

Clinician Perspective on the Business of Transplantation

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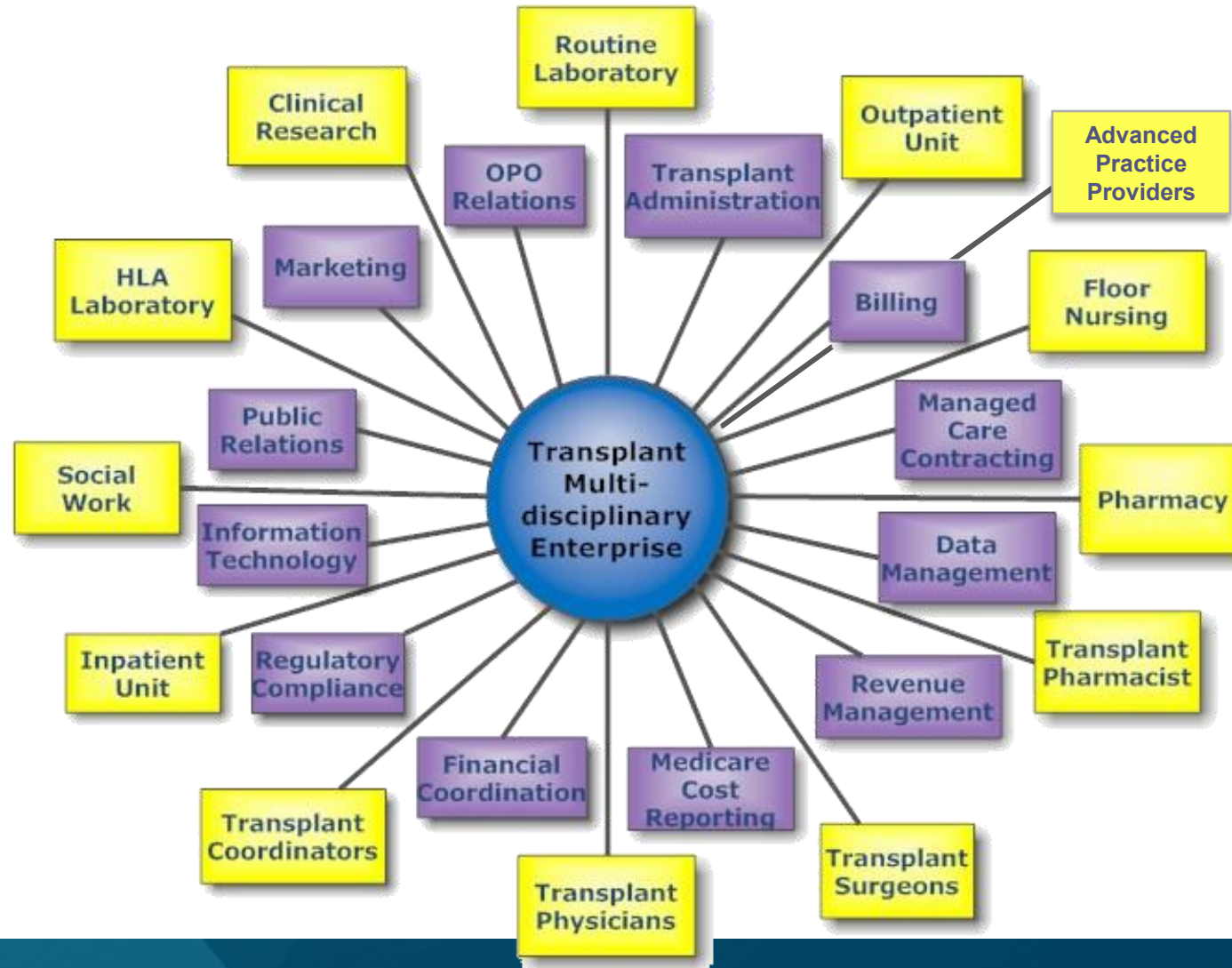


Transplant Enterprise

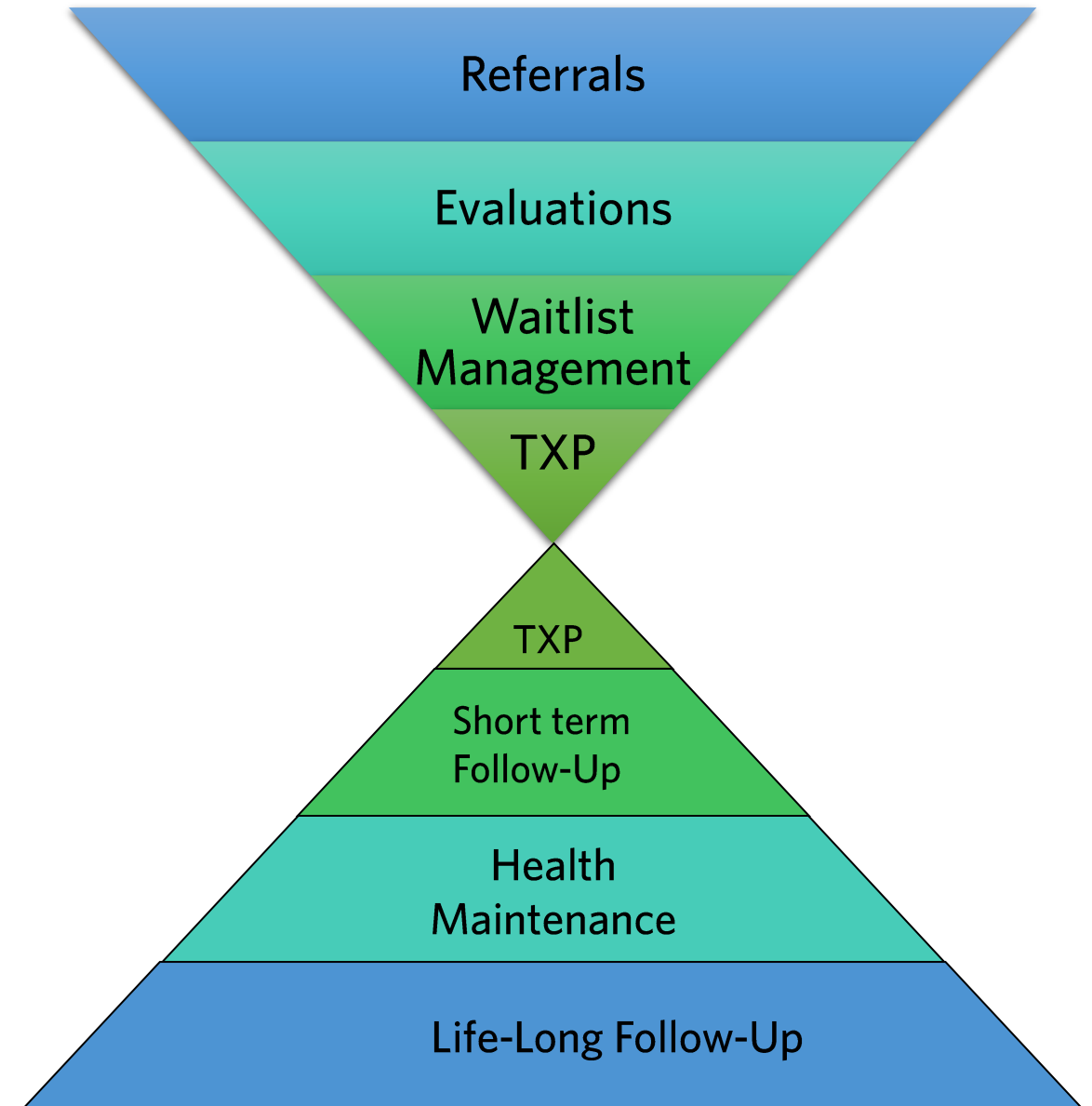
Function of the Transplant Center

- **Objective 1:** Care management of population in end organ failure from referral to eval, eval to list, list to transplant, and post-transplant life in perpetuity
- **Objective 2:** Staffing, resource management
- **Objective 3:** Regulatory compliance (CMS, OPTN/UNOS)
- **Objective 4:** Quality improvement – outcomes management, processes, efficiency, patient experience, etc.
- **Objective 5:** Access and outreach – community partnerships, OPO efforts to grow donation, grow referrals
- **Objective 6:** Finance – Medicare, managed care, payer mix, contracts, COEs

Transplant Multidisciplinary Enterprise

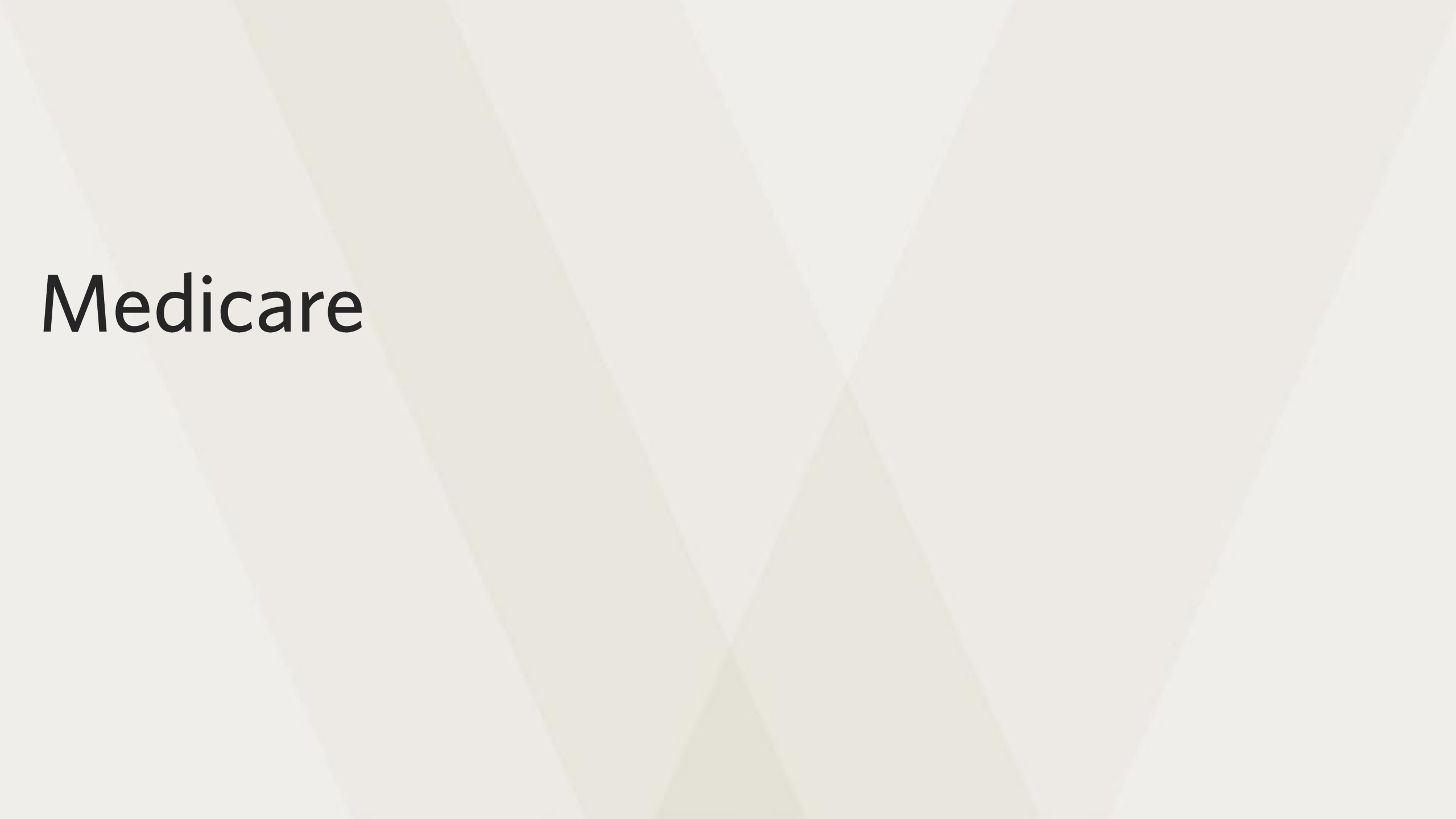


Volume of Transplant Work



Courtesy of Tracy Giacomini

Book of Business



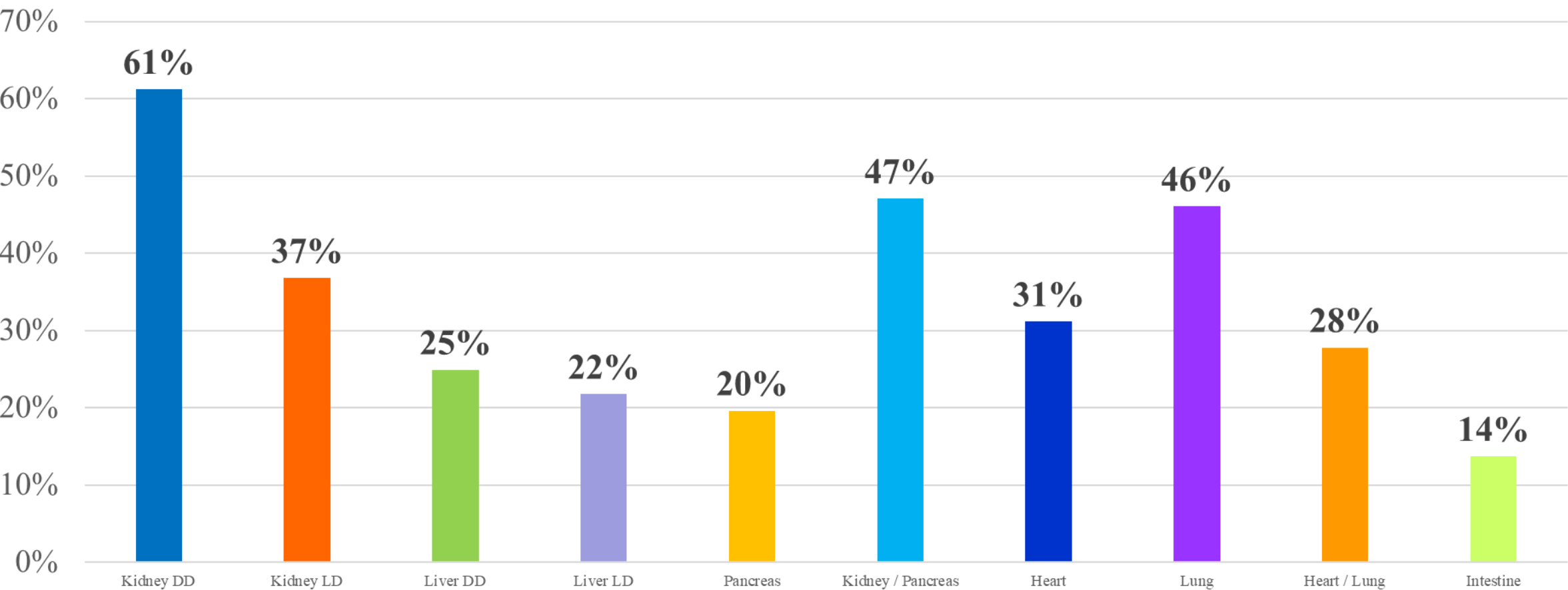
Medicare

Medicare Transplant Approvals

Transplant	Year Coverage Approved
Kidney	1972 - ESRD
Heart	1987
Liver	1991
Lung	1995
SPK	1999
PAK	1999
PA	2006
Intestine	2006

Percentage of 2023 Transplants Paid by Medicare as Primary Source of Payment

Based on OPTN data as of 10/7/2024



Medicare

Phases of Transplantation		
Phase 1	Pre-transplant evaluation.	Organ Acquisition
Phase 2	Patient accepted and listed with UNOS and is now in the maintenance or candidacy phase.	
Phase 3	Patient admitted to hospital for organ transplant procedure and subsequent inpatient stay. This is typically the DRG component of the transplant process.	DRG
Phase 4	Patient discharged from hospital and post-transplant follow-up care period starts.	APC

Living Donation

Phases of Living Donation		Organ Acquisition
Phase 1	Pre-donation evaluation.	
Phase 2	Patient accepted as living donor and now in candidacy phase.	
Phase 3	Patient admitted to hospital for living donor procedure and subsequent inpatient stay.	
Phase 4	Patient discharged from hospital and post-donor follow-up care period starts.	

Why Are Medicare Acquisition Cost Centers Important?

- Medicare will reimburse all appropriate Medicare allowable pre-transplant expenses in Phases 1 and 2 to the point of admission for transplantation inclusive of:
 - Transplant Nurse Coordinators, NPs, Pharmacists, Social Workers, Financial Coordinators, Administrative Staff, Management, etc., accounted for via a monthly time study
 - Transplant Physicians and Surgeons pre-transplant non-billable administrative time accounted for via a monthly time study
 - Office Space
 - Pre-Txp Testing
 - OPO Organ Acquisition
 - Living Donation
 - HLA
 - Communications
 - Pagers
 - Cell Phones
 - Land Lines
 - Etc.
 - Educational Materials
 - Etc.

Factors That Determine a Transplant Program's Total Medicare Ratio

- Medicare Primary Transplant
- Medicare Paid as a Secondary
- Organ Donation in the Hospital

Factors That Determine a Transplant Program's Total Medicare Ratio

Transplant Specific

Medicare Primary + Medicare Secondary + Donor Organs

Total Transplants + Donor Organs

Calculation

Medicare Ratio

Medicare Organs	Ratio
Annual Kidney Transplants = 50	N/A
Medicare Primary Transplants = 25	$25/50 = 50\%$
Medicare Secondary Payments = 5	$30/50 = 60\%$
Kidney Donation in Transplant Hospitals = 26	$56/76 = 73\%$

Medicare Ratio and Reimbursement

(Based on One Million Dollars of Annual Costs)

Medicare Ratio	Reimbursement
Medicare Primary = 50%	\$500,000.00
Medicare Primary + Secondary = 60%	\$600,000.00
Medicare Primary + Secondary + In-House Deceased Donor Kidneys = 73%	\$730,000.00

Organ Donation at Transplant Hospitals

Average Increase in Medicare Organ Acquisition Cost (OAC) Reimbursement
Due to Organ Procurement for OPOs and Other CTCs in 2017

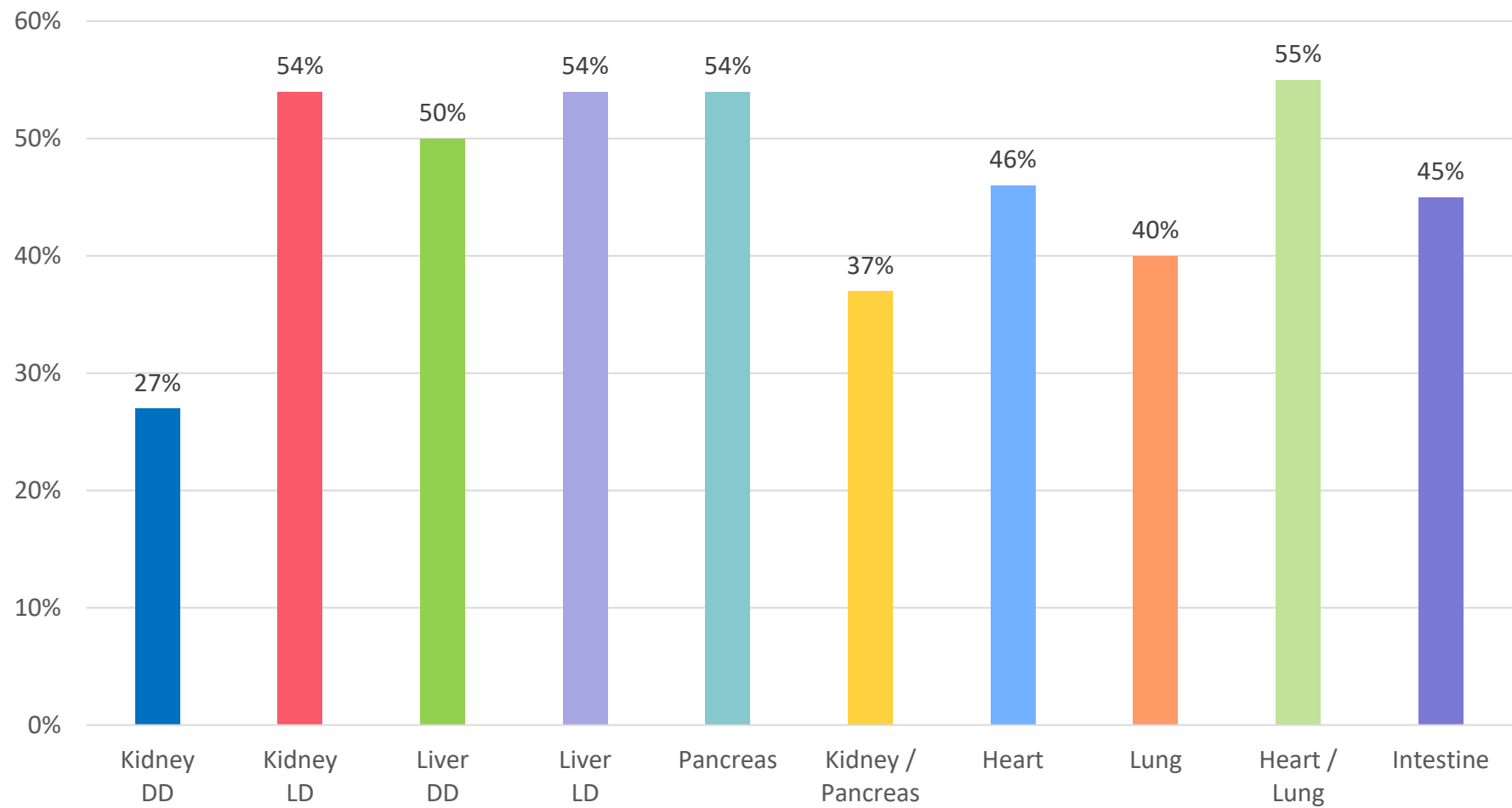
CTC Organ Types	CTC Program Count	Deceased and Live Donor Organs Procured for OPOs and Other CTCs	Difference in Medicare Ratio	Difference in Medicare Reimbursement	Average Reimbursement Per Additional Organ Procured	Average Reimbursement Per Transplant Center	Cost Per Organ Procured
Kidney	223	6,770	8.5%	132,190,393	19,526	592,782	11,125
Liver	126	2,097	13.8%	90,555,317	43,183	718,693	11,627
Heart	114	912	15.6%	50,572,570	55,452	443,619	11,053
Lung	62	589	9.9%	23,435,038	39,788	377,984	11,537
Total Difference in Medicare Reimbursement				\$296,753,318			

Medicare Cost Ratios

National Ratios FY 2024	
Kidney	72%
Pancreas	52%
Liver	37%
Heart	40%
Lung	42%

Managed Care / Commercial

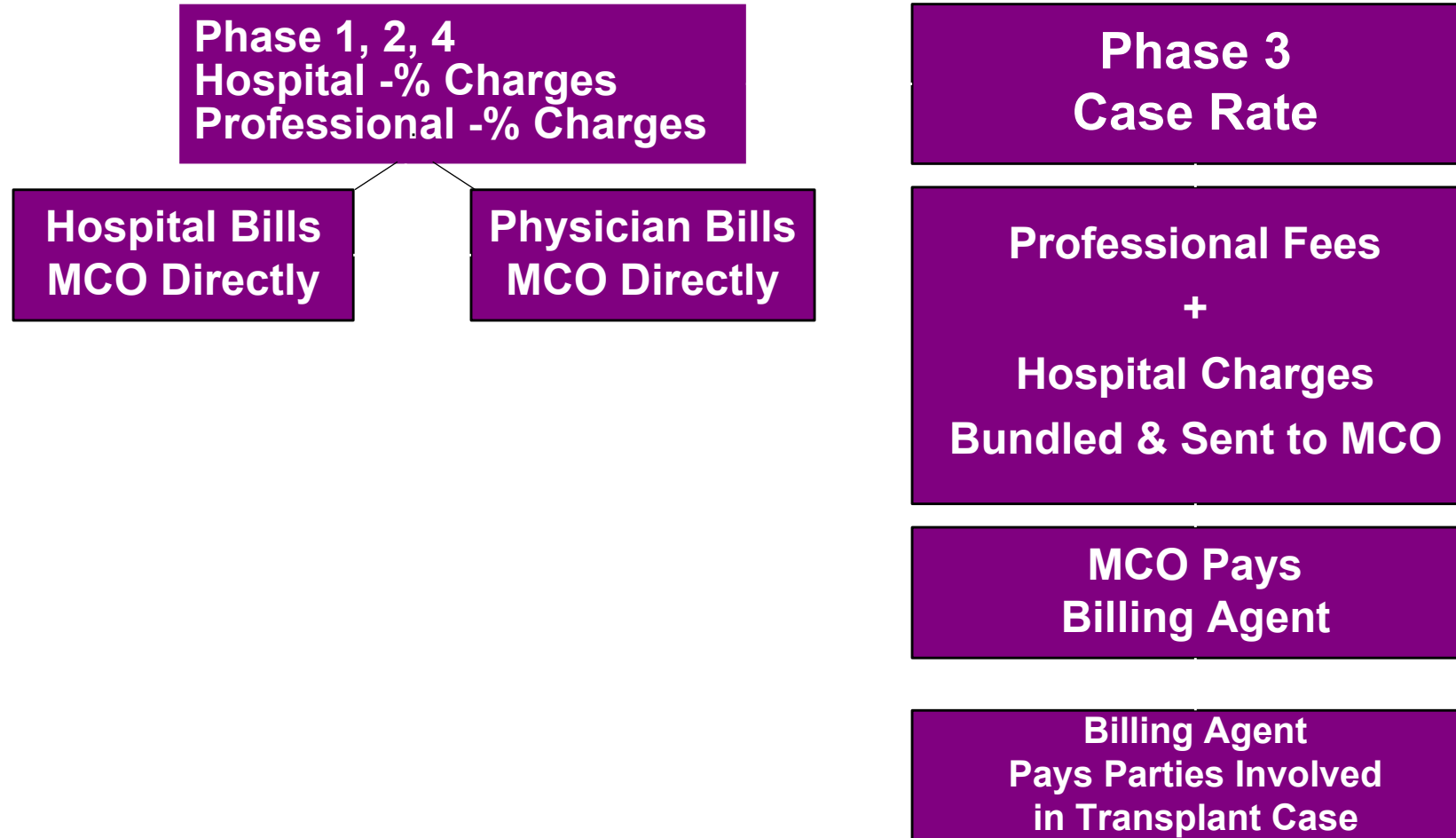
Percentage of 2023 Transplants Paid by Managed Care / Commercial Payors as Primary Source of Payment



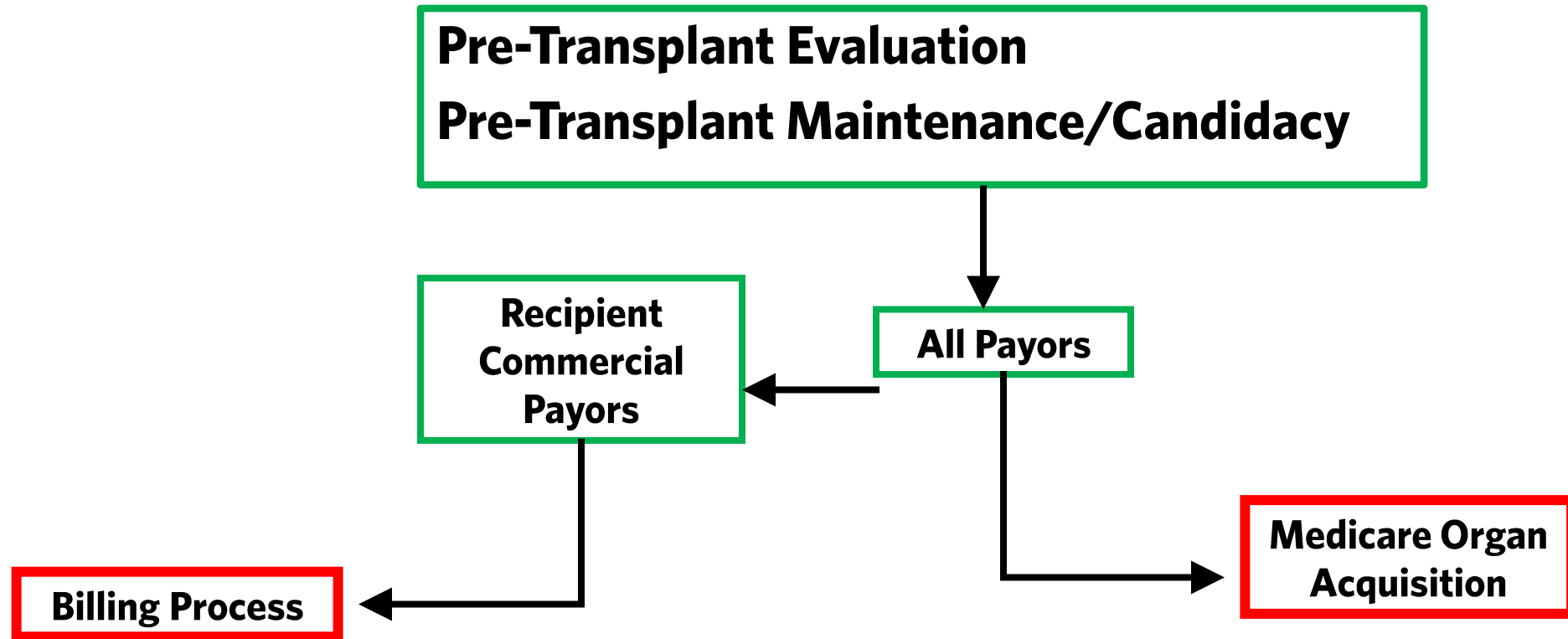
Managed Care Contracting

- Contracts are typically hybrid models of payment, i.e., % charges, case rates, per diems, etc.

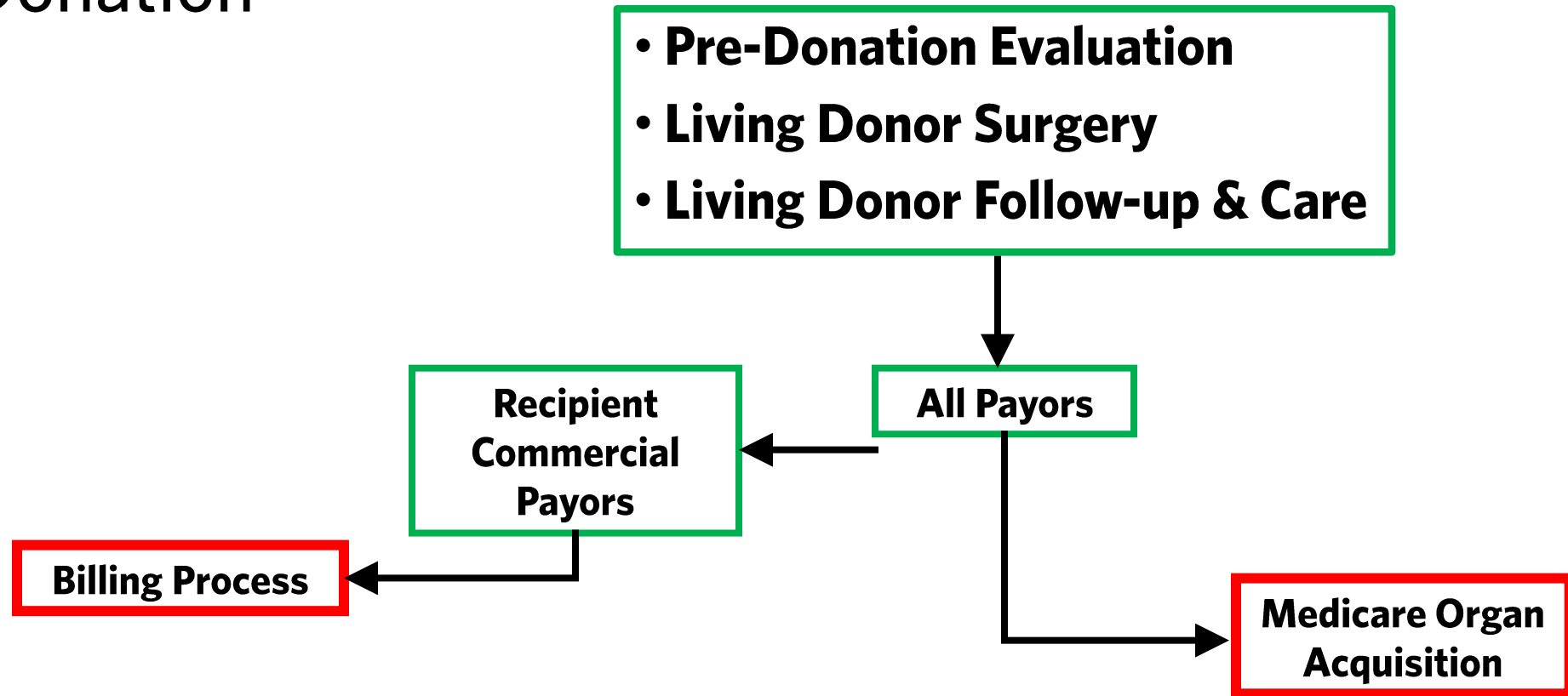
Payment Mechanism: Hybrid



Accounting Issues to Determine Medicare Reimbursement in a Multiple Payor Market Transplant Candidate



Accounting Issues to Determine Medicare Reimbursement in a Multiple Payor Market Living Donation



Multiple Payor Complexity - Transplant Candidate/Recipient

		Medicare		Commercial	
Phases of Transplantation		Facility	M.D.	Facility	M.D.
Phase 1	Pre-transplant evaluation.	Organ Acquisition	Organ Acquisition	Based on Contract	Based on Contract
Phase 2	Patient accepted and listed with UNOS and is now in the maintenance or candidacy phase.				
Phase 3	Patient admitted to hospital for organ transplant procedure and subsequent inpatient stay. This is typically the DRG component of the transplant process.	DRG	Part B	Based on Contract	Based on Contract
Phase 4	Patient discharged from hospital and post-transplant follow-up care period starts.	APC	Part B	Based on Contract	Based on Contract

Multiple Payor Complexity - Living Donation

		Medicare		Commercial	
Phases of Transplantation		Facility	M.D.	Facility	M.D.
Phase 1	Pre-transplant evaluation.	Organ Acquisition	Organ Acquisition	Based on Contract	Based on Contract
Phase 2	Patient accepted as living donor and now in candidacy phase.		Organ Acquisition	Based on Contract	Based on Contract
Phase 3	Patient admitted to hospital for living donor procedure and subsequent inpatient stay.		Part B	Based on Contract	Based on Contract
Phase 4	Patient discharged from hospital and post-donor follow-up care period starts.		Part B	Based on Contract	Based on Contract

Time Study Sample Electronic

Employee Time Records - Record of Pre/Post/Transplant Time

Vanderbilt Medical Center Employee Time Records - Record Of Pre/Post/Transplant Time

[Home](#) [Input Time](#)

Name: Kathleen L Keck

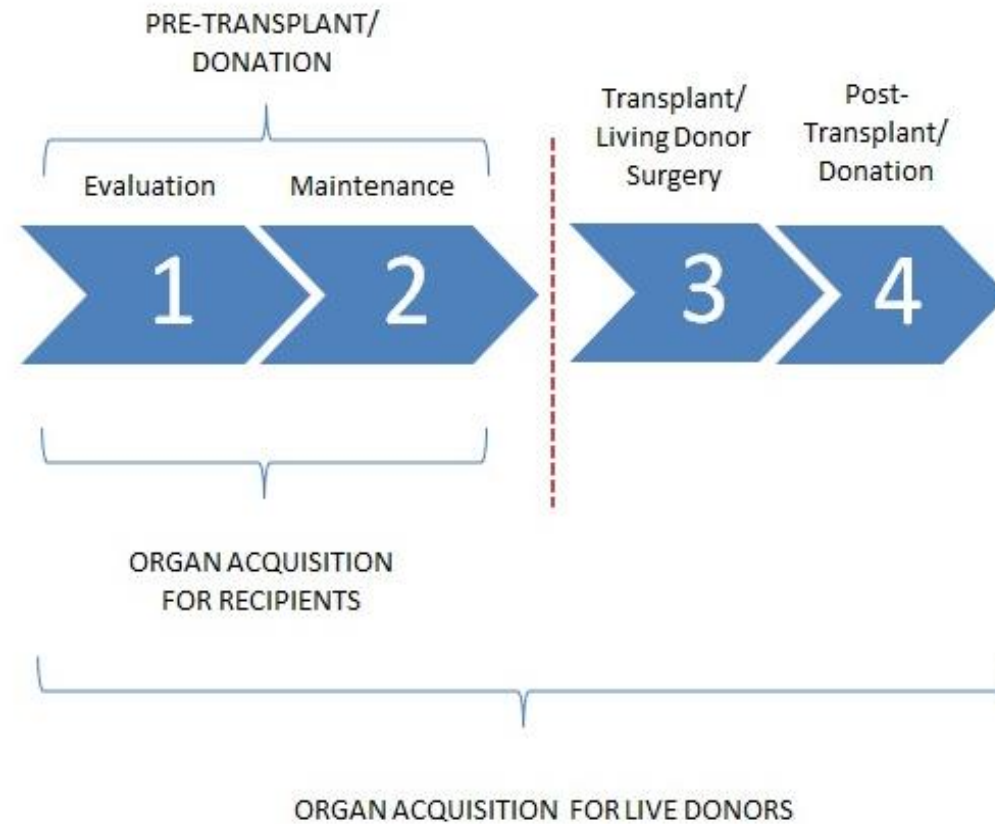
Dates Between: Sun 03/20/2011 and Sun 03/27/2011

Department: Transplant Center Admin - 201311

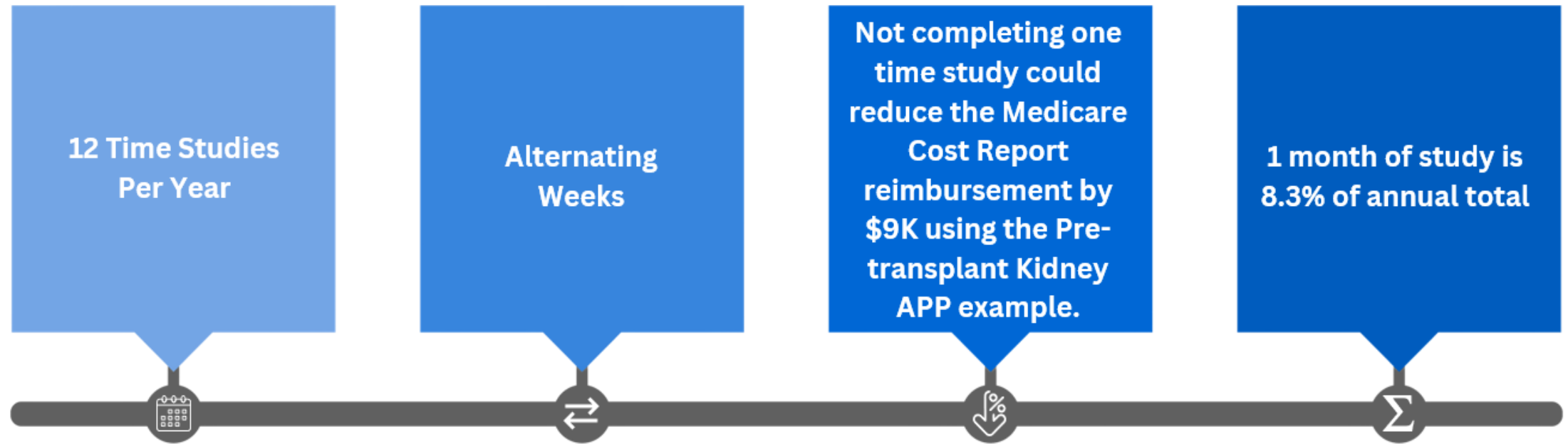
Deadline: Sat 04/02/2011

Date	Day #	Pre-Transplant	Transplant	Post-Transplant	Administrative	Other	Compensated Time Off	Daily Total	Category Help
Sun 03/20/2011	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Edit
Mon 03/21/2011	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Edit
Tue 03/22/2011	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Edit
Wed 03/23/2011	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Edit
Thu 03/24/2011	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Edit
Fri 03/25/2011	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Edit
Sat 03/26/2011	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Edit
Sun 03/27/2011	8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Edit
	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Finalize

Organ Acquisition Phase 1-4 for Transplant Recipients and Living Donors



Completing the Time Study



100% pre-transplant APP, salary & benefits = \$150K, MCR Ratio 72% (kidney)

Transplant Program Staffing Needs

Transplant Coordinator - \$100K

- Pre-Transplant Coordinator
- Living Donor Coordinator
- Transplant List Coordinator

Transplant Assistant (Administrative) \$65K

Transplant Program Staffing Reimbursement Model

Staff	Medicare Reimbursement 72%	Hospital Investment
Transplant Coordinator \$100K	\$72,000	\$28,000
Transplant Assistant \$65K	\$46,800	\$18,200
Total	\$118,800	\$46,200

Pre-Transplant APP: To Bill or Not to Bill

Not Billing	Billing
Medicare Ratio for Kidney = 72%	APP billing for level 4 established patient = \$109
APP Salary and Benefits = \$150K	APP billing for new patient = \$142
APP is 100% Pre-transplant	Two half days of clinic – 5 patients per clinic
100% of Time Study Complete	Level 4 and new patient equally divided
	Work 50 weeks/year
Medicare Cost Report Reimbursement = \$108K	Pre-transplant Billing = \$62,750

APP Billing Post Transplant

- Billing post transplant care outside of the global period (30-180 days post transplant) no Medicare Cost Report issues.

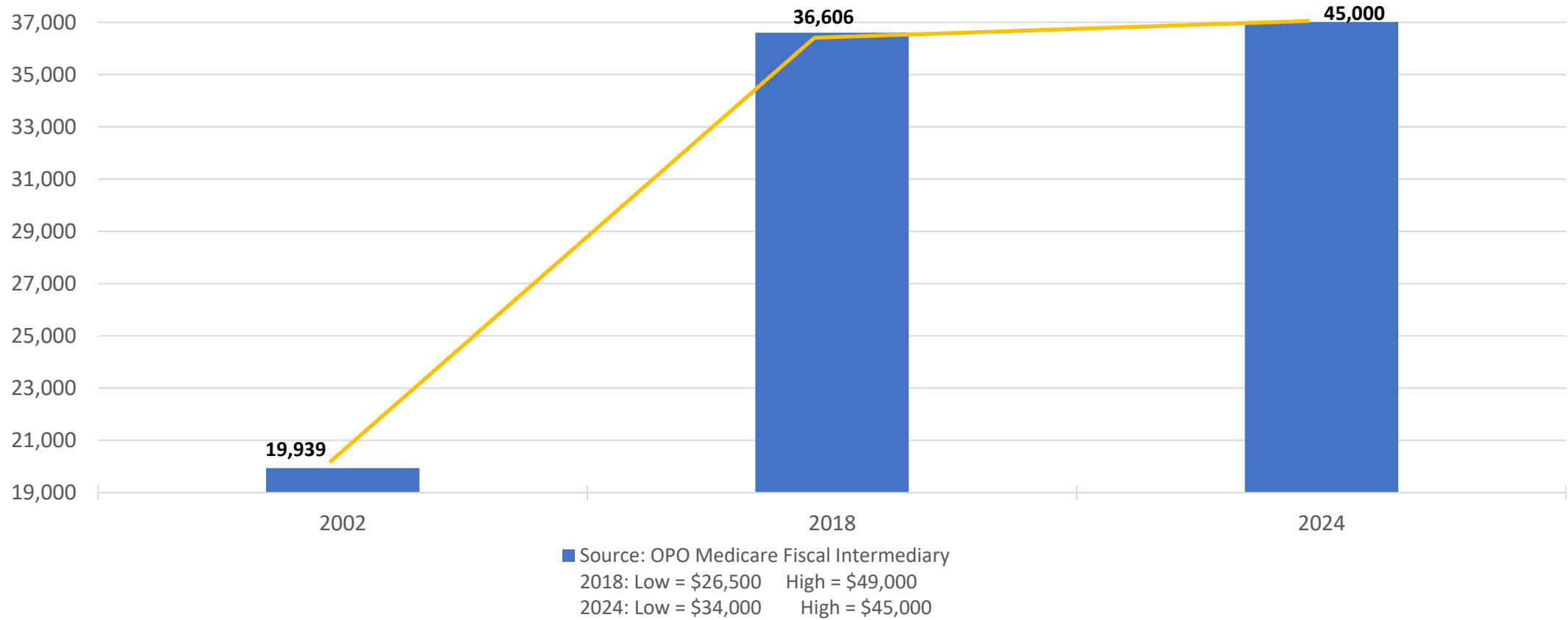


Challenges

ECONOMICS

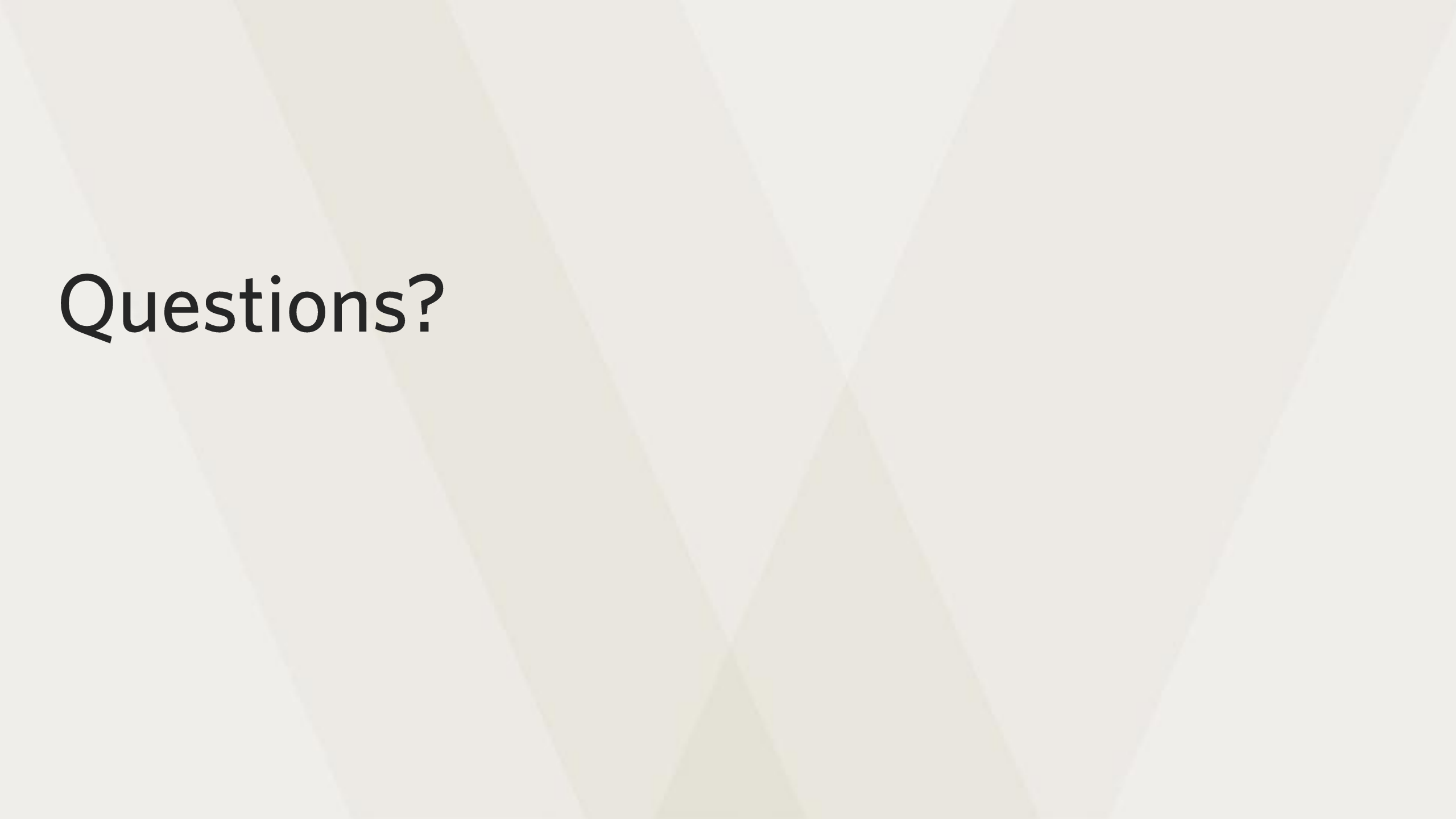
- Increased costs to perform transplant
- Flat reimbursement rates
- Changes in Organ Allocation
- Increases in organ acquisition from OPOs
- Increased costs for organ preservation technology (ex vivo, NRP, etc.)

Organ Acquisition Costs



Conclusion

- Reimbursement for transplantation has become increasingly complex over the years with multiple payors and inconsistent methods of reimbursement from payor to payor.
- Transplant billing and payment processes must be managed and operationalized by individuals dedicated to transplantation.
- We must manage our costs.



Questions?