charging the transplant center for the organ.
 - Reporting to the national registry of potential donors in case that a potential donor decides to walk out.
 - Other responsibilities?

Basic Framework



Organ Procurement Agencies: Organization

- Programs of financial compensation for living organ donors can take many forms.
- We consider three market structures:
 - Centralized system
 - Decentralized system with control
 - Free Market

Centralized system

- An agency designated by the federal government will be in charge of organizing, designating and controlling the organ procurement agencies.
- This system is analogous to the current system of cadaveric organ procurement.
- The financial compensation for donors and the price paid by transplant centers will be established by the federal government or the designated agency.

Centralized system

- Note that the cost of organs charged to the transplant centers is going to be larger than the financial compensation for donors since organ procurement agencies have other costs (e.g. donor screening costs, administrative cost).

Decentralized system with control

- A central agency coordinate and control organ procurement agencies.
- Price paid to donors is determined by the market.
- Price paid to donors may vary across donors (e.g. according to donor age, blood type); and across organ procurement agencies.
- Price paid by transplant centers is controlled by the central agency.
- Organ are assigned with the same allocation system as before. Not according to willingness to pay.

Free Market

- A central agency may coordinate and control organ procurement agencies.
- Price paid to donors and by transplant centers is determined by the market.
- Price paid to donors may vary across donors (e.g. according to donor age, blood type); and across organ procurement agencies.
- Price paid by transplant centers may also vary.
- Organ are assigned according to willingness to pay.

Conclusions

- Organ Transplant problem is grave: Long waits, low quality of life, and many deaths while waiting.
- The implementation of a system of financial compensation to attract organs from live donors is not complicated.
- It can take many forms, centralized system, decentralized, etc.; but there are some basic features that are common to any system in order to make it reliable.
- The most important features in the proposed compensation systems of organ procurement rely in the current system.

Further Work

- Design of a pilot testing study.