

Lung Transplantation and the VA Health Care System

ATS International Conference
VA Interest Group Meeting
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Jeffrey D. Edelman, M.D.
Head, VA Lung Transplant Program
Puget Sound Health Care System

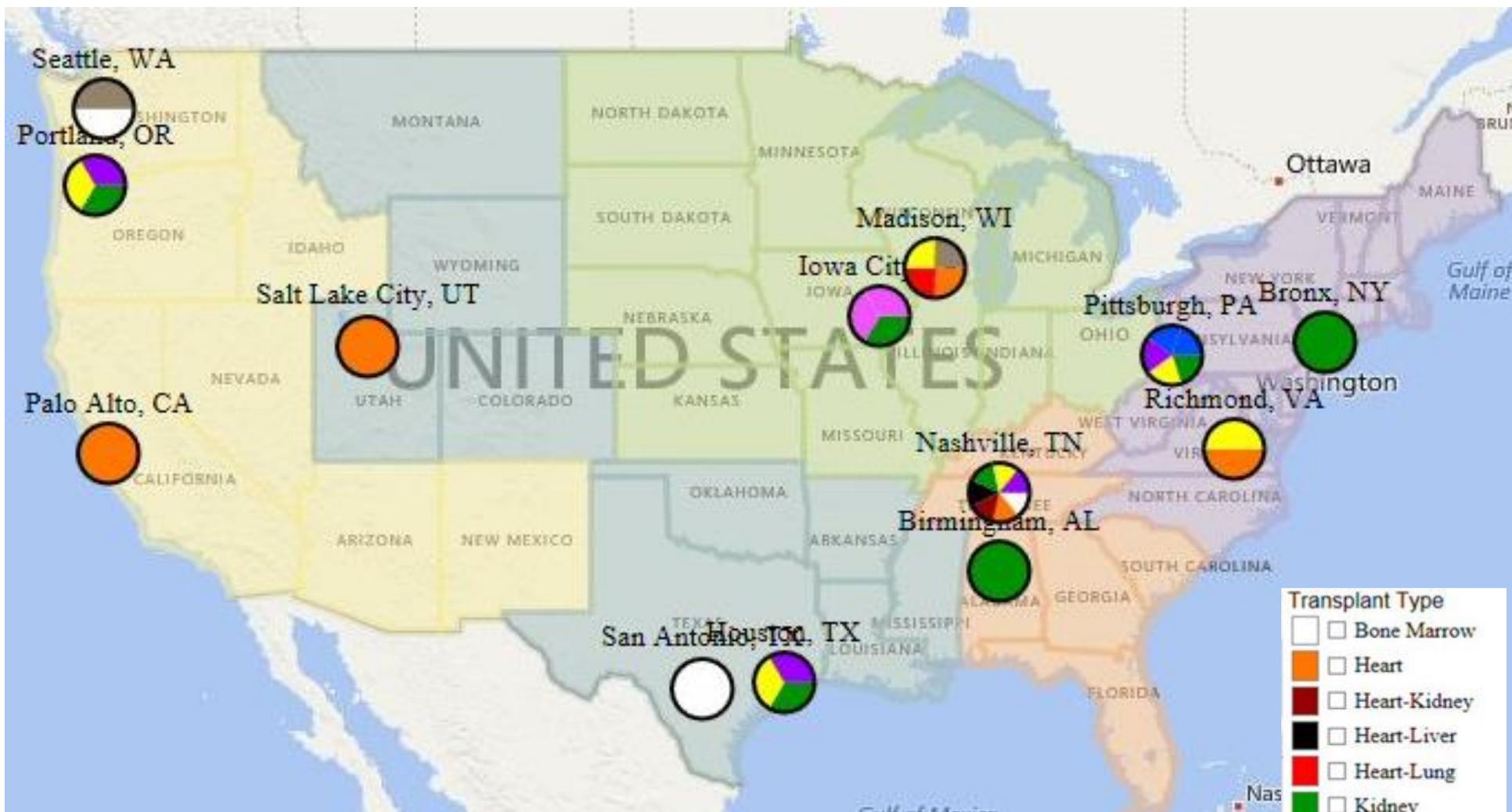


Disclosures

- No conflicts of interest to disclose
- All of my support comes from the VA
- Off label use of medications:
Many transplant medications are not FDA approved for lung transplantation.

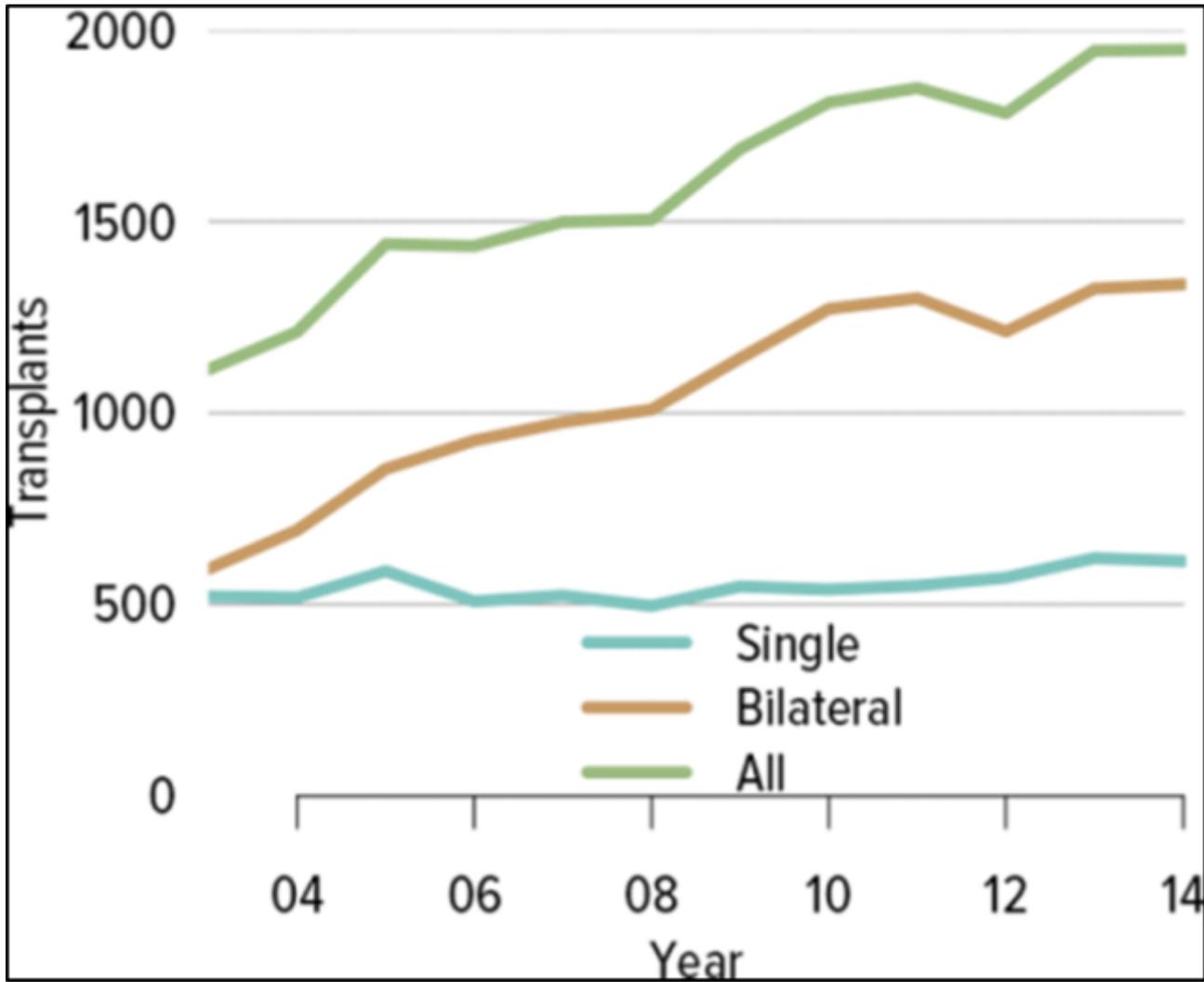
VA Transplant Facilities

- Multiple transplant programs:
Lung, Stem Cell, Heart, Kidney, Pancreas, Liver
- Two VA Lung Transplant Programs
 - Madison, WI program active since 1994
 - Seattle, WA Program initiated in 2012
 - Both affiliates with “UW”s
 - Status of additional future sites not known
 - Approximately 65 adult lung transplant centers in the U.S.



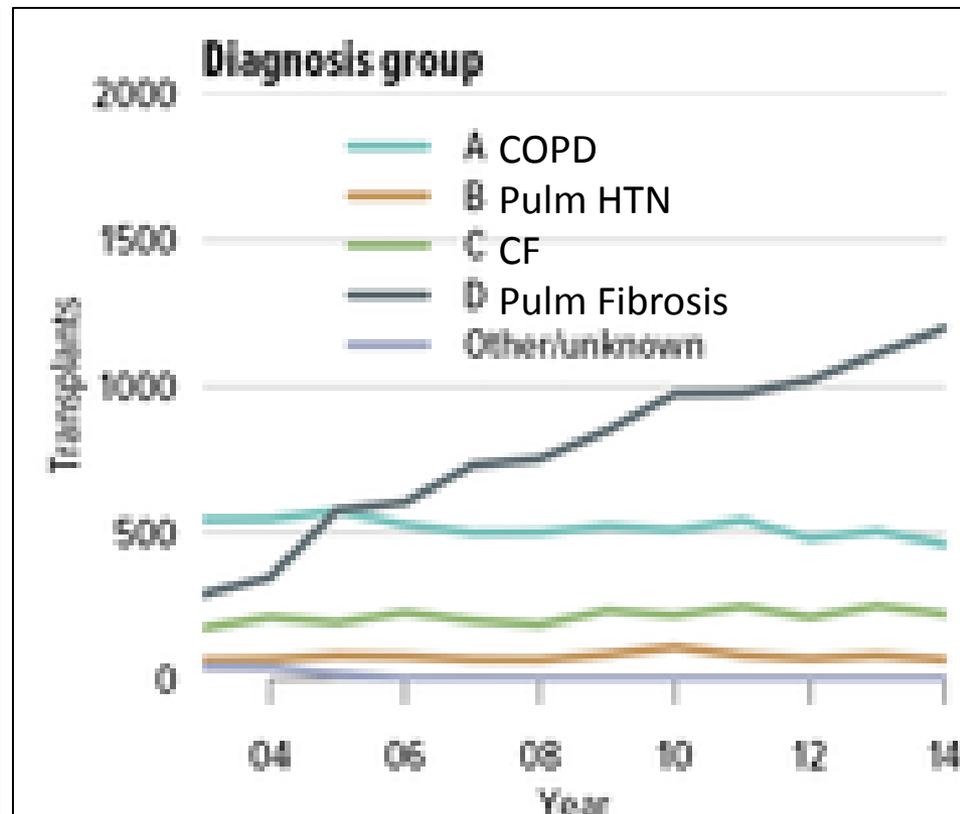
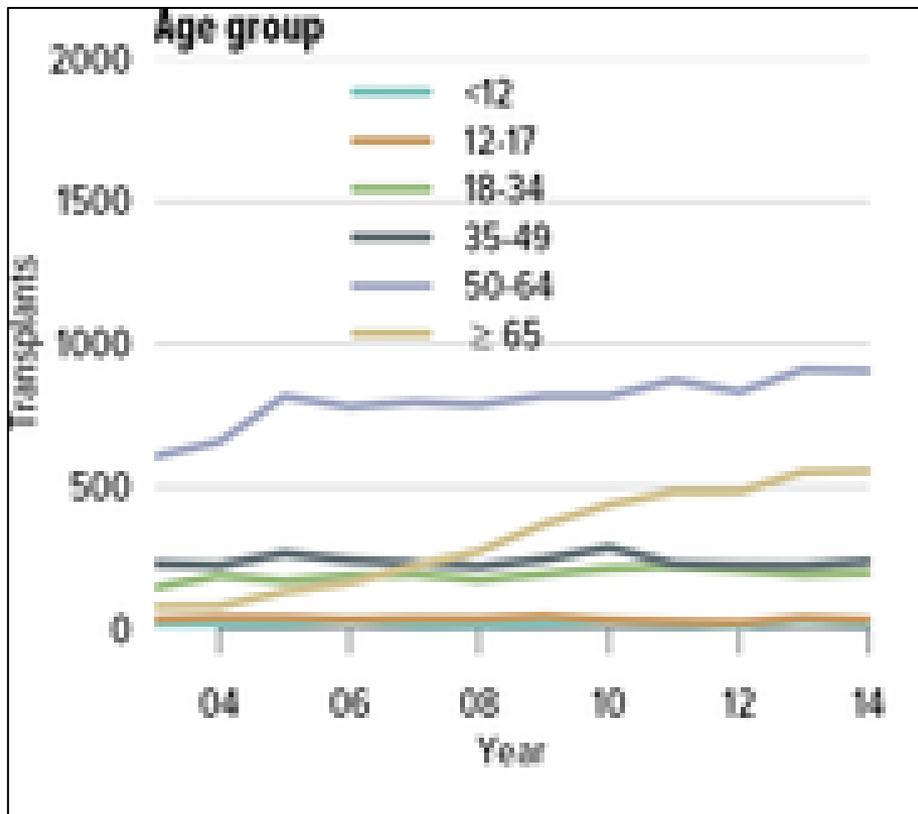
<http://www.va.gov/health/services/transplant/>

U.S. LUNG TRANSPLANT VOLUMES



Organ Procurement and Transplant Network (OPTN)
Scientific Registry of Transplant Recipients (SRTR) 2014 Annual Data Report

TRANSPLANT VOLUMES BY AGE AND AND DIAGNOSIS GROUP

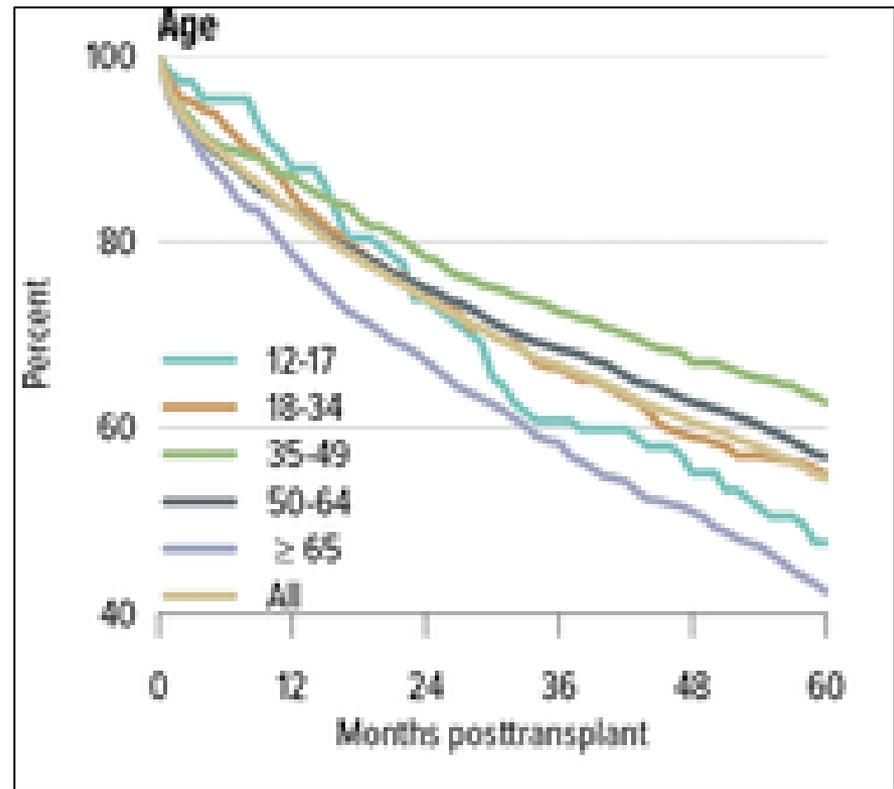
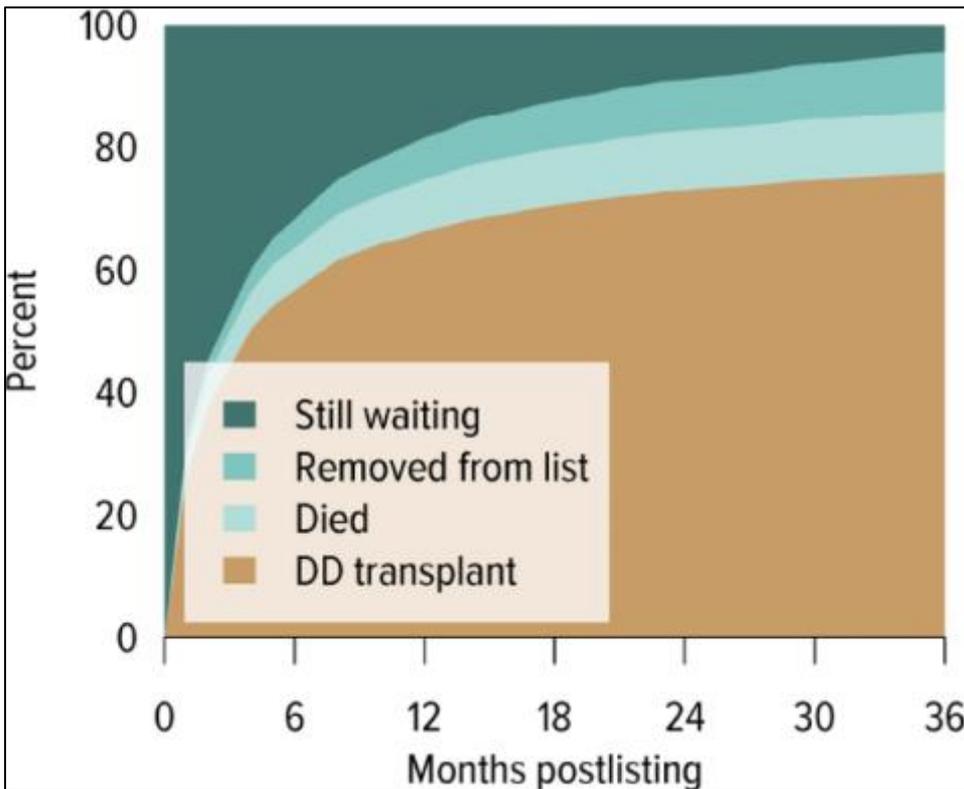


25% of patients are over age 65

Majority of transplants are for pulmonary fibrosis and COPD

WAITING LIST MORTALITY

POST TRANSPLANT SURVIVAL BY AGE



In 2014:

1,578 patients on list at start of year
 2,518 patients added to the list during the year
 1,921 patients transplanted
 402 died or were deemed too sick for transplant
 1,637 patients on list at end of year

Organ Procurement and
 Transplant Network (OPTN)
 Scientific Registry of
 Transplant Recipients (SRTR)
 2014 Annual Data Report

Seattle VA Lung Transplant Program

- Pulmonary Physicians
 - Jeffrey Edelman
 - Richard Goodman
 - Gus Matute-Bello
 - Tiffany Bridges
- Surgeon
 - Michael Mulligan
- Coordinator
 - Naomi Weatherford

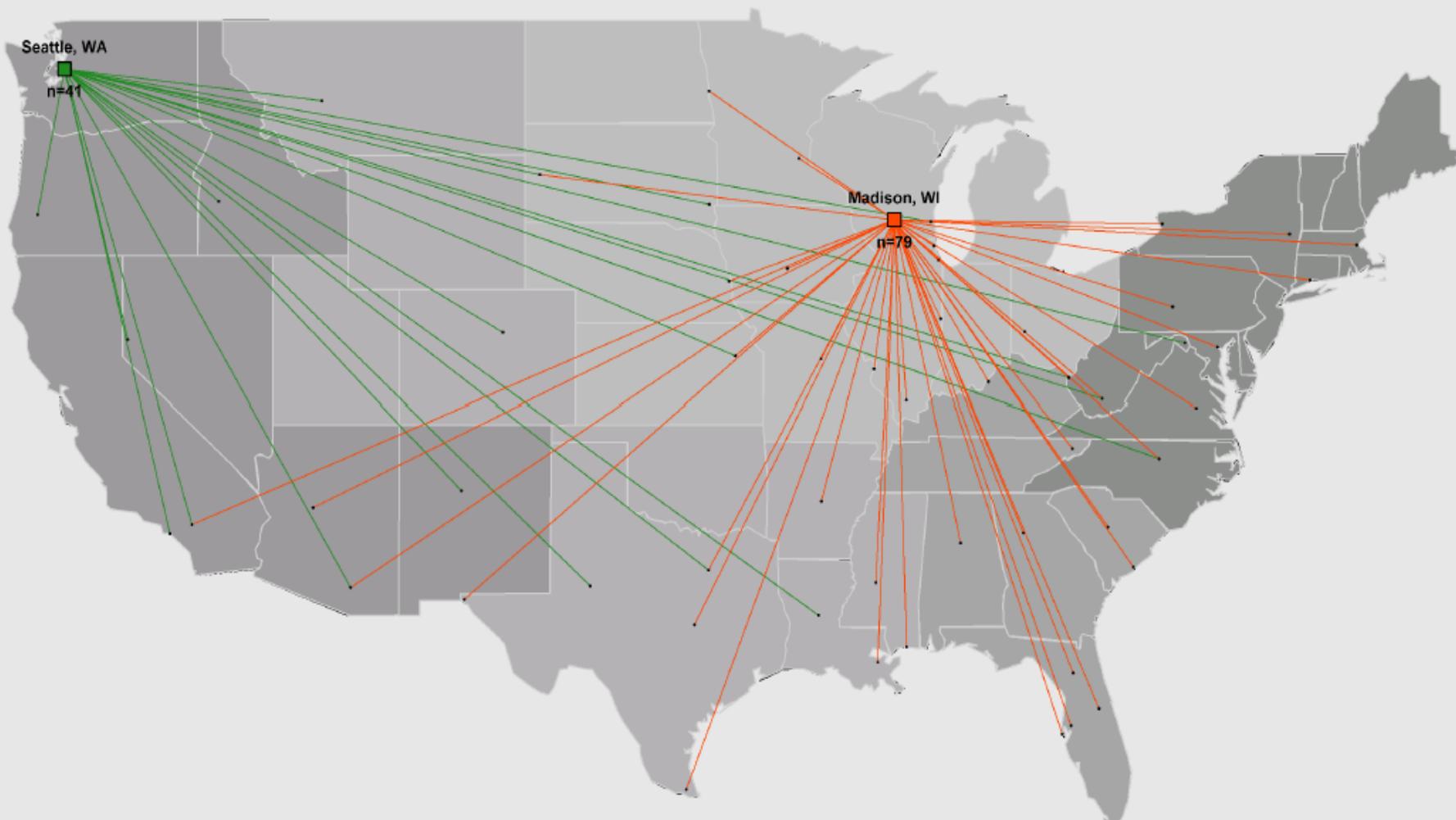


Referral Model

- Patients are referred through national system called TRACER.
<https://vaww.tracer.nso.med.va.gov/>
- Referring center reviews criteria and completes evaluation package (testing) before submitting referral
- Referral sent to us (or Madison) for review and turnaround w/in 7 days
- Initial patient visit within 30 days (in person or via telehealth)

Lung Referral Map

12 Month Period from October 1, 2014 to September 30, 2015



Transplant Referral

- After telehealth
 - Additional local testing and/or
 - On site evaluation in Seattle
 - Committee review
 - If accepted, patients are listed after relocation to Seattle (with caregiver) to await transplant
 - Position on the list is determined by Lung Allocation Score (LAS)

Transplant listing

- Listed patients need to live within 3 hours of transplant center (VA currently doesn't cover on-call air transport for transplant)
- Patients need a caregiver
- Potential for long waiting times for patients with low LAS also influences listing decision

Transplant and Post-Transplant Care

- Transplant at University of Washington Med. Ctr.
- Transfer to VA to complete post transplant care
 - Stable but ICU level care
 - Patients transferred to MICU
 - Post discharge care and f/u in VA lung txp clinic
 - Patients in Seattle for 3 months
 - Care returns to local VA with Seattle F/U

Referrals/Transplants

- First evaluation 3/2012
- 145 referrals to date
- 31 patients have been listed
- 5 patients currently listed
- 4 patients expired after listing
- 1 patient recently de-listed
- 21 patients transplanted
 - 4 in the last 30 days
 - No post transplant deaths

Madison Wisconsin VA Program

- First transplant in 1994
- Total of 235 lung transplants in VA Program
- Similar care model to Seattle program

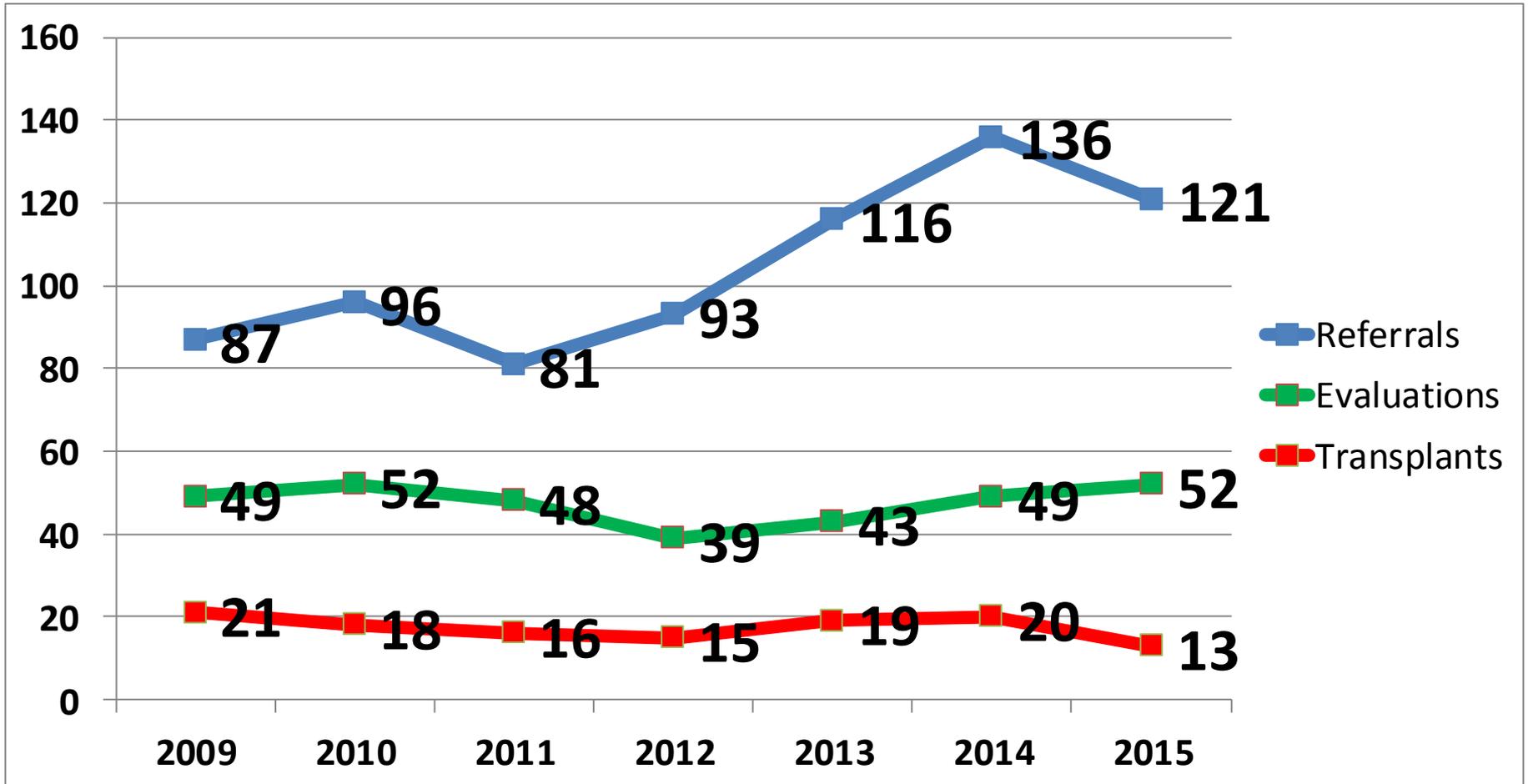
Seattle VA Transplanted Patients

Transplant Waiting Times

	Number	Mean	Median	Range
Overall	21	196	109	10-669
ILD	7	159	95	10-669
COPD	14	214	138	10-559

- Mean LAS at Txp = 38
- 21 patients transplanted; 100% survival to date
 - 14 have ≥ 1 year of follow-up
 - 9 have ≥ 2 years of follow-up
 - 7 have < 1 year follow-up

Lung Transplant



Estimate of VA Transplant Need

	U.S. OVERALL	VETERANS
TOTAL POPULATION	321 MILLION	22 MILLION
AGE 18-70	230 MILLION	15 MILLION (6.5% of U.S. adults 18-70)
UTILIZING VA CARE		6 MILLION (2.6% of U.S. adults 18-70)

Without considering differences in incidence of transplantable lung disease, psychosocial and medical comorbidities

AND

Assuming 2000 lung transplants overall per year

Estimated lung transplant “volume” in the VA population would be 2.6%-6.5% of 2000 or 52-130 lung transplants



Transplant Options for Veterans

- VA transplant programs
 - National program funding
- VA referral to non-VA transplant program
 - Referring VA funding
- Patient decision to use other coverage

VA Lung Transplant Programs

- Excellent outcomes
- Significant geographic constraints
- Include travel and housing before/after transplant
- Add to existing transplant options for veterans
- Most of our patients would not have been able to receive transplants without this program

Useful Information Sources

VA Transplant Information

<http://vaww.dushom.va.gov/surgery/transplant/>

TRACER

<https://vaww.tracer.nso.med.va.gov/>

UNOS

www.unos.org

SRTR

<http://www.srtr.org/>

ISHLT

www.isHLT.org

Seattle VA Lung Transplant Program

Jeff Edelman

Jeffrey.edelman@va.gov

206 277-5195

Naomi Weatherford

Naomi.weatherford@va.gov

206 277-4213