

# Collaborative Innovation and Improvement Network (COIIN)

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# Background

- Perception in transplant community that decision to accept or utilize higher Kidney Donor Profile Index (KDPI) kidneys influenced by concern over possible outcomes review by UNOS or Centers for Medicare and Medicaid Services (CMS)
- While the kidney transplant waiting list continues to grow, potentially hundreds of higher KDPI kidneys are being discarded each year
- Research suggests that these higher KDPI kidneys could be transplanted with good outcomes.
- Use of higher KDPI kidneys may provide better patient survival and quality of life compared to remaining on the waitlist or dialysis for some patients.

# What is COIIN?

- A 3 year OPTN/UNOS program to pilot an alternative approach to transplant center performance monitoring
- Goals of COIIN:
  - reduce the risk-avoidance behaviors associated with current monitoring system
  - develop and test an alternative quality monitoring framework
  - create a collaborative approach toward performance improvement and effective practices
- The overall aim of the project: increase transplantation, particular focus on moderate to high KDPI kidneys defined as a KDPI score greater than 50%.

# **Building COIIN Change Packages**



Identify Practice Model Hospitals



Perform Site Assessments and Surveys based on Key Drivers



Convene for Think Tank



Identify Key Themes and refine Effective Practices



Choose Change Concepts, Build Change Ideas, and refine Process Measures



Assess Pilot Hospitals



Develop Action Plans with accompanying Process Measures



# Selection of Practice Model Hospitals

- Centers were chosen if they were:
  - In the top of 5-tiers of risk-adjusted adult kidney graft survival taken from the December 2015 Program Specific Reports
  - In the top 25% of organ acceptance rates
- Acceptance rates were calculated using match runs from Dec 4, 2014 through Aug 31, 2015.
- 14 programs identified in the top 25% of acceptance rates as well as in the top graft survival tier
- Of these, 11 programs had performed 45 transplants or more annually
- These 11 programs were asked to move forward as "practice model hospitals"

# Practice Model Hospitals

- 11 hospitals identified across the country
  - 3 in Region 6!
  - OHSU, Virginia Mason, UW
- Practice model hospitals are participating in an effort to design a "tool kit" of effective practices to share with other transplant hospitals in order to increase the use of these types of kidneys.

# Practice Model Hospitals

- Site assessments performed at 5 of the centers
  - 1.5 day visits
  - Interview key staff on process used by the model hospital regarding acceptance and utilization of moderate to high KDPI kidneys
  - Interview personnel at OPO to better understand degree of collaboration
  - Interview 4-5 candidates on waitlist

Think Tank: Convened June 2016 Richmond, VA

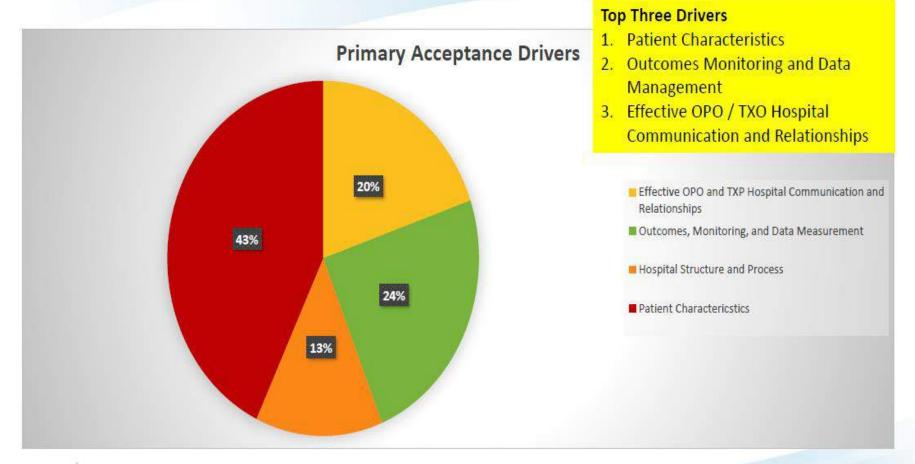
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## **COIIN and Relational Coordination**

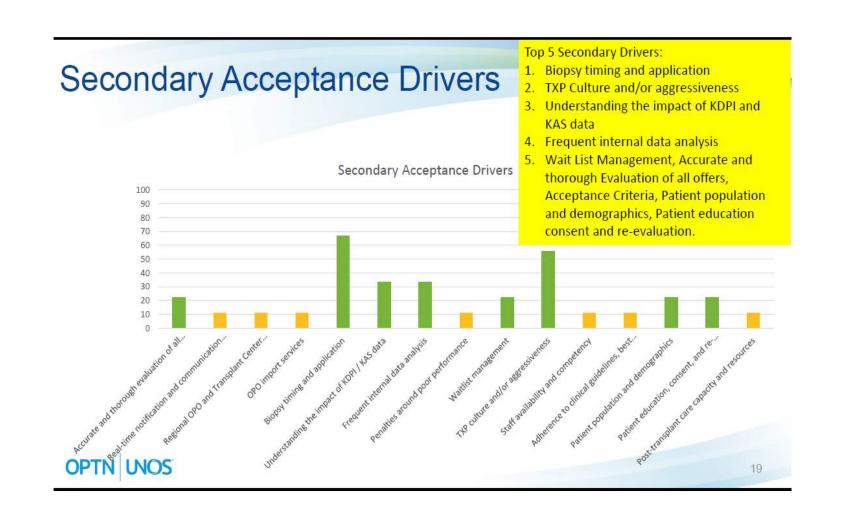
- Does the degree of Transplant Program and OPO interaction impact quality of care?
- Relational Coordination Theory:
  - Measure of the quality of relationships and communication that is involved in the coordination of work
  - 7 dimensions
    - Relationships Shared goals, shared knowledge, mutual respect
    - Communication Frequent, Timely, accurate, focus on problem solving
- Participants at model hospitals and OPOs completed relational coordination survey answering questions focused on these 7 dimensions

Jody Hoffer Gittell and Anthony L. Suchman 2013, provided by UNOS.

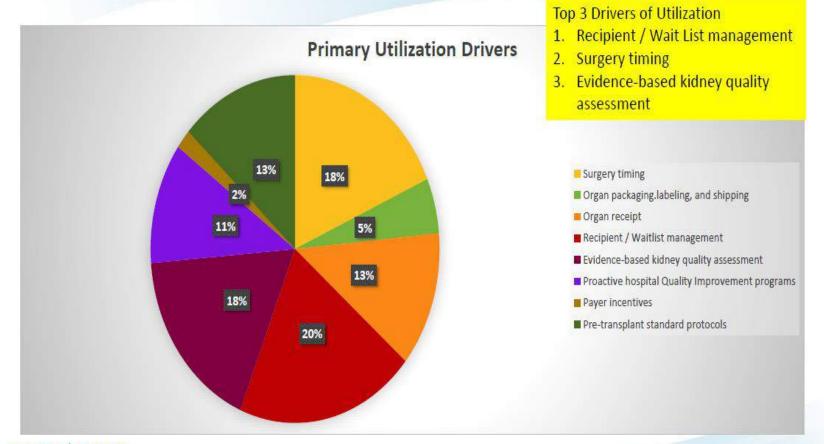
# **Primary Acceptance Drivers**





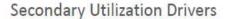


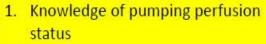
# **Primary Utilization Drivers**





# Secondary Utilization Drivers

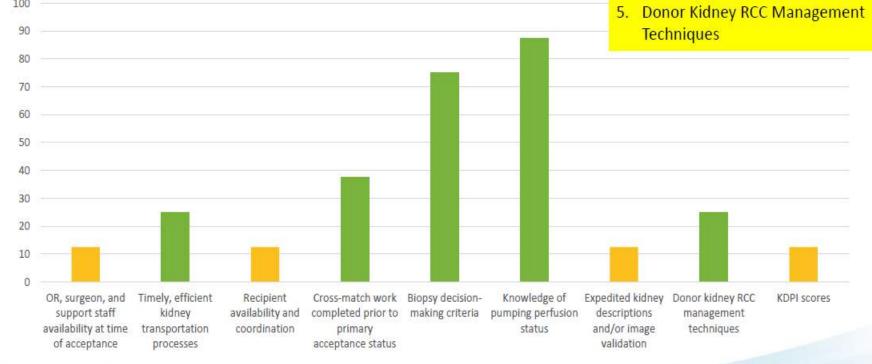




2. Biopsy Decision making criteria

Top 5 Secondary Drivers:

- 3. Cross Match work completed prior to primary acceptance
- 4. Timely/ Efficient Kidney transport





# COIIN Pilot Program

- COIIN has been accepting applications for the Pilot Program
- To be considered for participation in the pilot program:
  - Perform a minimum of 45 kidney transplants in the past 12 months or average over the past three years.
  - Currently not under review by UNOS Membership and Professional Standards Committee for kidney outcomes

# COIIN Pilot Program

- 3 areas of focus
  - Offer and Acceptance
  - Waitlist Management
  - Care Coordination

# Pilot Program Goals:

- Program will explore the use of an alternative monitoring process to encourage innovation and limit the current risk adverse behaviors associated with the current monitoring process.
- Will foster improvement efforts in a collaborative framework – allow participating programs to gain better understanding for how to approach there own future performance improvement work.
- Will provide a testing environment for rapid widespread improvement.

## Disclaimer

 Description of COIIN in this talk is extrapolated from UNOS/OPTN data and publications and should not be construed as original work of the presenter.

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Each Person.
Every Moment.
Better Never Stops.





# Dr Jorge Reyes MD, FACS, FAAP Professor of Surgery & Chief of the Division of Transplant Surgery UWMC

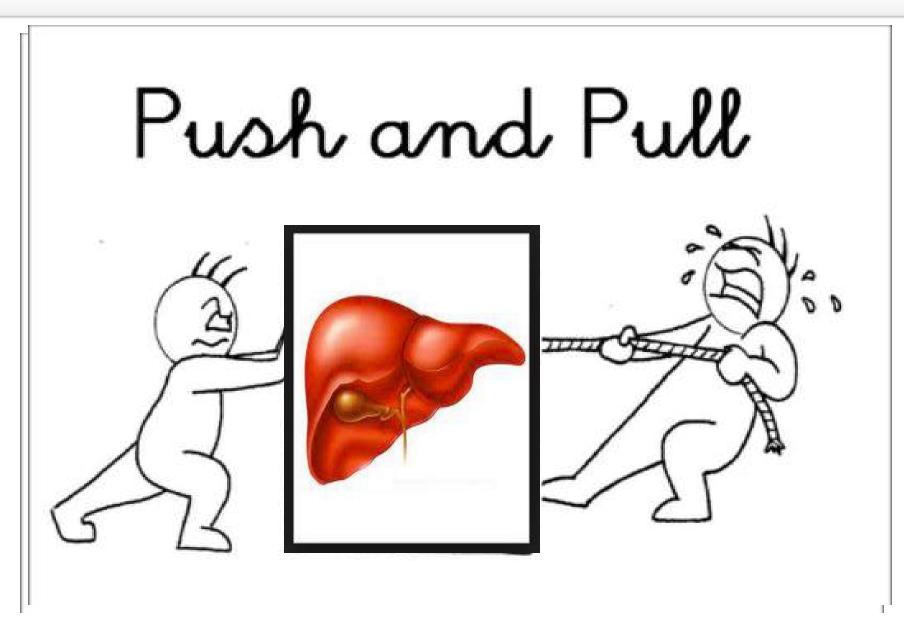




# Increasing Organ Utilization through QAPI & Relational Coordination





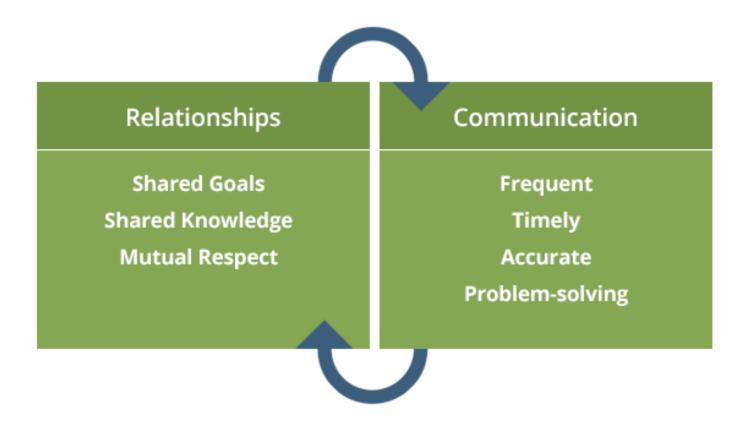






#### What is Relational Coordination?

Relational Coordination (RC) is a mutually reinforcing process of communicating and relating for the purpose of task integration. Relational coordination captures the relational dynamics of coordinating work.







#### Relational Coordination

The theory specifies three attributes of relationships that support the highest levels of coordination and performance:

- **shared goals** that transcend participants' specific functional goals: increase # of transplants
- **shared knowledge** that enables participants to see how their specific tasks interrelate with the whole process: donor management
- mutual respect that enables participants to overcome status barriers that might otherwise prevent them from seeing and taking account of the work of others: productive tension





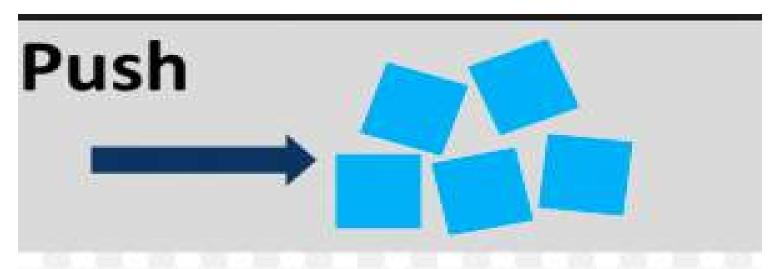
### Shared Goals, Knowledge, & Mutual Respect

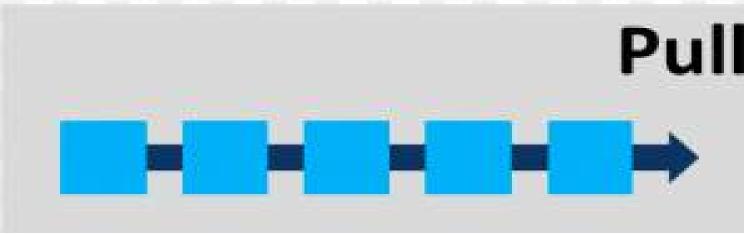
- Shared goals increase participants' motivation to engage in high quality communication and predispose them towards problemsolving rather than blaming when things go wrong.
- Shared knowledge of each participant's contributions to the overall work process enables timely communication across functions, an understanding of who needs to know what, why, and with what degree of urgency.
- Mutual respect increases the likelihood that participants will be receptive to communication from
   Published in "Oxford Handbook of Positive Organizational Scholarship," eds. Kim Cameron and Gretchen Spreitzer, Oxford University Press (2011).









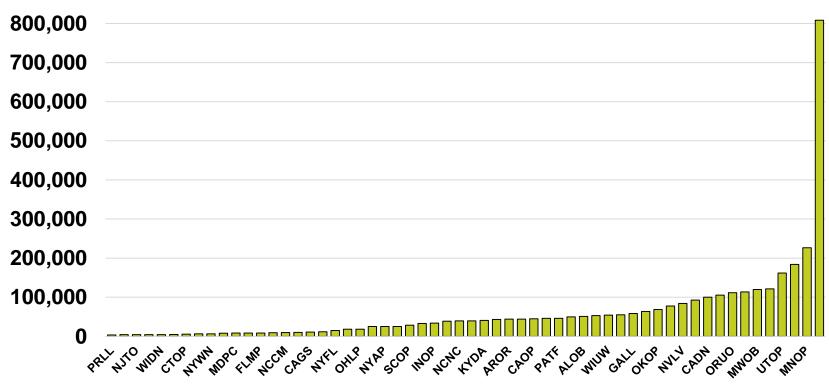






#### **UW Medicine**

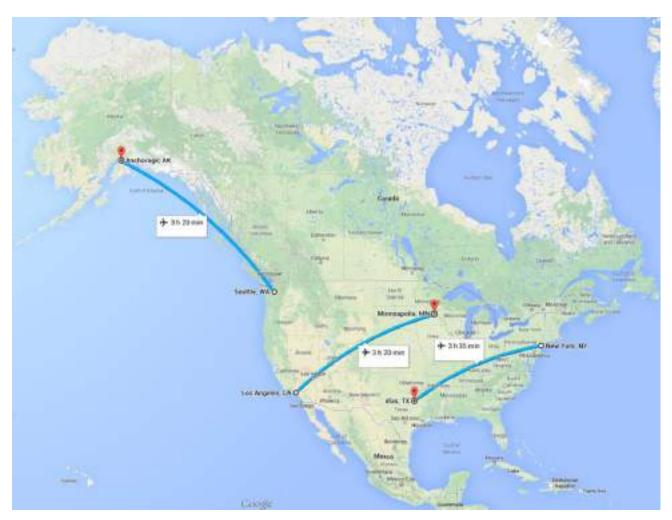
### **OPO Local Service Areas (square miles)**



(source: SRTR data tables at www.srtr .org)







#### **UW** Medicine





#### **UW** Medicine

# **UW Liver Transplantation - Cold Ischemic Times (Alaska, Hawaii)**

Table 9

Transplant Operation Characteristics, Deceased Donor Transplants

Transplants performed between 07/01/2012 and 06/30/2013

Center: University of Washington Medical Center (WAUW)

Organ: LI: Liver

	Percentage in each category (except where noted)		
	Center 100% (N=73)	Region 100% (N=161)	U.S. 100% (N=6,032
Cold Ischemic Time (Hours): Local (%)			1000
Deceased: 0-5 hr	13,6	15.4	50.9
Deceased: 6-10 hr	63.6	64.4	42.7
Deceased: 11-15 hr	22.7	18.8	3.7
Deceased: 16-20 hr	0.0	0.7	0.2
Deceased: 21+ hr	0.0	0.0	0.7
Not Reported	0.0	0.7	1.9
Cold Ischemic Time (Hours): Shared (%)			
Deceased: 0-5 hr	0.0	0.0	30.6
Deceased: 6-10 hr	14.3	25,0	61.7
Deceased: 11-15 hr	28.6	33.3	5.3
Deceased: 16-20 hr	57.1	33.3	0.7
Deceased: 21+ hr	0.0	0.0	0.4
Not Reported	0.0	8.3	1.4





#### Where it all started...

Senior leadership meeting Sept 2013, mutual commitment to:

- Improve communication
- Build mutual trust
- Increase outcomes
- Improve for liver utilization, observed to expected lower than 0.90





# Implemented QAPI Organ Utilization Review

- Started in October 2013 reviewing every organ donor, every organ, every month
- Was the organ transplanted? If not why?
- If not transplanted at the UW, where was it transplanted? What was the outcome?
- Identify communication and process improvement opportunities for LCNW and UWMC
- Identify any "missed apportunities"





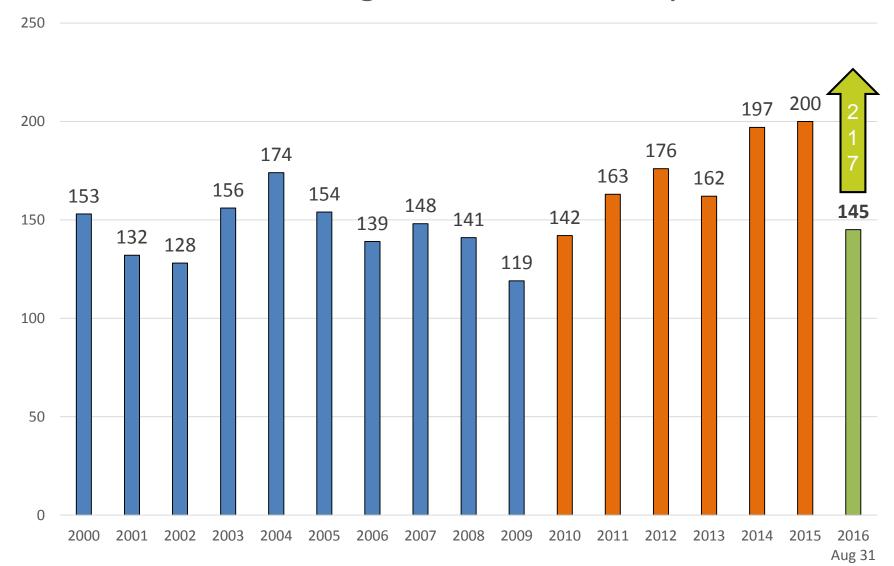
# Process Changes following QAPI Meetings

- Focused effort on reviewing liver utilization
- UWMC acceptance of livers in the OR, not to delay reallocation
- After action reviews when there was a communication or process breakdown
- Increased real-time communication
- QAPI started with abdominal transplant, expanded to include





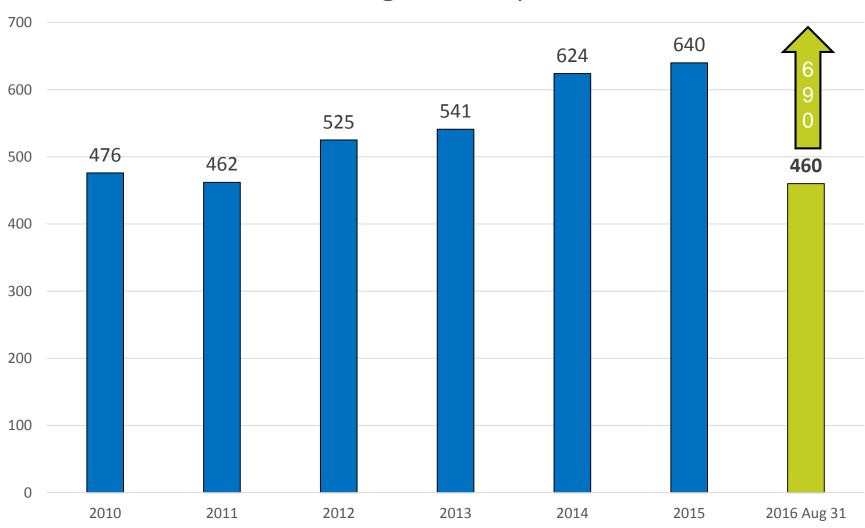
#### **LCNW Organ Donation Activity**







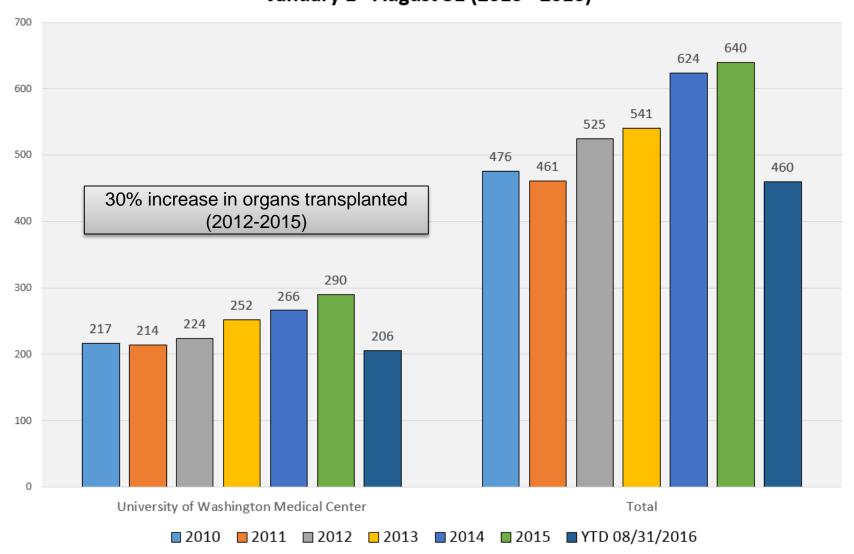
#### **LCNW Organs Transplanted**







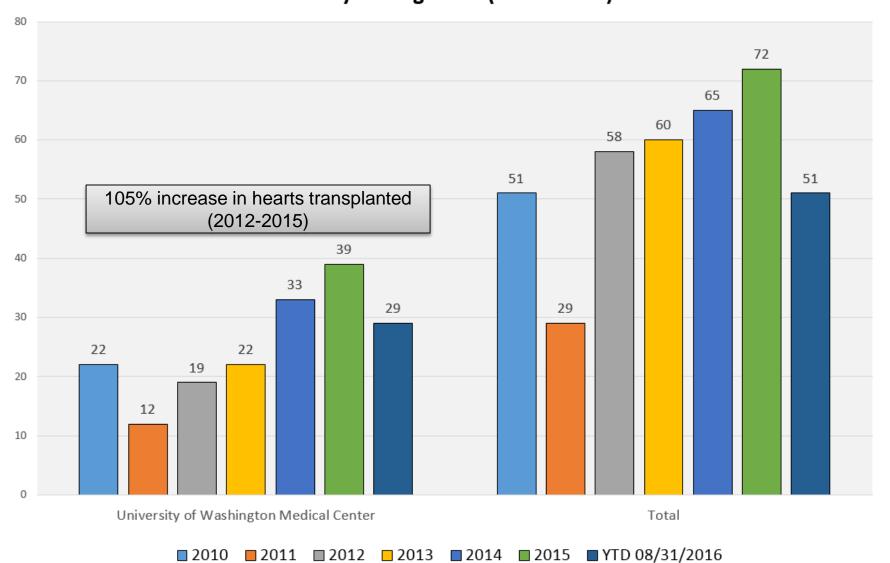
#### All LCNW Organs Transplanted by the University of Washington January 1 - August 31 (2010 - 2016)







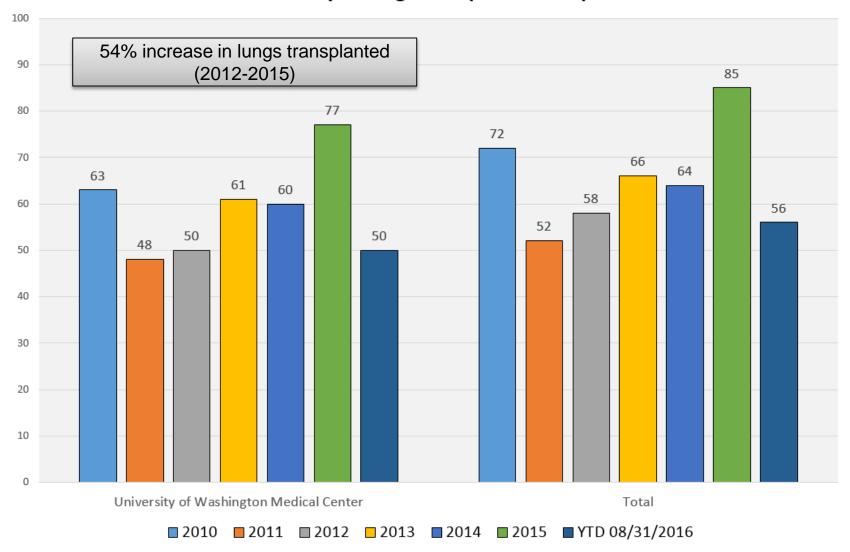
#### LCNW Hearts Transplanted by the University of Washington January 1 - August 31 (2010 - 2016)







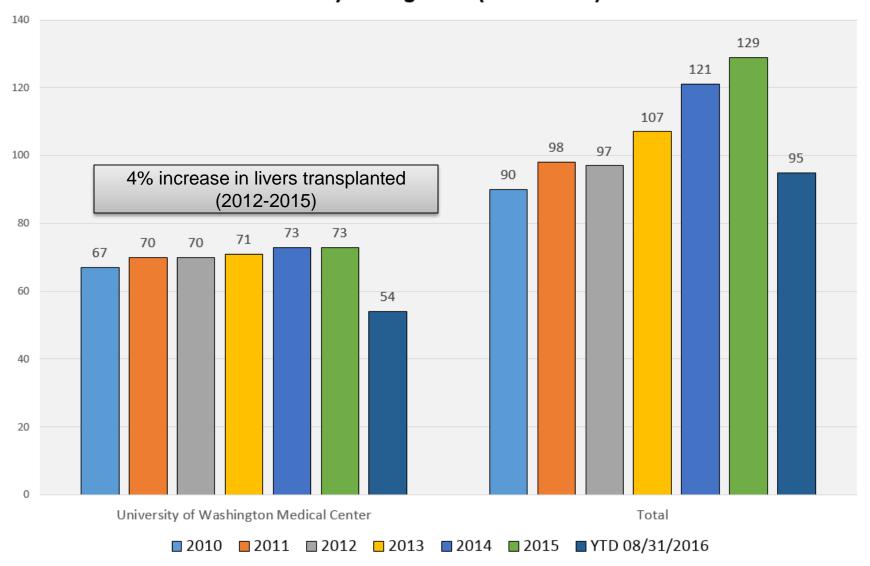
# LCNW Lungs Transplanted by the University of Washington January 1 - August 31 (2010 - 2016)







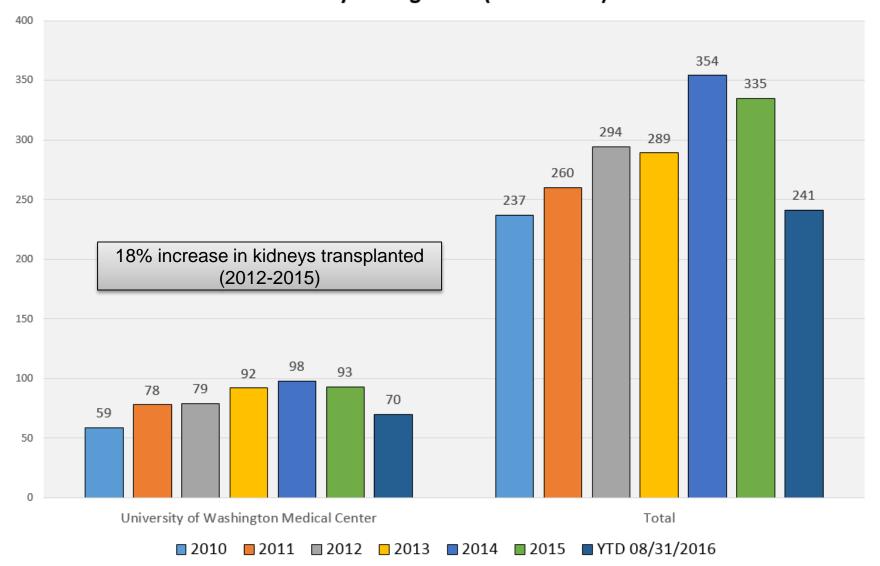
#### LCNW Livers Transplanted by the University of Washington January 1 - August 31 (2010 - 2016)







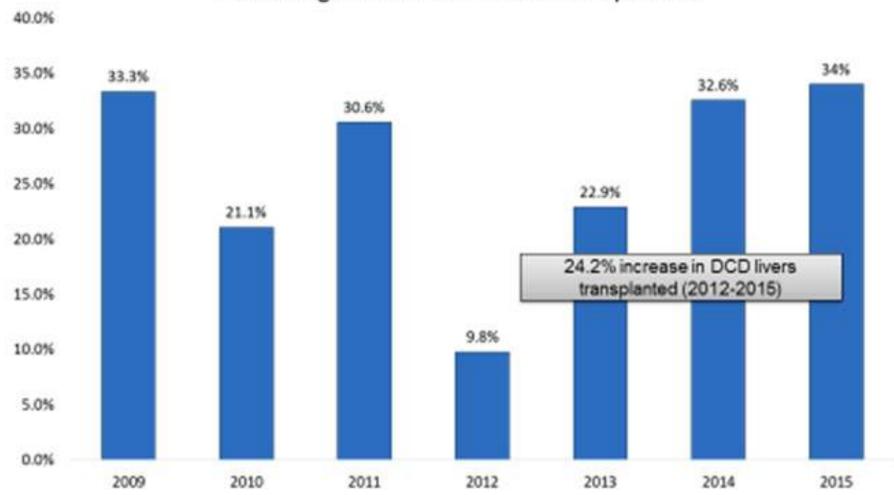
#### LCNW Kidneys Transplanted by the Univerity of Washington January 1 - August 31 (2010 - 2016)







#### Percentage LCNW DCD Livers Transplanted







#### What is next?

- Continue QAPI Organ Utilization Review Meetings
- Abdominal, lung, and heart transplant program QAPI reviews to focus on specific communication and process improvements
- Increase the number of organs transplanted (appropriately matching donor and recipient factors)
- Optimize safety, quality, and outcomes
- Continued focus on saving more lives





#### Relational Coordination Process

