

Expert Teams – Transplant

Case-Based Learning & Mentorship

Thursday, November 16, 2023

Moderator: Julie Moss, MS

ESRD National Coordinating Center



Meeting Logistics

- Call is being recorded
- Participants can unmute themselves
 - Please stay on mute unless you are speaking
 - Do not place the call on “hold”
- Everyone is encouraged to use the video and chat features
- Meeting materials will be posted to the ESRD NCC website.



Who Is On The Call?

Clinician and
Practitioner
Subject
Matter Experts

Dialysis Facility
and Transplant
Professionals

ESRD Network
Staff

Kidney Care
Trade
Association
Members

Centers for
Medicare &
Medicaid Services
(CMS) Leadership

What are Expert Teams?



Participants from varying levels of organizational performance, each with lived experience and knowledge, come together to support continual learning and improvement



Help others learn faster by sharing what worked and what didn't work around a particular case, situation, or circumstance



Bring the best possible solutions to the table

Guest Expert

**Kristin Smith, MSN, RN, CNL, CCTC
Manager, Abdominal Transplant
Vanderbilt University Medical Center**

Network 8 QI



Participation in a Transplant Coalition to Improve Patient Outcomes

Kristin Smith, MSN, RN, CCTC, CNL
Manager, Abdominal Transplant Programs
Vanderbilt Medical Center



Objectives

- Discuss barriers to transplant
- Describe the impact of the Transplant Coalition to improve communication between dialysis units and transplant centers
- Share best practices to overcome barriers and breakdown silos

Vanderbilt Transplant Center

- Average 200+ referrals a month from more than 150 dialysis units
- 600-650 patients undergoing active evaluation at any given time
- Approximately 1300 patients on our waitlist
- 278 transplants YTD

Transplant Coalition

- Goals
 - Increase the number of patients added to the waitlist
 - Increase the number of patients receiving a kidney transplant
- Members
 - Transplant Center & Dialysis Unit representatives
 - Network 8 region: AL, TN, MS
 - 500 dialysis units
 - 10 transplant centers
 - Facilitators
- Meet quarterly

Nature of the Kidney Transplant Process

- Dialysis Units & Transplant Centers share common goals
- Siloed care
- Different burdens on dialysis units and transplant centers
 - “If you have seen one transplant center, you have seen one transplant center”
- High volumes
- Long wait times
 - Keeping patients "transplant ready"
- Constant regulatory and programmatic changes

Barriers to Transplant

Dialysis Unit Perceptions

- Staff turnover
- Wait times to be seen at transplant centers
- Communication between dialysis unit and transplant center
- Patient education/understanding of transplant process
- Eligibility- support, transportation, weight, finances

Transplant Center Perceptions

- Incomplete referrals
- Ineligible candidates
- Patient ability/motivation to complete evaluation process
- Direct communication to Dialysis Units/Social Worker
- Monthly PRA samples

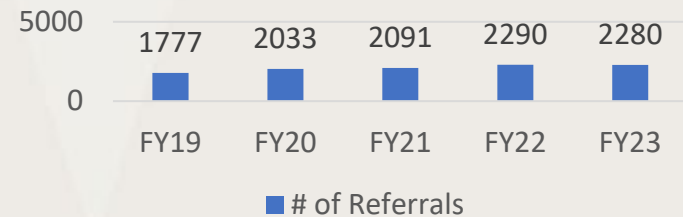
Transplant Coalition Outcomes

- Development of educational documents/tip sheets
 - PRA-what is it, why it's important, when should it be sent, what happens if we don't send it?
 - Transplant center specific program requirements
- Impact of COVID on programs
- Dialysis Unit Collaboration Events
 - Multiple live webinar to help dialysis units meet the new CMS transplant goals
 - Virtual education sessions
- Dissemination of policy changes
 - Transplant center metrics
 - Allocation changes
 - Race neutral eGFR
- Venue for collaboration, feedback, knowledge sharing, relationship building with others that share common goals

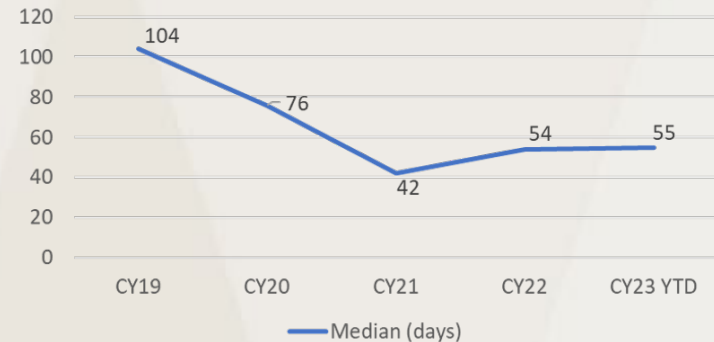
Impact on Transplant Center

- Revision of referral form
- Decrease in time from referral to evaluation visit
- Decrease in delinquent serum list
- Dialysis Unit Liaison Role
 - Monthly calls with dialysis units
- Increase in referrals
- Ability to have direct contact with those that can disseminate important information

Kidney Transplant Referral Volume



Time from Referral to Evaluation Visit



Case Study Presentation

Leonardo V. Riella, MD, PhD

Harold and Ellen Danser Endowed Chair in Transplantation

Senior Investigator at the Center for Transplantation Sciences

Medical Director of MGH Kidney Transplant Program

Associate Director, Legorreta Center for Clinical Transplant Tolerance

Rafael Khaim, ANP/FNP-BC

Senior Coordinator/Clinical Operations Manager

Mount Sinai Health System

Will Maixner & Brittany Music

DaVita Kidney Care





Mass General Brigham



Massachusetts General Hospital
Founding Member, Mass General Brigham

Achieving Tolerance in Kidney Transplantation

Leonardo V. Riella, MD, PhD

Harold and Ellen Danser Endowed Chair in Transplantation

Senior Investigator at the Center for Transplantation Sciences

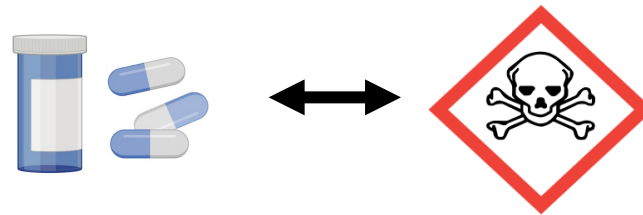
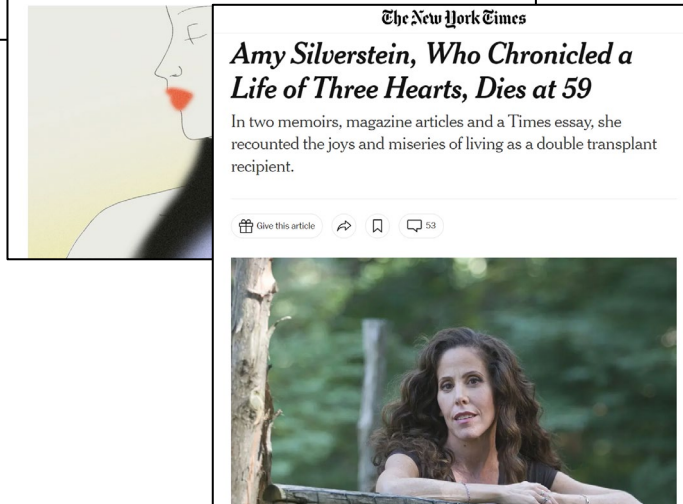
Medical Director of MGH Kidney Transplant Program

Associate Director, Legorreta Center for Clinical Transplant Tolerance

Why is tolerance necessary?

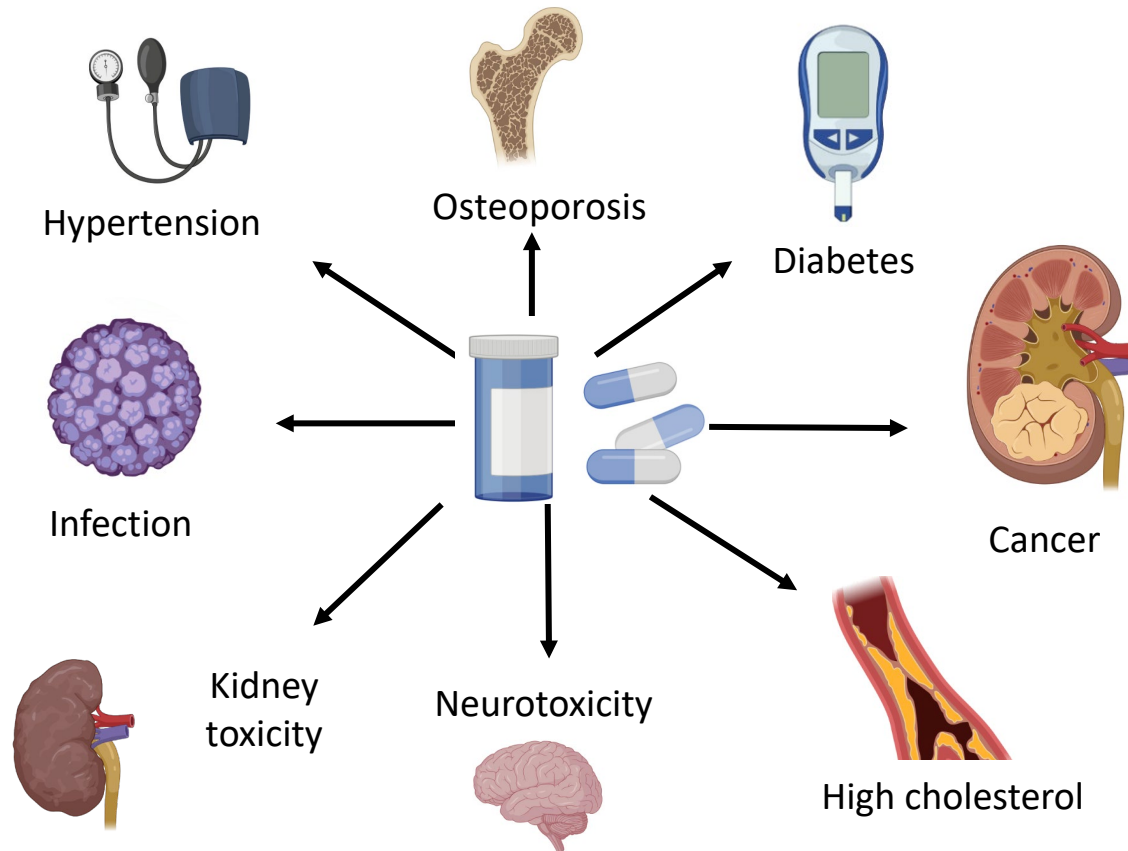


Unchanged Immunosuppressive Drugs for more than 40 years



"I am speaking out while I still can for my magnificent hearts. And for the patients who have called me or written from their post-transplant deathbeds, dismayed, "I did my best, I took every pill, every day. ..."

Immunosuppressive medications prevent rejection but are associated with multiple side effects



What is transplant tolerance?

It is the **specific absence of a destructive immune response to a transplanted organ without the use of anti-rejection medications**, while maintaining an **intact immune response against other threats** such as infections or cancers.



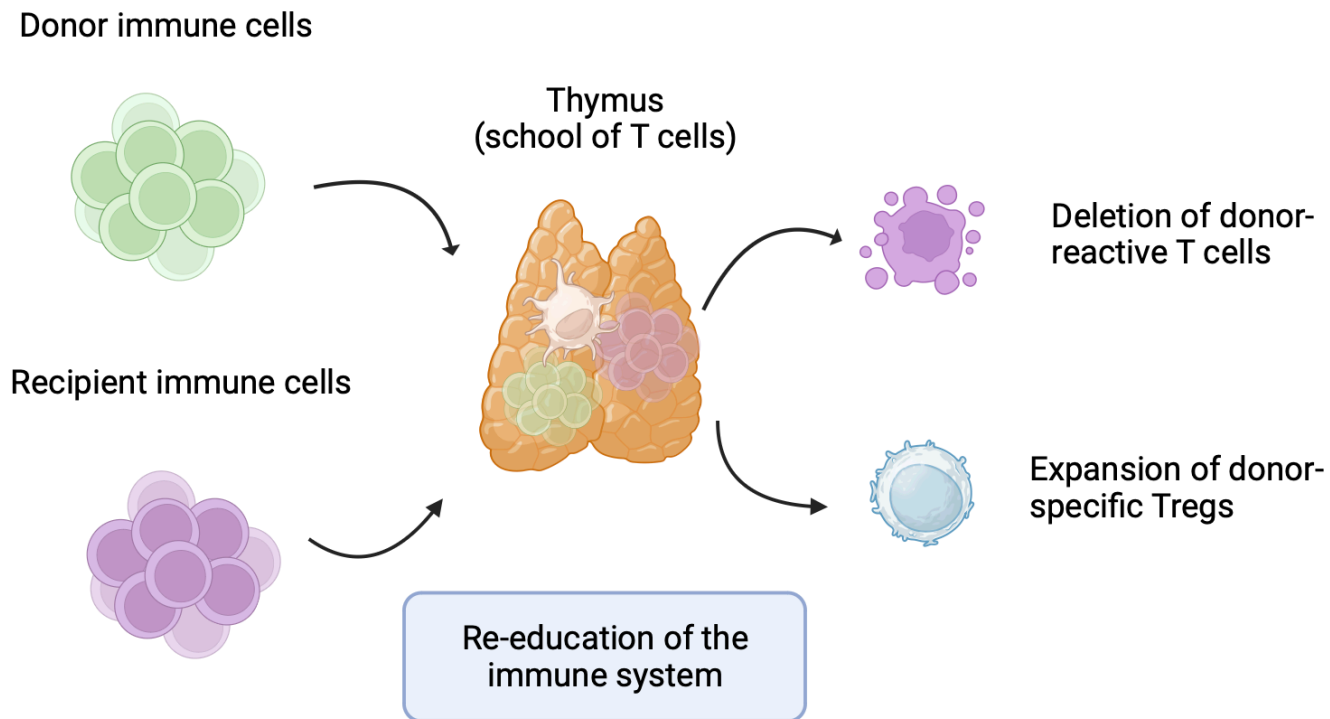
Strategies to induce Transplantation Tolerance

	Mice	Monkeys	Humans
Donor Specific Transfusion	+	-	-
Peptides	+	-	-
Cyclosporine	+	-	-
Anti-CD4	+	-	-
Anti-CD25	+	-	-
TLI	+	-	-
Anti-CD3 toxin	+	-	-
ALS + donor bone marrow	+	-	-
Co-stimulatory blockade	+	-	-
Treg-Transfer	+	-	-
Chimerism	+	+	+



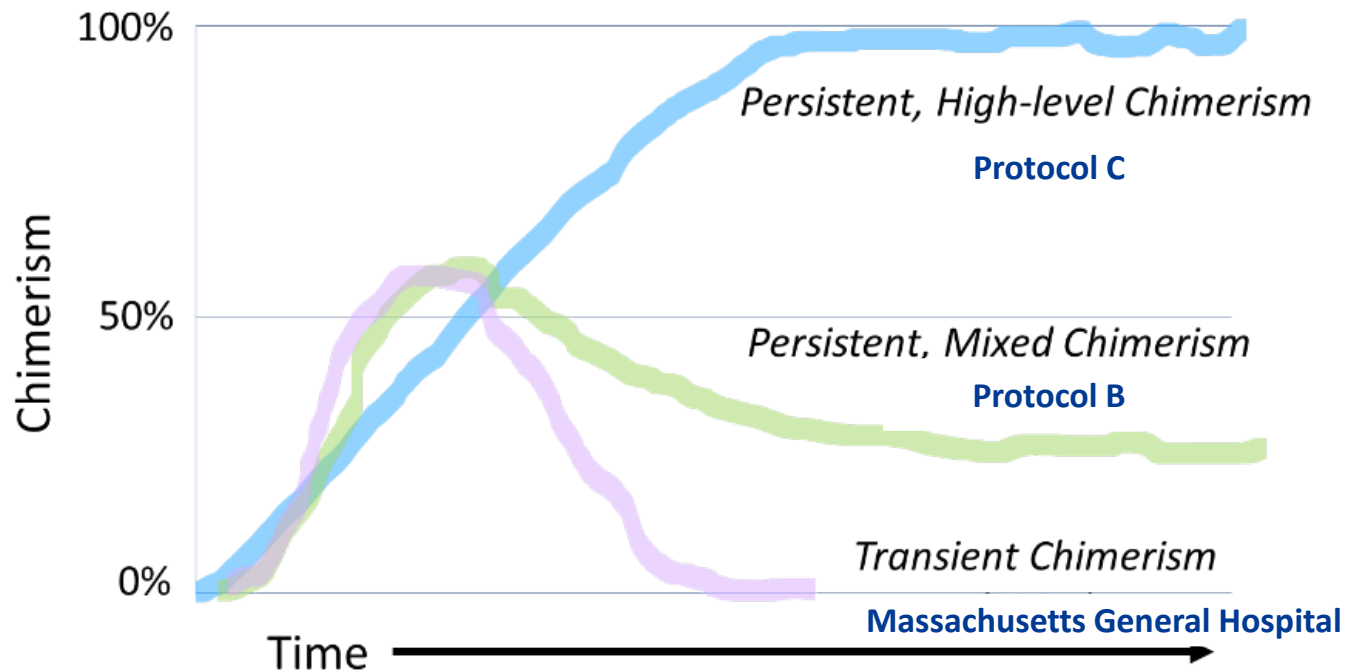
Development of Tolerance Through Mixed Chimerism

Chimerism is the presence of both donor and recipient immune cells in the peripheral blood.



Induction of tolerance with chimerism

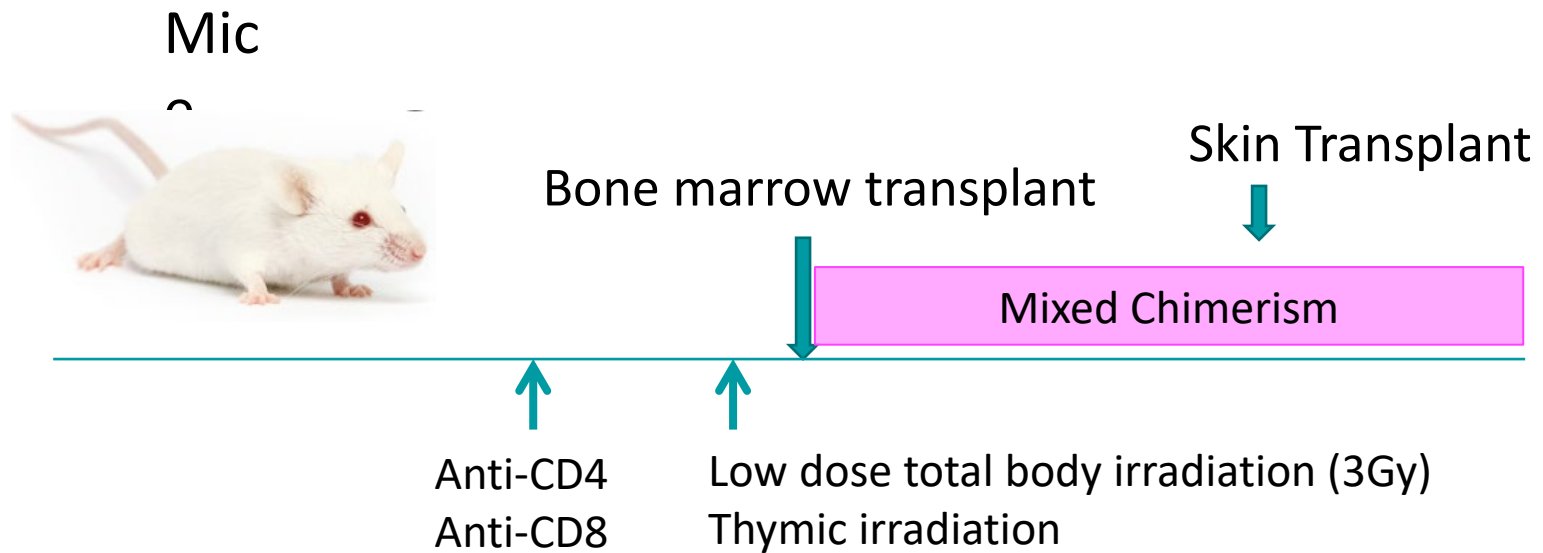
Fine balance: the higher the chimerism, the greater the risk for graft-vs-host disease (major complication).



Pre-Clinical Studies

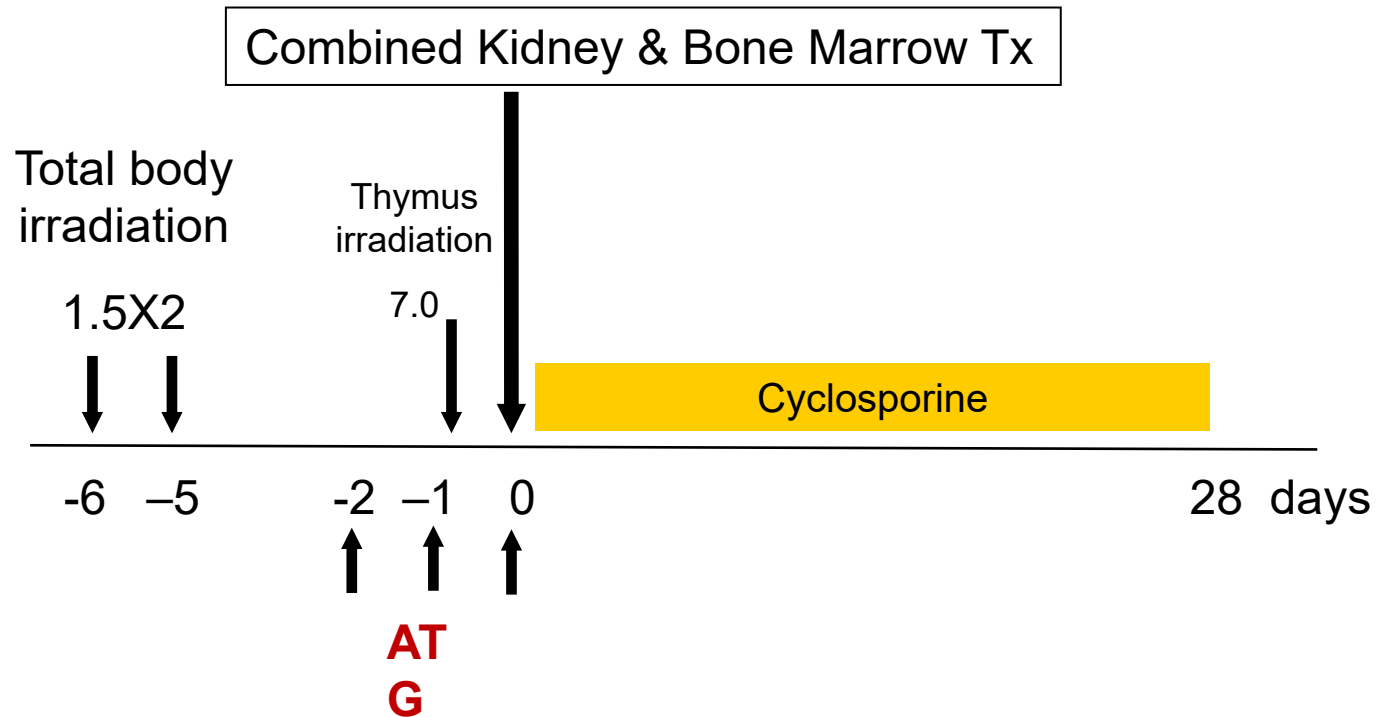
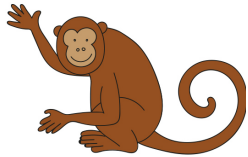


Induction of mixed chimerism in mice

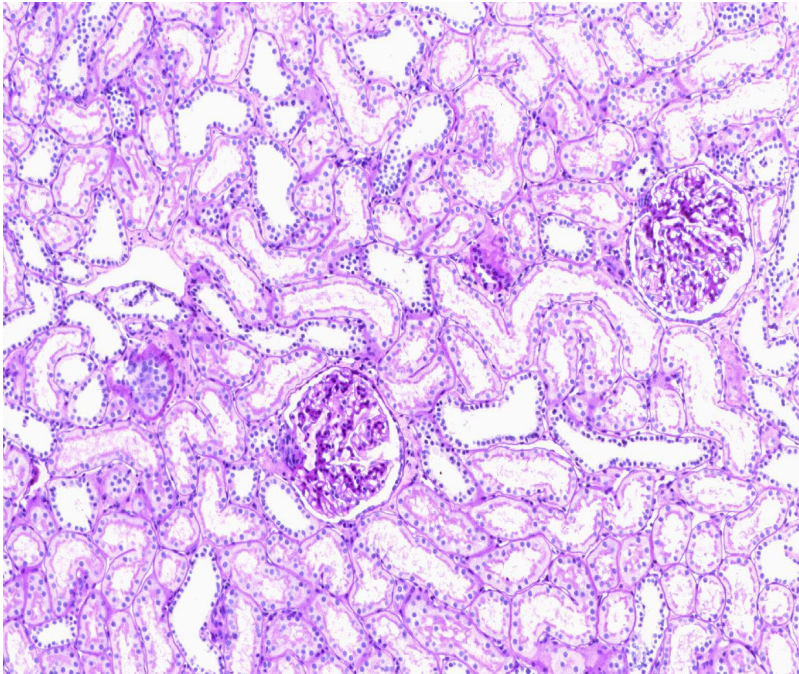


Induction of mixed chimerism in nonhuman primates

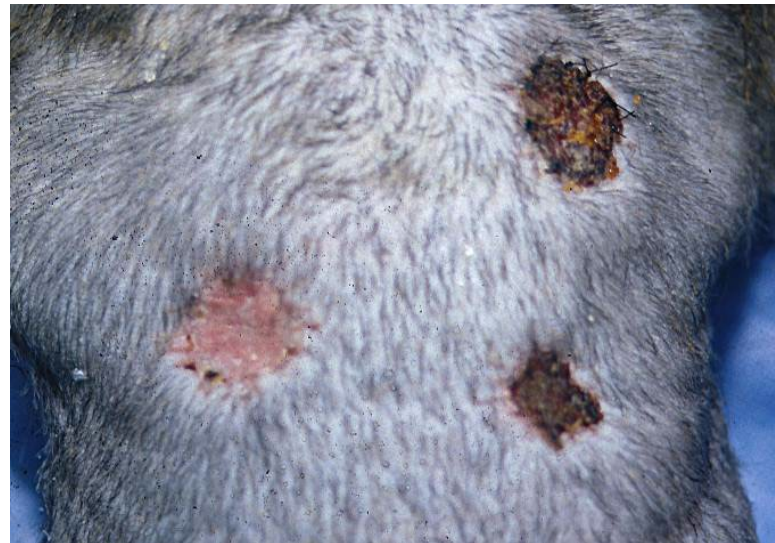
Monkeys



Renal Allograft Biopsy at 10 years



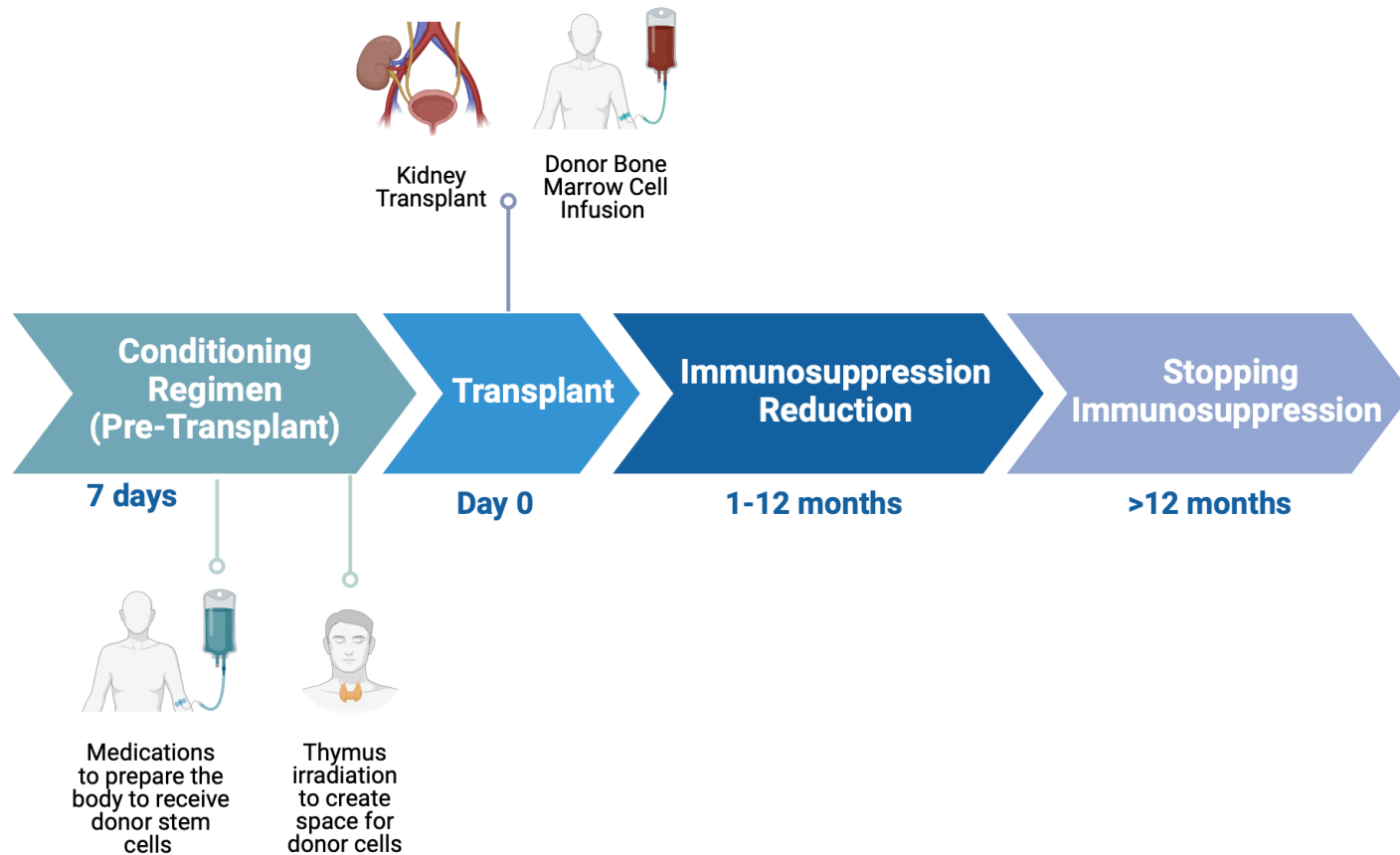
Skin Transplant at 1 year



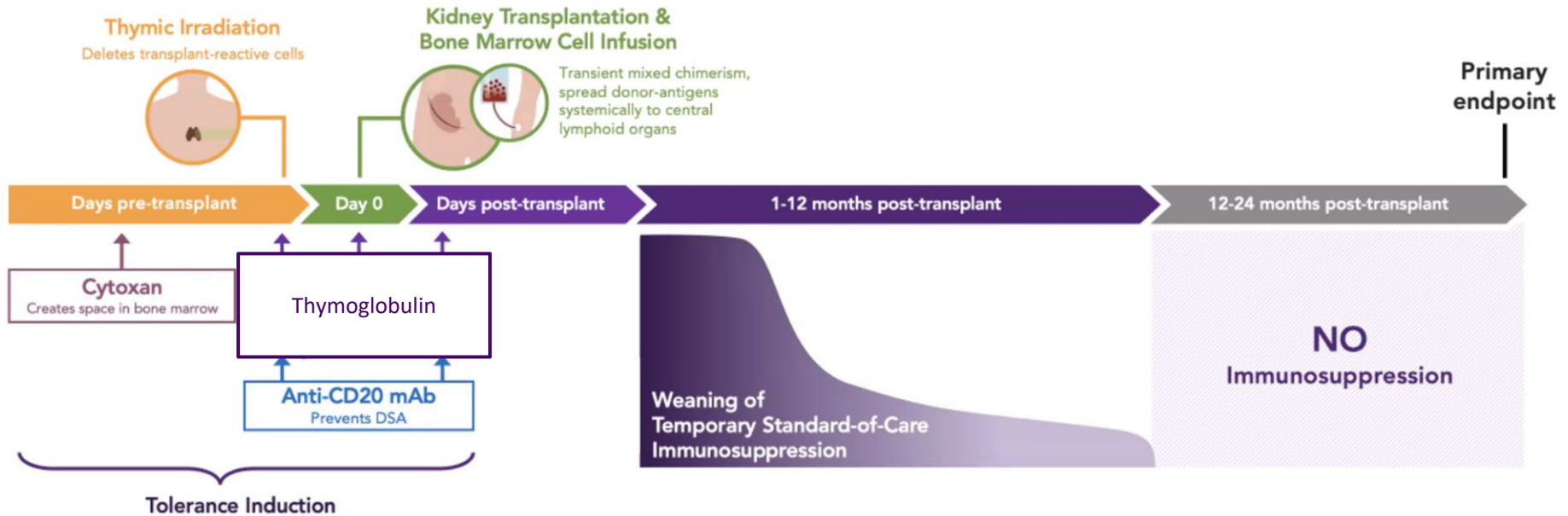
Current Clinical Studies



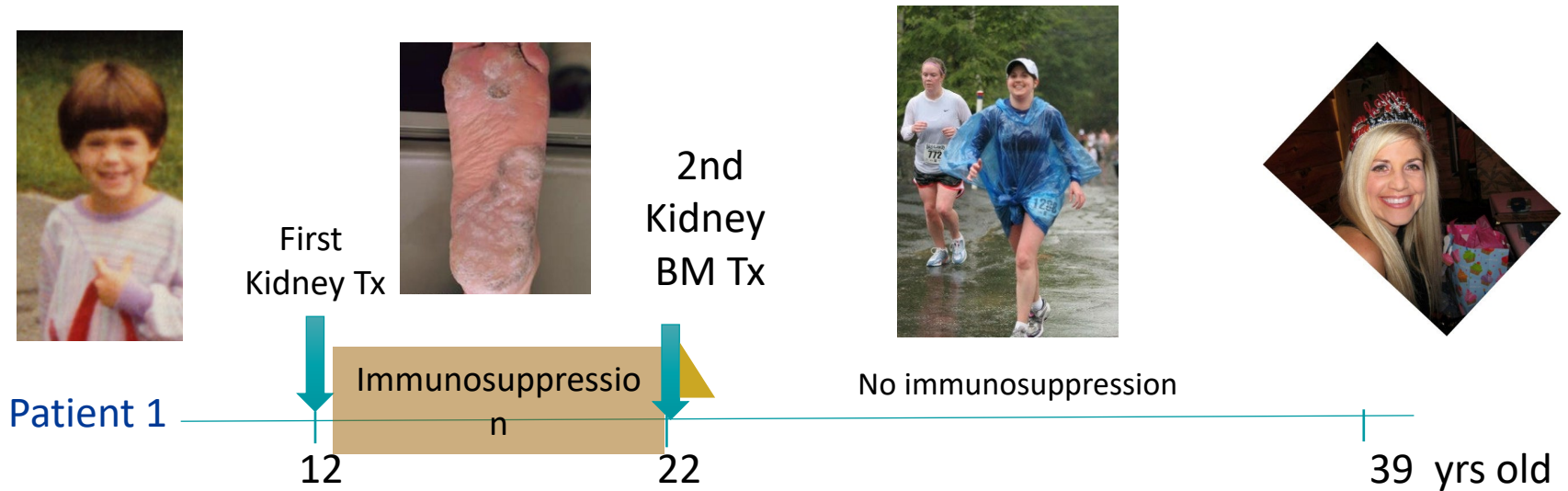
MGH Protocol for Transplant Tolerance



1st Generation MGH Protocol for Transplant Tolerance



Transplant Tolerance Patient 1



Transplant Tolerance Patient 2



Patient 2

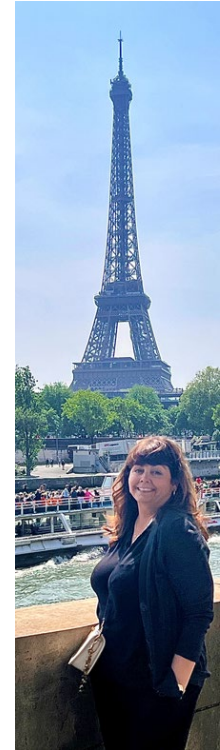
Kidney
BM Tx



36

No immunosuppression

50 yo





BRIEF REPORT

HLA-Mismatched Renal Transplantation without Maintenance Immunosuppression

Tatsuo Kawai, M.D., A. Benedict Cosimi, M.D., Thomas R. Spitzer, M.D.,
Nina Tolkoff-Rubin, M.D., Manikkam Suthanthiran, M.D., Susan L. Saidman, Ph.D.,
Juanita Shaffer, B.S., Frederic I. Preffer, Ph.D., Ruchuang Ding, M.D.,
Vijay Sharma, Ph.D., Jay A. Fishman, M.D., Bimalangshu Dey, M.D.,
Dicken S.C. Ko, M.D., Martin Hertl, M.D., Nelson B. Goes, M.D., Waichi Wong, M.D.,
Winfred W. Williams, Jr., M.D., Robert B. Colvin, M.D., Megan Sykes, M.D.,
and David H. Sachs, M.D.



The Results of the Initial Clinical Tolerance Regimen

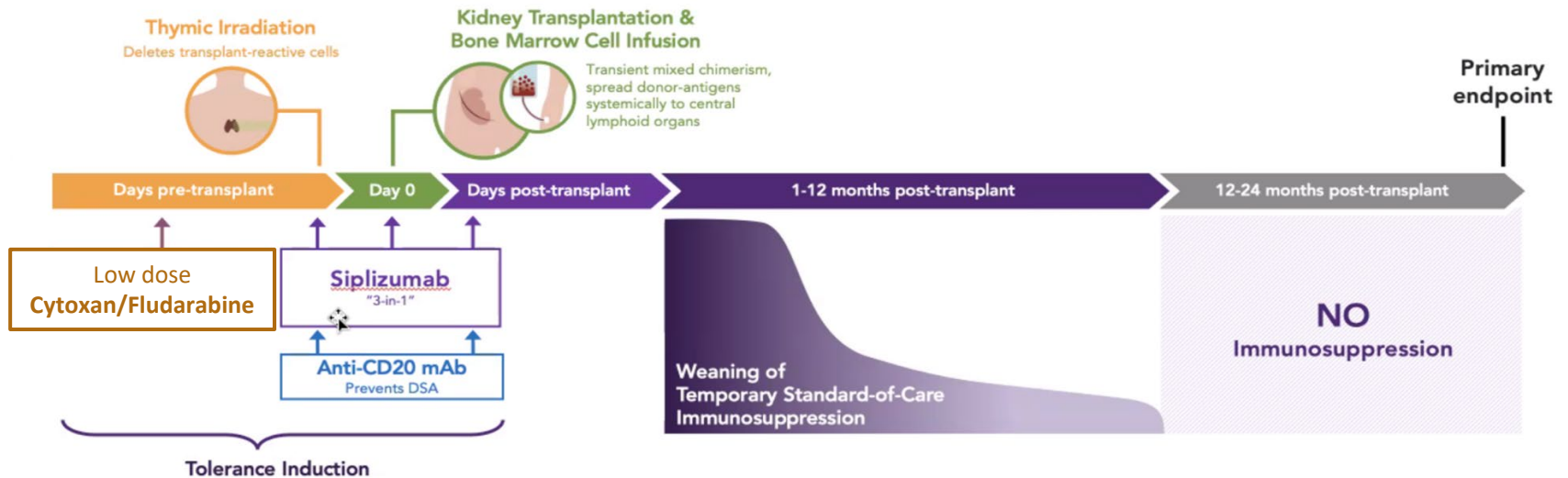
- All 10 developed transient mixed chimerism.
- 7/10 Achieved drug free kidney transplantation >5 years.
- The longest drug-free survival 17 years, with two recipients remain drug-free>13 years.
- No cases of graft-vs-host disease
- No patient death or infectious complications



Kawai T et al. New Engl J Med. 2008;358(4):353-361
Kawai T et al. New Engl J Med; 2013;368(19):1850-2
Kawai T et al. Am J Transplant 2014 14:1599-1611



Revised MGH Protocol for Transplant Tolerance (2022~)



	Duration Chimerism	Duration Drug-Free	Graft Survival	sCreatinine (mg/dl)	Outcome
1	26 days	tapering	>1.4 yrs	1.0	Stable
2	21 days	tapering	>1.2 yrs	1.4	Stable
3	34 days	On Tac mono	>3 mos	1.6	Stable
4	>30 days	On Tac mono	>1 mos	1.0	Stable

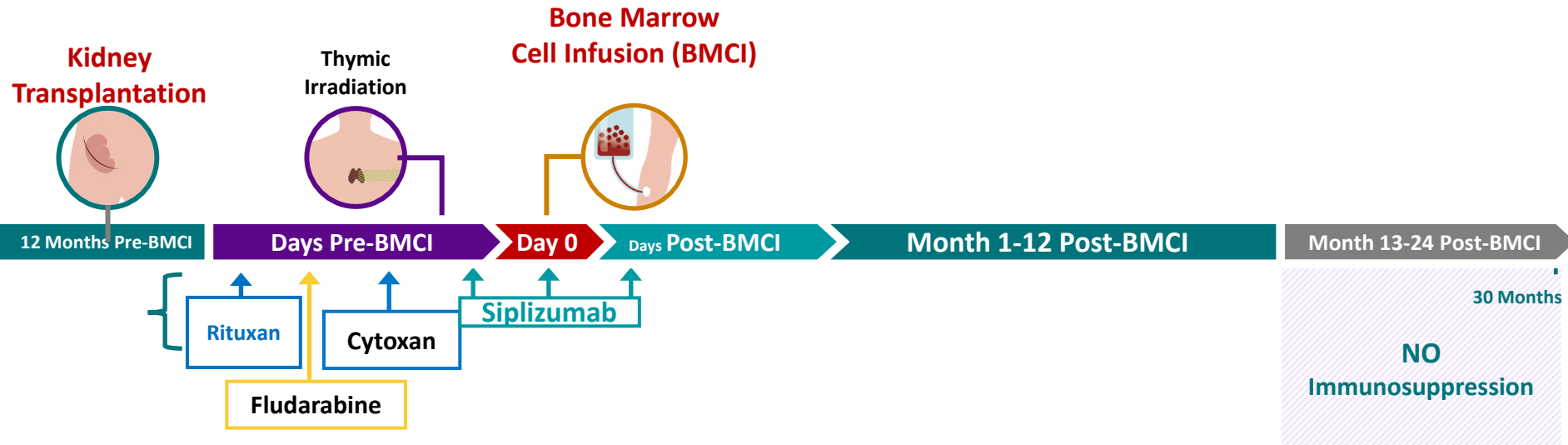
Clinical Studies Next Step



TRANSPLANTATION

Delayed Kidney Tolerance

for deceased donor transplant
/previous living donor transplant



Tacrolimus + MMF + Corticosteroids



Conclusion

- Clinical Transplant Tolerance is the ultimate goal in organ transplantation as it minimizes or eliminates the requirement of immunosuppression
- MGH transplant tolerance work is based on more than 30 years of research, and it changes the paradigm by re-educating the immune system.
- Current MGH protocol has minimal toxicity and the opportunity for tolerance development in majority of patients.
- Upcoming opportunities to also previous living donor transplants and deceased donor transplants.



The Legorreta Center for Clinical Transplant Tolerance (CCTT)



Tatsuo Kawai, MD, PhD
Director, Legorreta CCTT

“ Our aim is to transform the lives of transplant patients by developing innovative care strategies that eliminate or minimize the need for lifelong immunosuppressive medications. ”

www.massgeneral.org/tolerance



Scan to learn more

877-644-2860



Initial Criteria for Candidacy at the Legorreta CCTT

1. Age: 18 – 65
2. Kidney transplant (past or future)
3. Approved Living Donor*

Keep in Touch



Learn more



Refer a patient



* Deceased donor protocol in development



Q&A





Massachusetts General Hospital

Founding Member, Mass General Brigham



Mount Sinai Health System Recanati/Miller Transplantation Institute

ESRD Network (IPRO) Transplant expert call

Dr Rafael Khaim DNP, ANP/FNP-BC
Sr. Coordinator/Clinical Operations Manager



**Mount
Sinai**

*Recanati/Miller
Transplantation
Institute*

Presenter

► **Rafael Khaim, DNP, ANP-BC, FNP-BC**

Sr Clinical Manager for Kidney/Pancreas Transplant at RMTI. Completed BSN and MSN- ANP at Hunter Bellevue School of Nursing, Post Masters in FNP and Doctoral Degree DNP at the George Washington University School of Health Science & Medicine; Dual certified through AANP & ANCC. Professional interests are healthcare quality, organizational change and education. Area of expertise includes transplant, management, and family practice. Active in community for advocating health, prevention and living donation. Awarded a NYC leadership commendation from Comptroller of City of NY for distinguished leadership, dedicated service, commitment to excellence and tremendous contributions to the City of NY; Presented with Excellence Team Spotlight Award by Mount Sinai's President Office Committee; Leadership in Partners of Life Award by Renewal Organization, and Leadership award by Dennis Bligen Kidney Foundation for Africa American Population.



Preparing for New Allocation Changes Agenda

- ▶ Mount Sinai Background
- ▶ RMTI Structure
- ▶ Approach to listing and waitlist management to increase transplants

- ▶ Preparing for more offers and more transplants was critical due to organ offer changes
 - Improved Recipient Review
 - Waitlist Management
 - On Call and Offer Review Process
 - Community Liaison

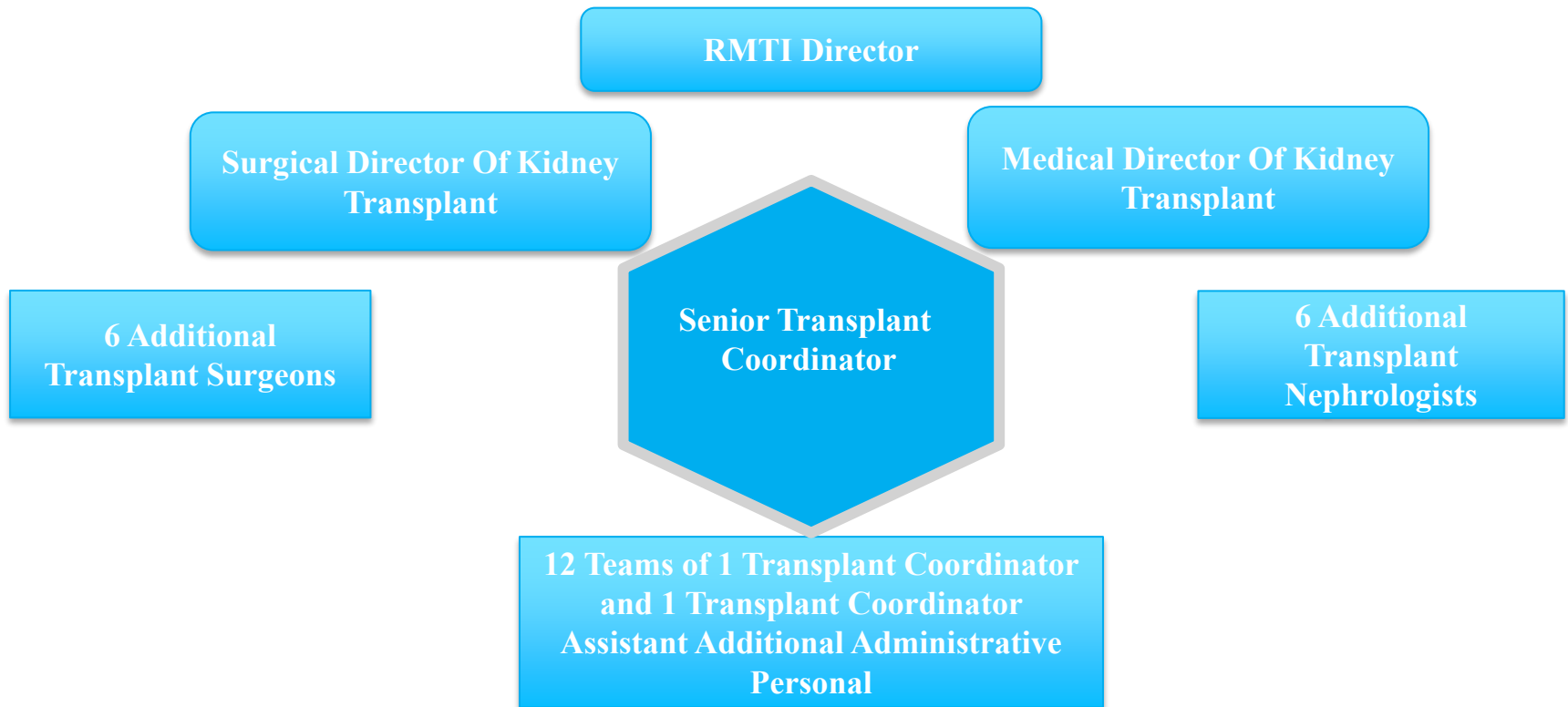
- ▶ Facilitated by Supportive Leadership

Mount Sinai Health System – Recanati/Miller Transplantation Institute Adult Kidney Program

- ▶ Located in New York City, 51 Kidney Transplants Centers within 250 radius
 - ▶ 3rd largest regional volume 2018-2022
 - ▶ 2018 – 206 Transplants
 - ▶ 2019 – 187 Transplants
 - ▶ 2020 – 194 Transplants
 - ▶ 2021 – 306 Transplants
 - ▶ 2022 – 283 Transplants
 - ▶ 2023 – 300 Projected Transplants
-
- ▶ 2nd Largest Kidney waiting list nationally with over 2,000 waitlisted candidates



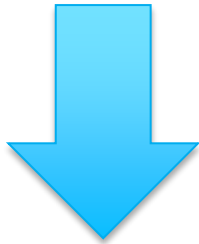
Kidney Transplant Team



Pre-Listing Workups and Clearances



Offer acceptance – Listed patients are ready for transplant



Death on the waitlist – Patients not prepared for transplant are not listed or removed from the list

Approach to Listing and Waitlist Management

Background Work

- Do as much as possible before RRC
- Limit types of Discussions at RRC
- 90 Day Evaluation Review – status check to find problems with listing

Focus on Problems

- Use RRC for review of questionable recipients or recipients with broad problems for the group to solve

Small Group vs Large Group

- Use small groups to review straightforward patients (Nephrologist, Coordinator, Assistant)
- Large conference for more complex patients

Waitlist Management

Oversight

- Surgeon, Nephrologist, Senior Coordinator
- Dedicated Coordinator and Assistant

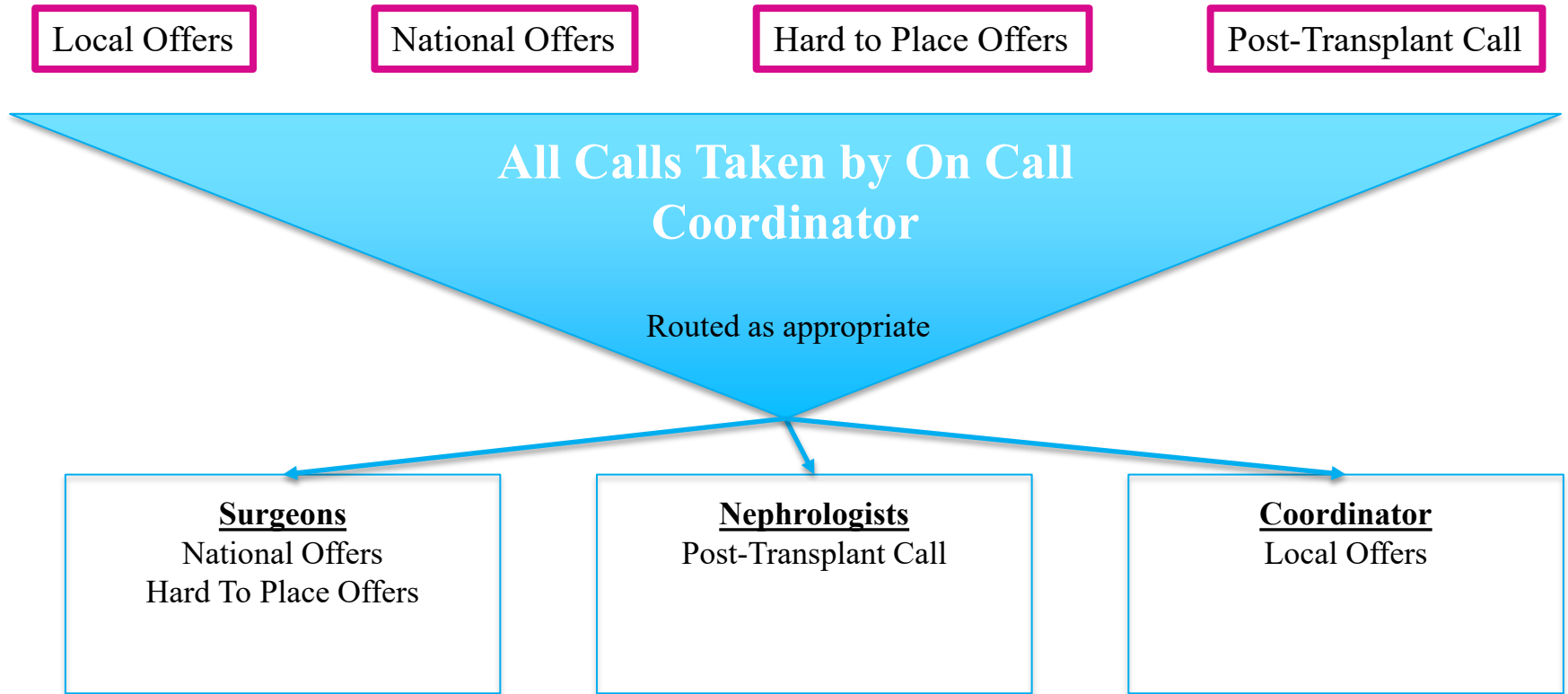
Focus

- Top Of List
- Ongoing Follow ups
- Clinical Readiness

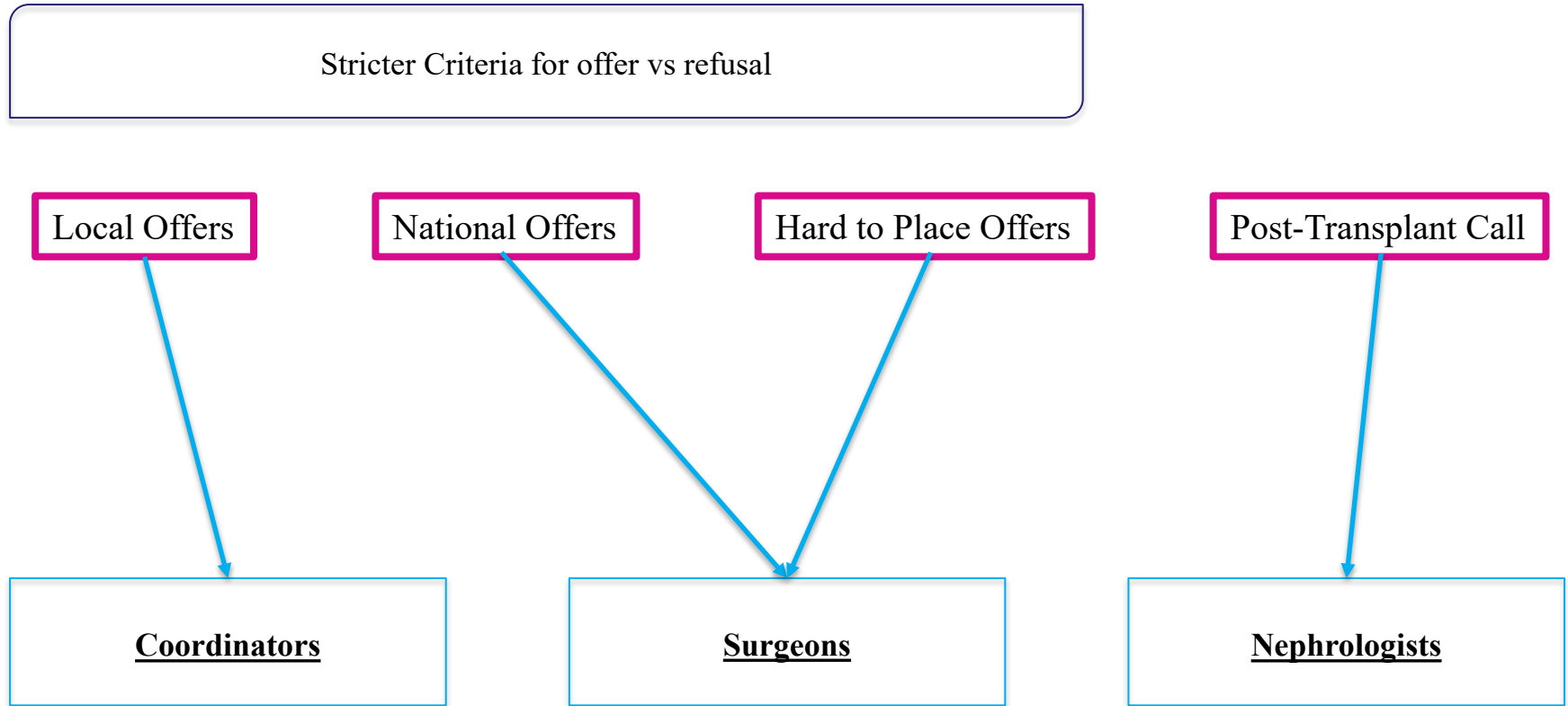
Education

- Quarterly meetings on Zoom
- Review patient role while listed

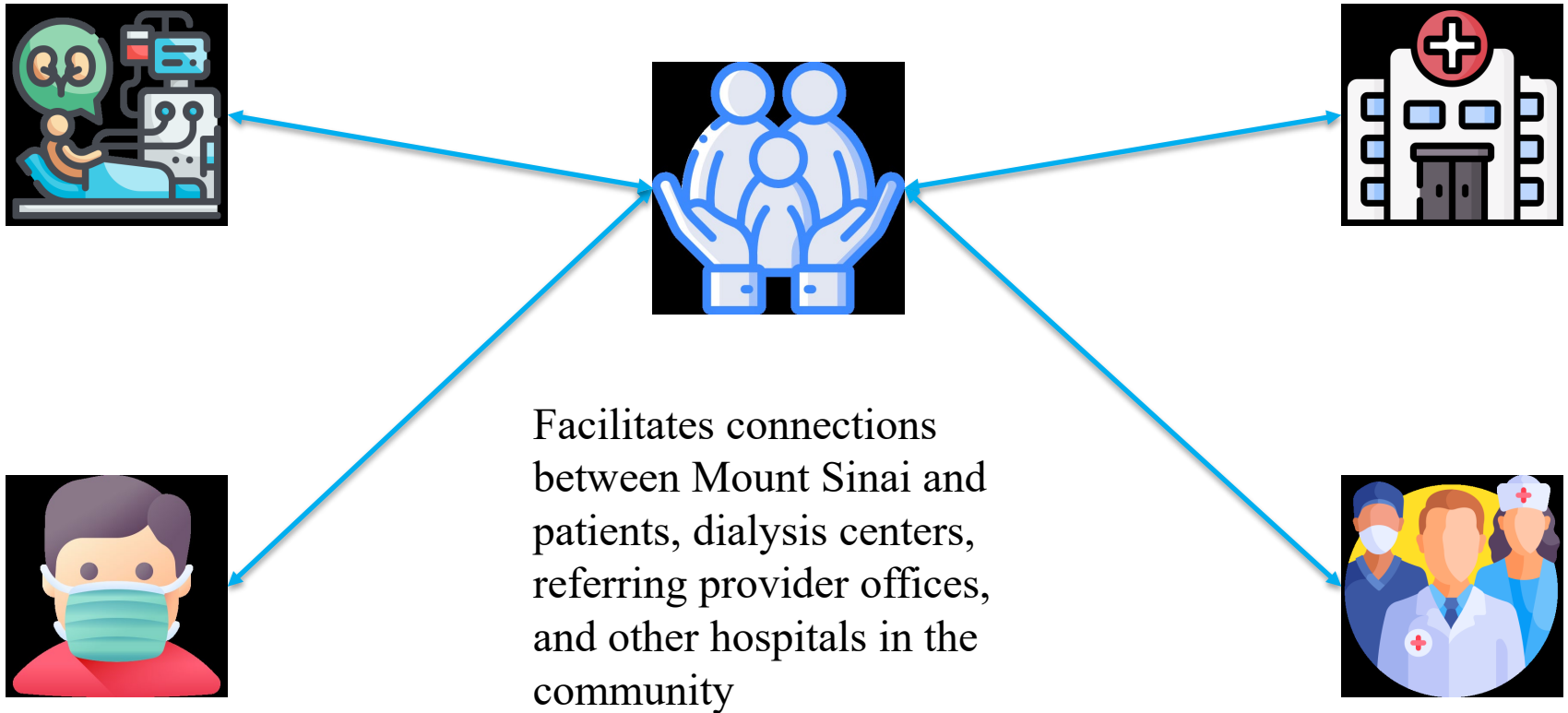
Offer and On-Call Workflow Prior Integration



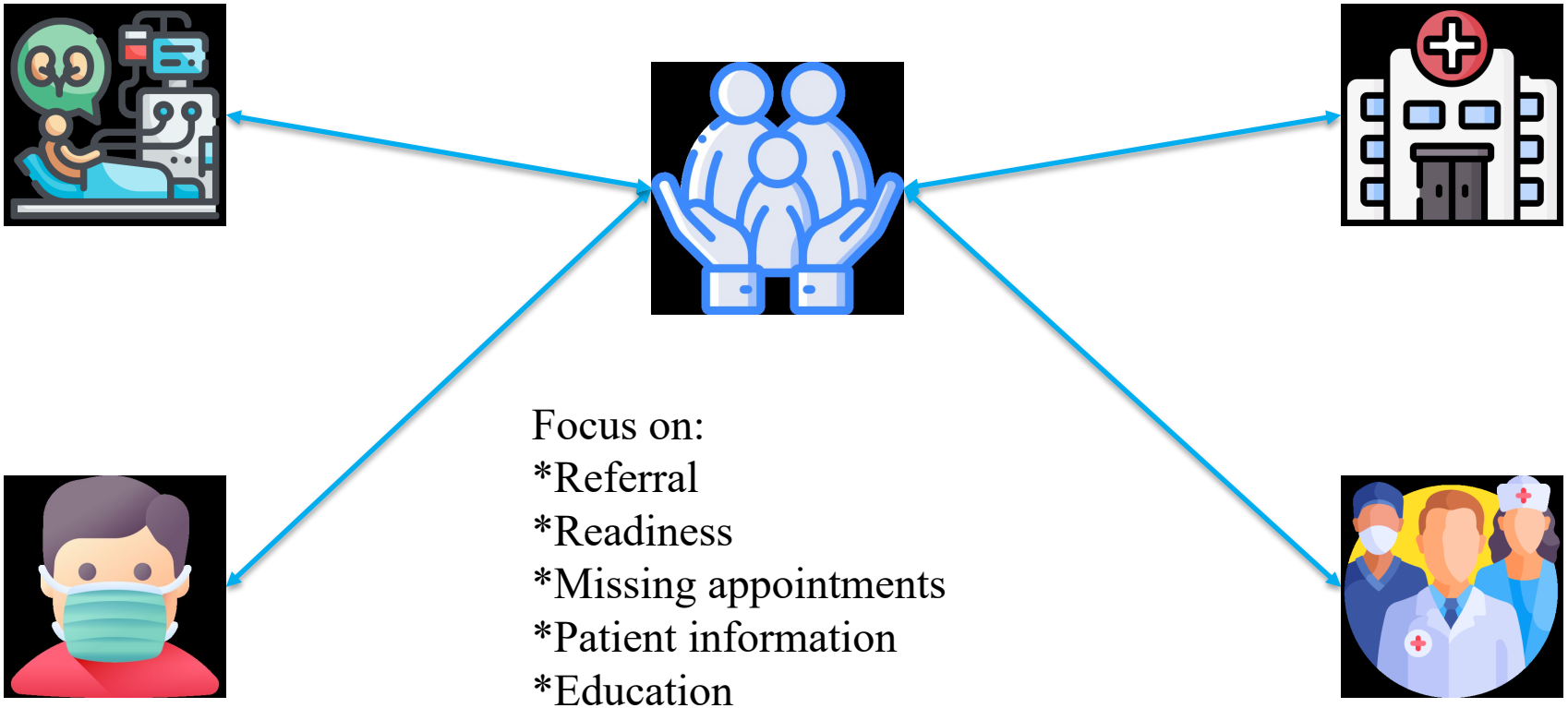
Offer and OnCall Workflow Update – Burnout Reduction



Community Liaison



Community Liaison



Robust Supportive Leadership

Health System

- Creation of Transplant ICU
- COVID Preparedness – Staffing Post COVID
 - Dedicated non-covid ICU
 - Virtual ICU

Kidney Program

- Open Door Policy
- Also taking call

Flexibility

- Moved quickly on new hires
- Approved work flow changes to combat burnout
- Constant adaptation



DaVita Kidney Care + MedSleuth Overcoming barriers to transplant equity & efficiency

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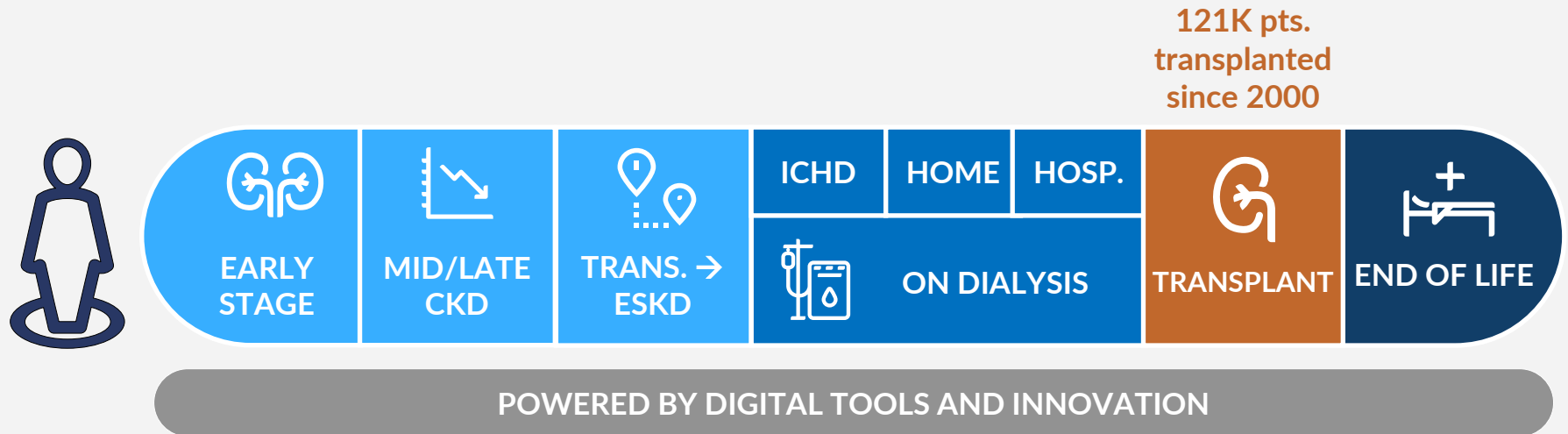


Today's discussion

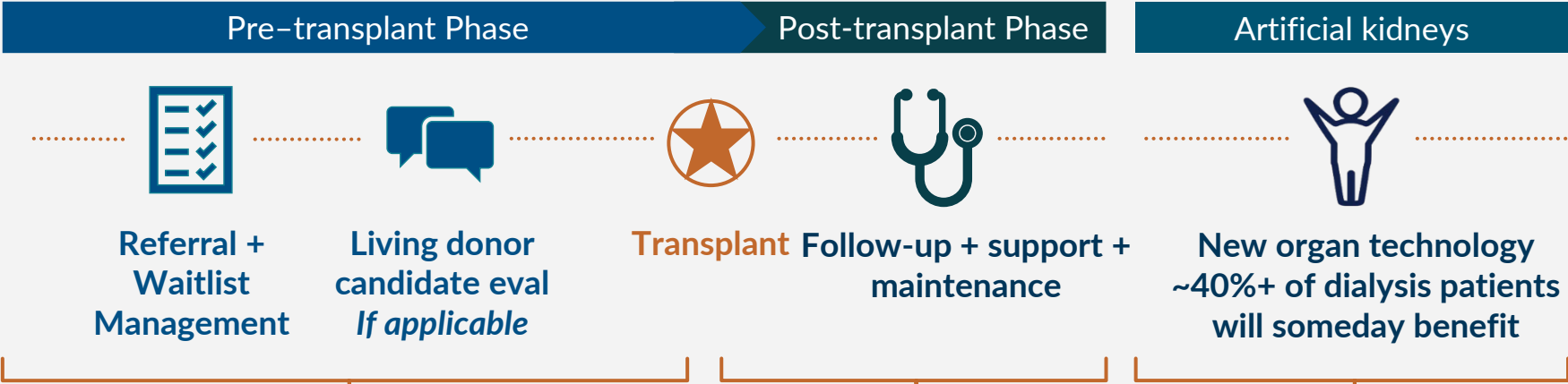
Overcoming obstacles

Transforming partnerships

Meaningful innovation across the kidney care continuum



Investing across the continuum



Davita
National Transplant Team

medsleuth

medsleuth

Today's discussion

| Overcoming obstacles

Transforming partnerships

Fundamental problems we seek to address. . .



Underutilization of living donation (CKD & ESKD)



Lack of systematic exchange of health information



Long, challenging to navigate process



Large inequity in patient's ability to access transplantation

Committed to performance upgrades

Increase living donor transplants	Improve health info exchange	Facilitate the waitlist process
<ul style="list-style-type: none">• CKD care <i>40k patients</i>• CKD education <i>36k patients annually</i>	<ul style="list-style-type: none">• EHR/transplant clinic connectivity <i>200k patients</i>• Dialysis/transplant center data sharing	<ul style="list-style-type: none">• National Kidney Care transplant team and Transplant Navigators• ESKD Transplant education <i>80k patients annually</i>

DaVita EHR • DaVita Clinical Research

medsl euth: leading platform, powerful data, + transplant experience

Today's discussion

Our vision

Overcoming obstacles

| Transforming partnerships

Focused on transforming our partnership with transplant centers



Deliver **activated and educated** patient referrals

Help more patients **complete their evaluation** with greater efficiency

Ensure waitlisted patients are **transplant ready**

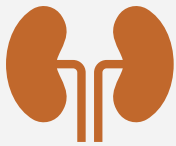
Help more patients **pursue living donation**

medsleuth BREEZE:
referral, evaluation, waitlist management,
living donor intake, & follow-up

medsleuth
MATCHGRID

How MedSleuth supports our goals

Increase living donor transplants



Provide more education and resources early to patients

MedSleuth living donor support in the hands of patients

Improve health info exchange



Sending a standard, comprehensive referral to all

MedSleuth BREEZE operationally integrated with patient's EHR

Facilitate the waitlist process



Better communication with transplant centers

Bi-directional capabilities with MedSleuth customers

MedSleuth brings value...

to patients and transplant centers

More kidney transplants with improved efficiency

Streamlines + complete patient referral

- ✓ Operational integration w/ DaVita patient EHR

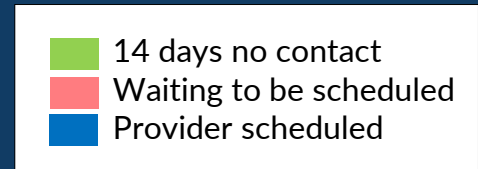
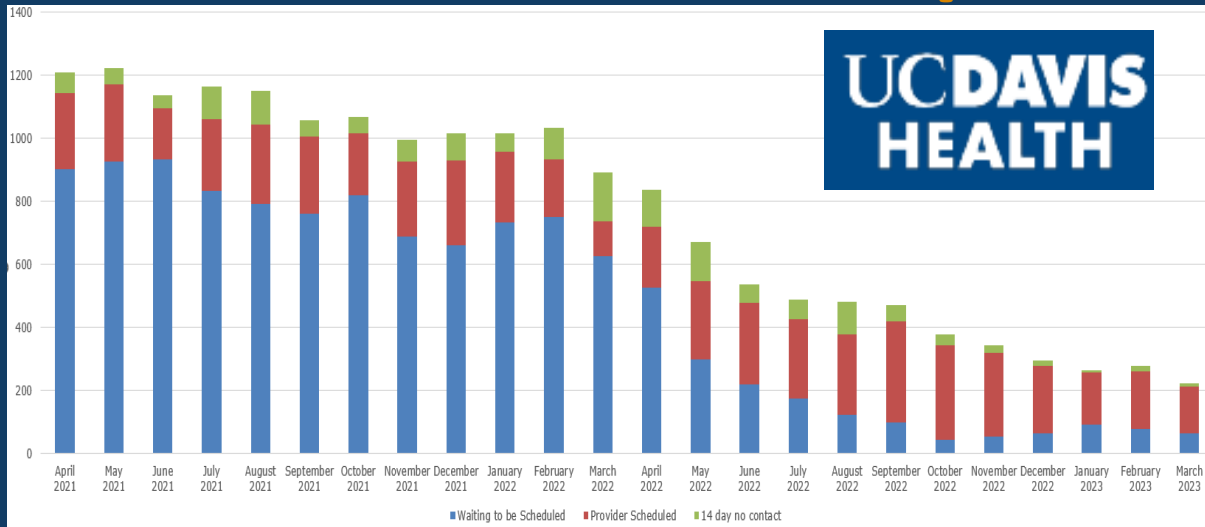
Improves communication & automation

- ✓ Increase efficiency and free up staff
- ✓ Improved communication with dialysis centers to keep pts active

Increases living donations

- ✓ 40% of LDKTs facilitated by MedSleuth in 2022

UC Davis & Sutter Experiences



80% reduction in referral backlog

Peterson, K. et al. Presented at UNOS Transplant Management Forum, May 2023

Sutter Health Video Visits Find Doctors Find Locations

Home / About Us / Six Way Kidney Transplant

Sutter Health Performs Six-Way Kidney Transplant Chain



Partnering to enable more transplants

- ✓ Educate and support to help patients find living donors & stay transplant ready
- ✓ Participate or support in patient research related to improving transplant rates
- ✓ Care coordination that improves health equity

Knowledge Into Action

Top Take-Aways



What is one thing you learned today that you could start doing immediately?



How will this action improve your current way of doing the practice/process?



Who is involved and how can they support the action to make it sustainable?

Recap & Next Steps

- Additional pathways for learning
 - Sharing Best Practices to a greater community through coalition meetings
 - Using Case Study examples to identify new ways of doing something and missed opportunities
- Next meeting – February 15, 2024 @ 2:00 p.m. ET

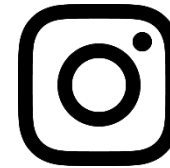
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Social Media



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National Coordinating Center (NCC)



Expert Teams – Case-Based Learning & Mentorship

Thank You

nccinfo@hsag.com

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