



Pediatric Transition of Care

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Objectives

- By the end of the presentation participants will be able to:
 - Define transition of care (TOC).
 - List two reasons why TOC is so important for pediatric transplant recipients.

Problem Statement

Does implementation of an Evidence Based Pamphlet highlighting the TOC for pediatric kidney transplant recipients from hospital to home, compared to no Evidence Based Pamphlet, improve overall TOC on T8/PICU at UCDCMC?

What is Transition of Care?

- Refer to the movement of patients between health care locations, providers, or different levels of care.
- The TOC goal for pediatric renal transplant recipients is to provide supportive care appropriate to the individual patient to maximize potential longevity of their renal allograft.
- The ***nurse functions as the primary educator and provides support*** to the patient and families.



(Haddad & Winnicki, 2013)

Background Information

- There are approximately 800 pediatric transplant surgeries every year in the USA.
(Sharma, Ramanathan, Posner & Fisher, 2013)
- UC Davis Medical Center in 2012 received a Kidney Transplant Excellence award based on clinical quality outcomes and survival rates. (www.ucdmc.edu)
- Recent Change in Admissions Criteria on T8.



Dr. Richard Perez during transplant surgery.

Review of Literature



- It is vital that patients are educated on immunosuppressive medication, graft surveillance and lifestyle modifications to help decrease graft loss (Urstad, Oyen, Anderson, Moum & Wahl, 2012)
- Pediatric transition of care improves post discharge medication errors, adverse events within one month of discharge, prevents readmission rates and decreases cost of these admissions (Lerret & Weiss, 2011)

Intention

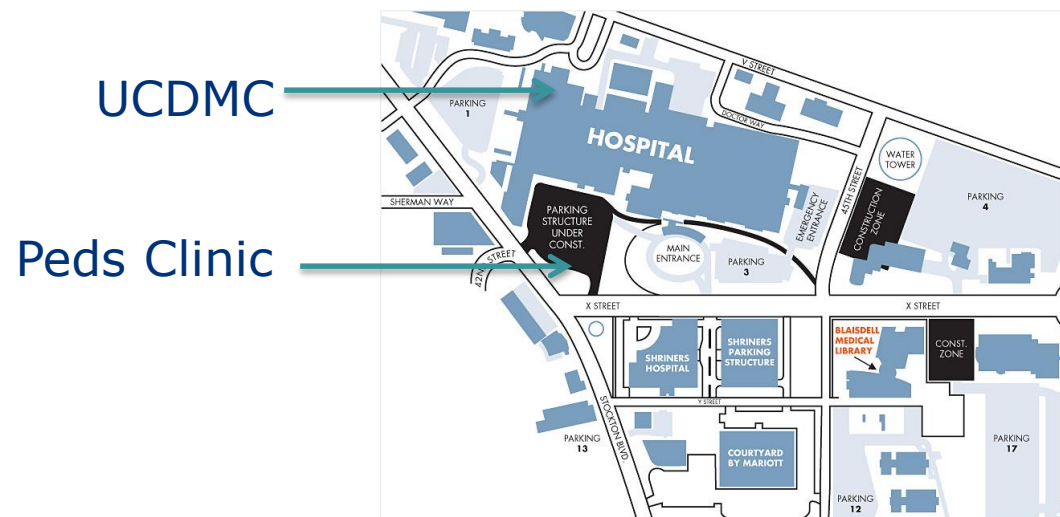
The goal of our project is to implement an evidence based pamphlet highlighting important TOC topics designed specifically for pediatric transplant recipients.

Creating the Evidence Based Pamphlet

- Literature Review
- Visited Pediatric Clinic, Collaborated with Pediatric Transplant Coordinator (*outpatient*)
- Collaborated with Pediatric Nephrologists, Pharmacist, Dietician, Registered Nurses (*inpatient*)



We worked across the care continuum & involved a multidisciplinary group of healthcare providers.



Methodology

- IRB application for survey approval.
- Survey was distributed to T8 nurses, nurse practitioners, transplant coordinators, and physicians assessing baseline knowledge pertaining to pediatric TOC.
- Evidence based pamphlet developed addressing gaps in practitioner knowledge, as well as other essential pediatric TOC topics.
- 2 Post surveys were distributed to PICU and T8 nurses.

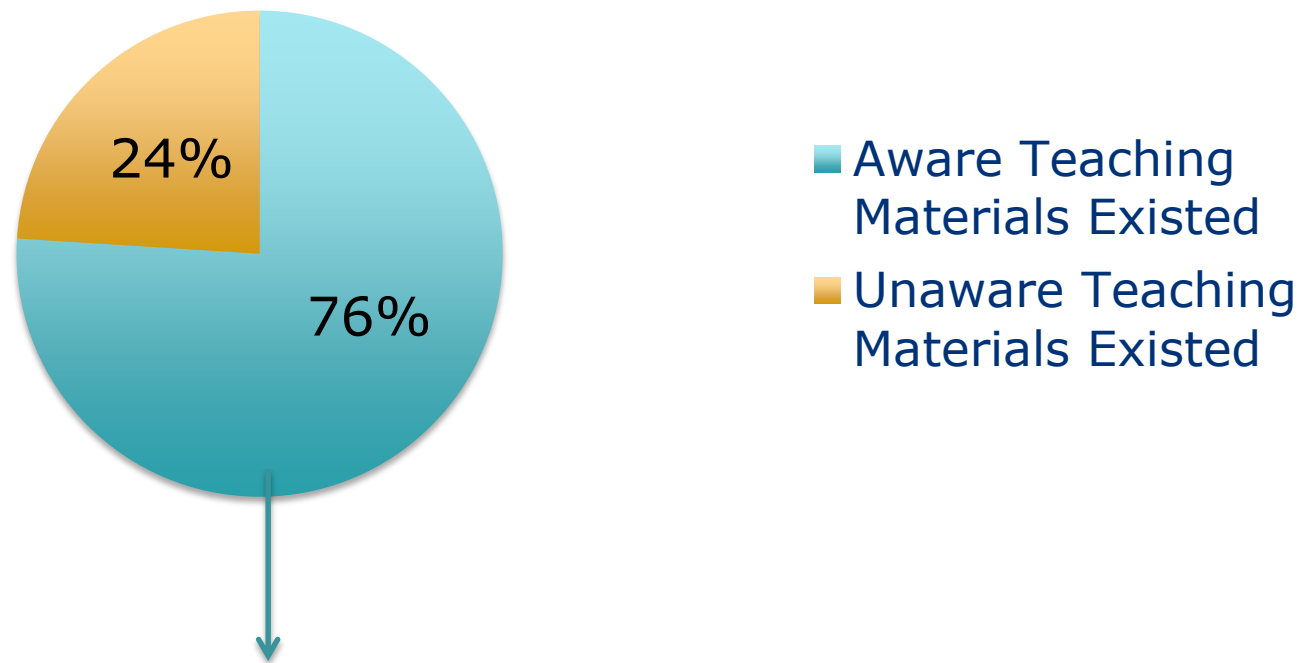


Comparison of Pre & Post Data

■ Pre Data

- The results of our initial survey indicated limited knowledge regarding pediatric TOC among all T8 practitioners.
- One hundred percent of T8 practitioners believed additional teaching material is needed for pediatric transplant patients and their families, which is standardized and in low literacy format.

T8 RN Knowledge Regarding Pediatric Educational Materials (Pre Implementation)



Of the 76% of RNs who knew that educational materials existed,
only 1RN knew the actual content!!!

Initial Survey

1. I am a (please circle):

- Physician
- Coordinator
- Nurse Practitioner
- Registered Nurse

2. My educational background is

- Associate Degree
- Bachelors
- Masters
- MD
- Doctorate

3. My age is

- 18-29
- 30-39
- 40-49
- 49-50
- 50-59
- > 59

4. My ethnic/cultural background is

- White
- African American
- Hispanic / Latino
- Asian
- Mixed race

5. On a scale of 1 (strongly disagree) to 5 (strongly agree), do you believe a patient centered pediatric discharge transition of care plan is currently in place at UC Davis Medical Center?

- 1 2 3 4 5

6. On a scale of 1 (strongly disagree) to 5 (strongly agree), are you comfortable educating parents on vital sign parameters specific to their stage of development?

1 2 3 4 5

7. Do you always incorporate birth control education in your teaching to children of child bearing age?

Circle: YES or NO

8. Are you aware that we have a pediatric educational binder available on Tower 8?

Circle: YES or NO

9. Are you familiar with the contents of the pediatric binder?

Circle: YES or NO

10. Please describe the primary contents of the pediatric binder.

11. Do you believe Tower 8 is in need of more teaching material for pediatric transplant patients and their families?

Circle: YES or NO

12. What additional teaching material should be available for Tower 8 families?

13. What additional educational materials should be available for Tower 8 staff?

14. Why is it important to prepare families whose child has had a transplant?

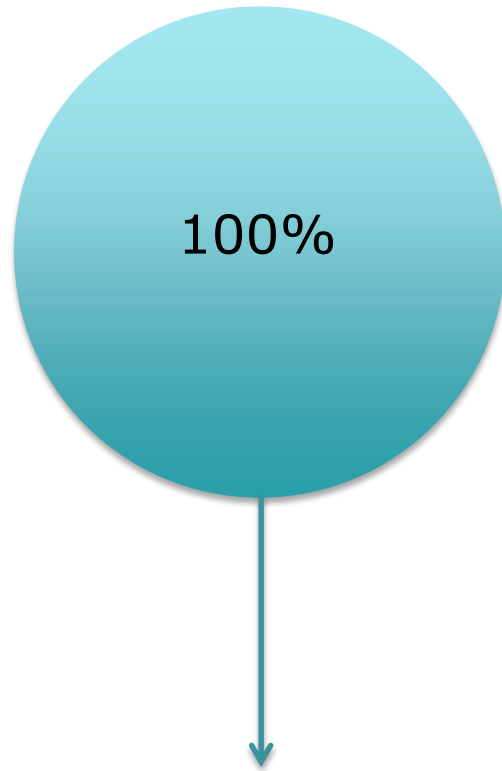
15. What else needs to be done to improve the transition of care for pediatric kidney transplant recipients from hospital to home?

Comparison of Pre & Post Data

■ Post Data

- The results of our post survey indicated that knowledge regarding pediatric TOC improved amongst all T8 and PICU RNs.
- However, educational gaps still exist and the Pediatric Teaching Tool for Kidney Transplants is not being used consistently for transplant education.

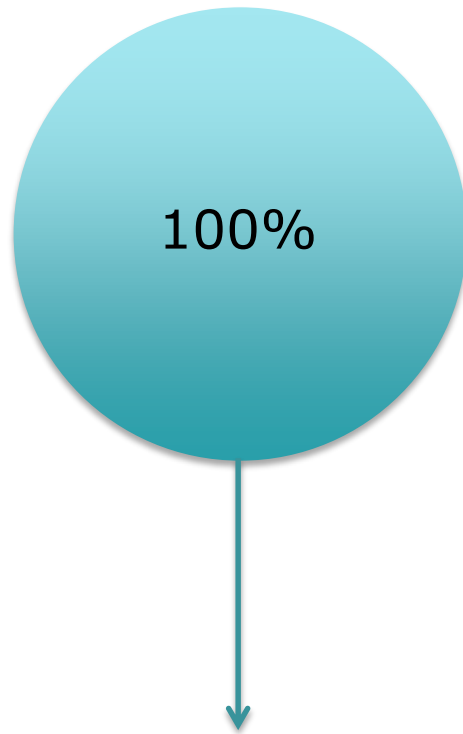
T8 RN Knowledge Regarding New Pediatric Teaching Tool (Post Implementation 3 months)



- T8 RN Aware of New Educational Tool
- T8 RN Unaware of New Educational Tool

88% of these T8 RNs actually knew the content of the new teaching tool.

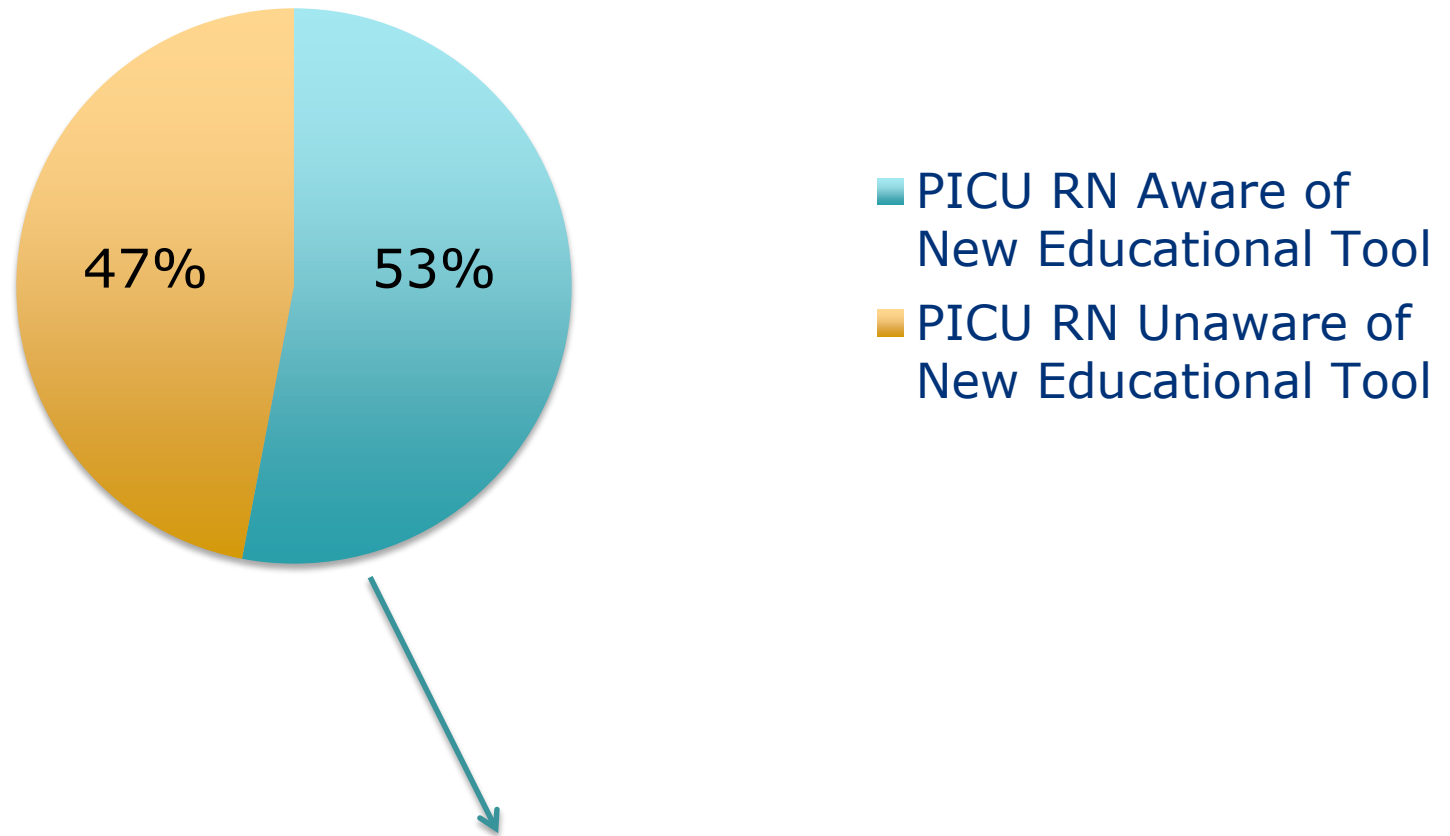
T8 RN Knowledge Regarding New Pediatric Teaching Tool (Post Implementation 6 months)



- T8 RN Aware of of New Educational Tool
- T8 RN Unaware of New Educational Tool

75% of these T8 RNs actually knew the content of the new teaching tool.

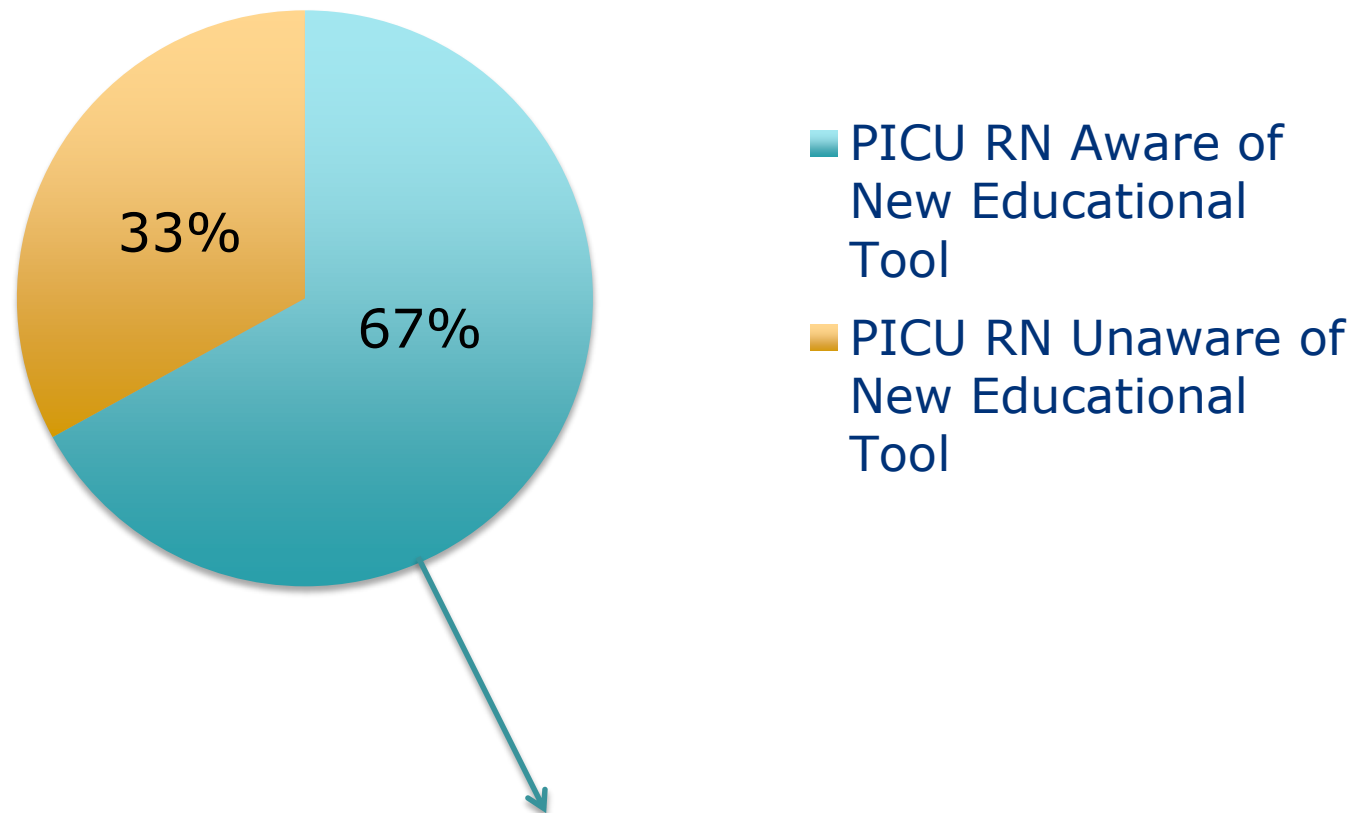
PICU RN Knowledge Regarding New Pediatric Teaching Tool (Post Implementation 3 months)



Of the 53% of PICU RNs who were aware of the new educational tool, only 33% knew the actual content.

N=15

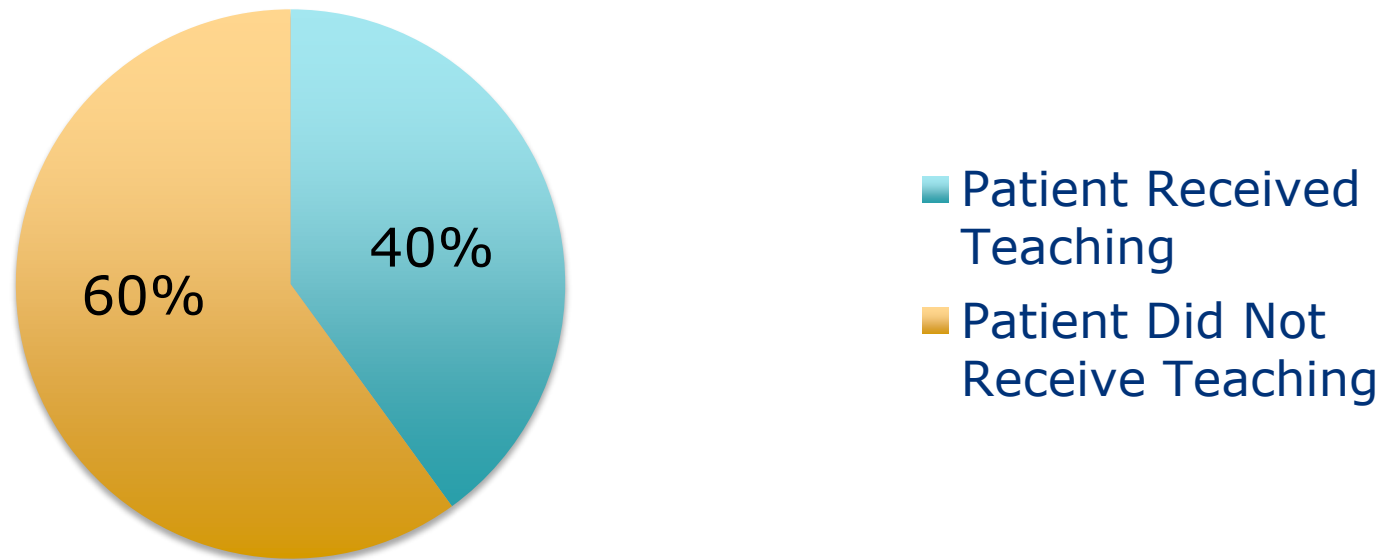
PICU RN Knowledge Regarding New Pediatric Teaching Tool (Post Implementation 6 months)



Of the 67% of PICU RNs who were aware of the new educational tool, **88% knew the actual content!**

N=12

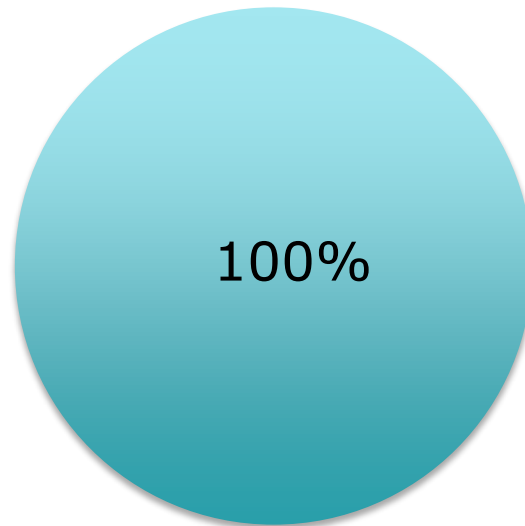
How Many PICU RNs Educated Newly Transplanted Patients Using the Pediatric Teaching Tool (Post Implementation 3 months)



Goal=All Newly Transplanted Pediatric Patients should be receiving education from the new Pediatric Teaching tool. That education should be reinforced each shift by RN.

N=5

How Many PICU RNs Educated Newly Transplanted Patients Using the Pediatric Teaching Tool (Post Implementation 6 months)



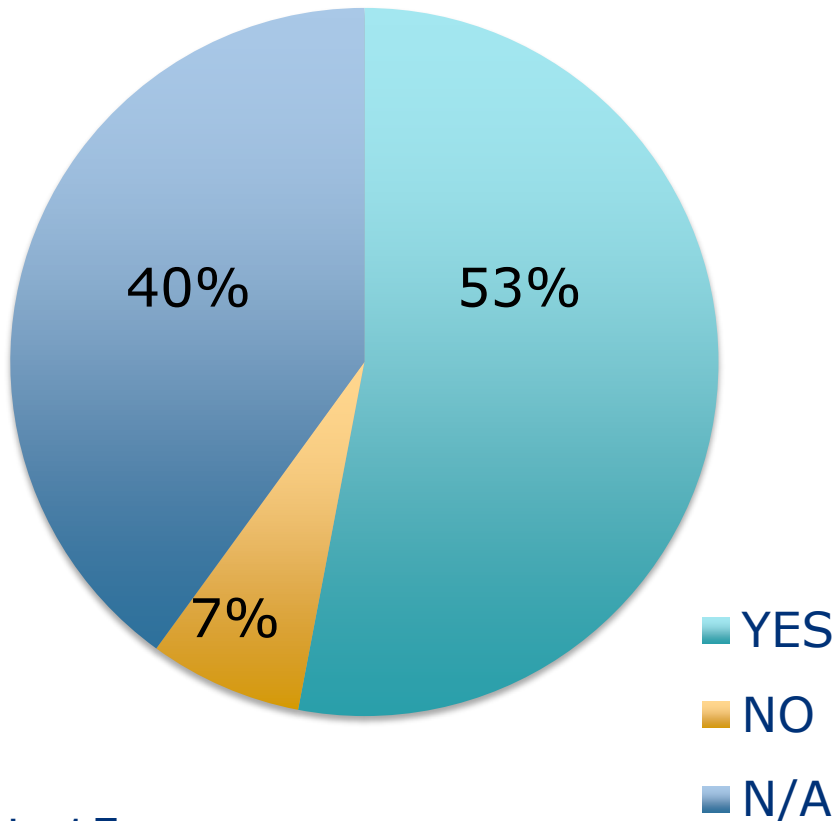
- Patient Received Teaching
- Patient Did Not Receive Teaching

All Newly Transplanted Pediatric Patients are now receiving education from the new Pediatric Teaching tool!

N=2

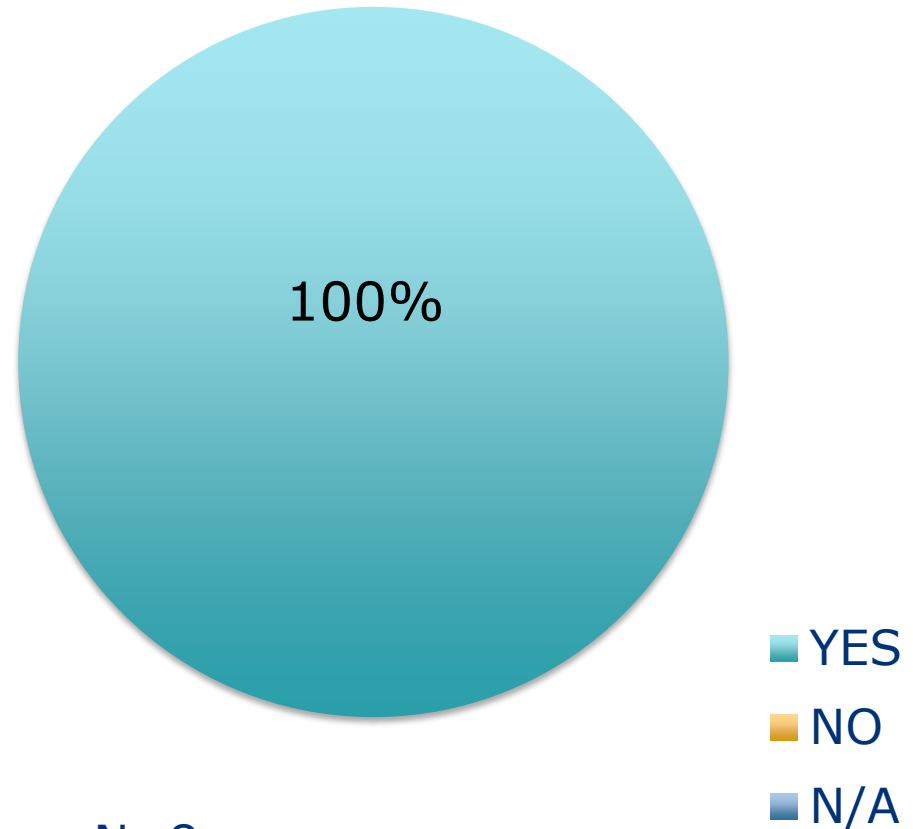
Do you believe the new teaching tool improves Pediatric Transition of Care? (Post Implementation 3 months)

PICU RNs



N=15

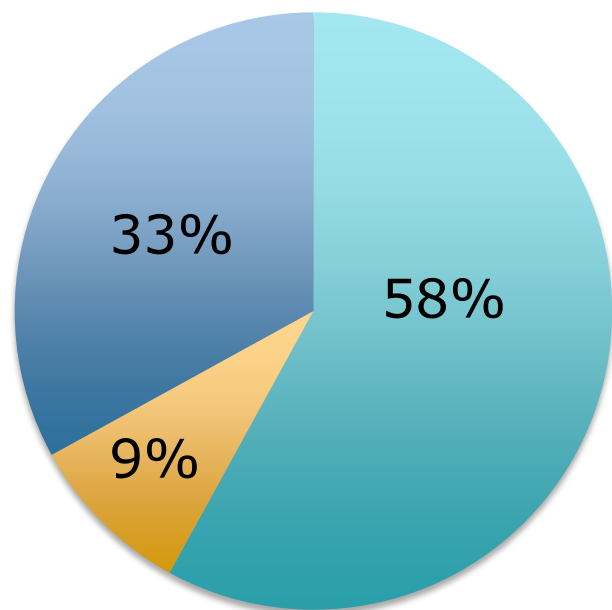
T8 RNs



N=8

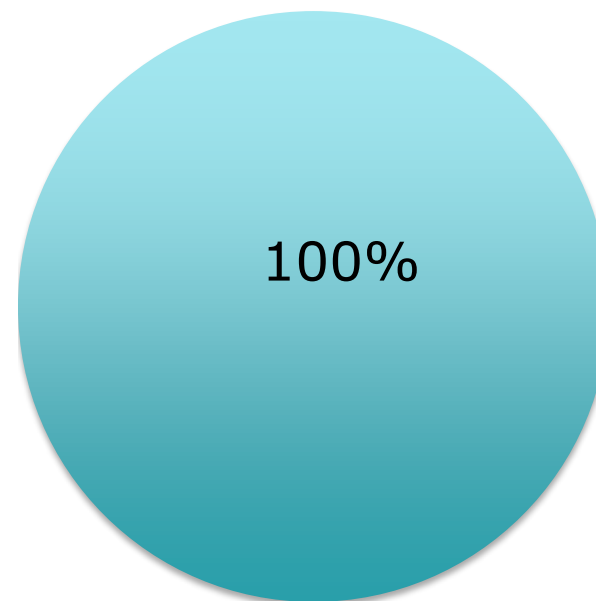
Do you believe the new teaching tool improves Pediatric Transition of Care? (Post Implementation 6 months)

PICU RNs



N=12

T8 RNs



N=8

- YES
- NO
- N/A

- YES
- NO
- N/A

Post Survey

(3 & 6 Months After Implementation of Pediatric Teaching Tool)

1. I am a (please circle):

- Physician
- Coordinator
- Nurse Practitioner
- Registered Nurse

2. My educational background is

- Associate Degree
- Bachelors
- Masters
- MD
- Doctorate

3. My age is

- 18-29
- 30-39
- 40-49
- 49-50
- 50-59
- > 59

4. My ethnic/cultural background is

- White
- African American
- Hispanic / Latino
- Asian
- Mixed race

5. On a scale of 1 (strongly disagree) to 5 (strongly agree), do you believe a patient centered pediatric discharge transition of care plan is currently in place at UC Davis Medical Center?

- 1 2 3 4 5

6. Are you familiar with the contents of the “Evidenced Based Pediatric Teaching Tool”?

Circle: YES or NO

7. In the last month, have you taken care of a pediatric transplant patient?

Circle: YES or NO

8. If yes to #7, did you educate the patient and their family using the “Evidence Based Pediatric Teaching Tool”?

Circle: YES or NO or N/A

9. Do you believe the teaching tool improves pediatric transition of care?

Circle: YES or NO or N/A

10. Do you believe Tower 8/PICU is in need of more teaching material for pediatric transplant patients and their families?

Circle: YES or NO

11. On a scale of 1 (strongly disagree) to 5 (strongly agree), do you believe a patient centered pediatric discharge transition of care plan is currently in place at UC Davis Medical Center?

1

2

3

4

5

What else needs to be done to improve the transition of care for pediatric kidney transplant recipients from hospital to home?

RN Responses (3 Months)



- “More teaching for nurses in the PICU.”
- “More communication with pediatric transplant coordinator.”
- “It will be helpful to have a dedicated RN to help with teaching.”
- “Group meetings, classes and gatherings for transplant patients their families so they can network and share experiences.”
- “Educate the nurses on our resources. We need more exposure.”

RN Responses (6 Months)



- “Solidify where teaching is in the EMR.”
- “Consistency in teaching.”
- “Nothing!”
- “Better communication with dietician and other educators.”
- “Translate educational materials into Spanish.”
- “Advance scheduling of T8 RN teaching sessions.”

Outcomes

- Increased collaboration among the pediatric transplant team throughout the care continuum.
- Standardized teaching tool for pediatric transplant patients.
- Enhanced knowledge regarding pediatric TOC.

PEDIATRIC TEACHING FOR ORGAN TRANSPLANTS

Teaching Tool (page 1)



CLINIC VISITS

WHEN?	2-3 Times Per Week *Transplant Coordinator will schedule your future visits
WHERE?	Glassrock Building 2521 Stockton Blvd, 2 nd floor sub-specialty clinic Sacramento, CA 95817
OFFICE HOURS?	Monday thru Thursday: 8 a.m. – 5 p.m. Friday: 9 a.m. – 5 p.m.
WHEN CAN WE COME LESS OFTEN?	After the first 4 weeks and transplant is functioning well, you will be expected to come less often.
LAB DRAWS	Labs will be done on the same day as clinic visits

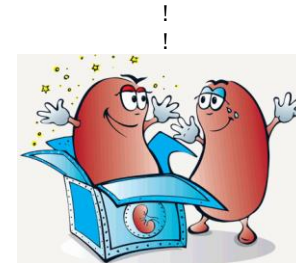
RULES FOR SCHOOL

<ul style="list-style-type: none"> · Please ask your kidney doctor how long your child will need to stay home from school after surgery (usually 6 weeks). · Upon return to school, your child should stay away from those who are sick · Make sure to wash hands frequently · Talk to your kidney doctor before participating in contact sports
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Teaching Tool

(page 2)


HOME MONITORING		
<i>What to Check</i>	<i>How Often</i>	<i>When to Call</i>
TEMPERATURE	Daily: Record in Transplant Diary	If temperature is > 100° F
URINE OUTPUT	Keep count of how many times your child pees every day	If you notice your child is peeing less than usual
HOME CARE		
CARING FOR INCISION	<ul style="list-style-type: none"> · Ok to shower when he or she goes home · Avoid baths or swimming until incision is healed · Avoid direct water stream to incision 	
URINE	<ul style="list-style-type: none"> · Remember to pee! 	
SKIN CARE	<ul style="list-style-type: none"> · Always apply sunscreen (SPF 30+) when outdoors · Limit sun exposure by wearing a hat and long sleeves 	
DRINK WATER	<ul style="list-style-type: none"> · Fluid intake varies depending on size of transplanted kidney <p style="text-align: center;">How much water should my child drink?</p> <p style="text-align: center;">_____</p> <p style="text-align: center;">(Please ask your kidney doctor & fill in blank)</p>	
FOOD SAFETY	<ul style="list-style-type: none"> · Wash all fruits & vegetables · Cook meats, fish, poultry, and eggs well 	
FOODS TO AVOID	<ul style="list-style-type: none"> · NO grapefruit or grapefruit juice or pomelo · NO raw fish · NO rare meat · AVOID milk 2 hours before taking Mycophenolate · AVOID milk 2 hours after taking Mycophenolate 	



Teaching Tool

(page 3)

MEDICATION LIST	
ANTI REJECTION	Mycophenolate (Cellcept) Tacrolimus (Prograf)
ANTI INFECTION	Bactrim Valcyte Fluconazole (Diflucan)
MAINTENANCE	Aspirin Colace Pepcid Pravastatin
FAMILY PLANNING	
Because Mycophenolate can cause serious birth defects, unplanned pregnancies are especially risky. When the time comes, please do not hesitate to discuss family planning and birth control options with your transplant coordinator or kidney doctor.	
NEW MEDICATIONS	
Please do not start taking new medications, herbals or supplements without talking to your kidney doctor first.	
MEDIC ALERT ID	
In an emergency, the Medic Alert ID conveys your child's health information to emergency responders and health professionals to ensure your child receives quick and proper treatment.	

WHEN TO CALL YOUR TRANSPLANT COORDINATOR	
SIGNS & SYMPTOMS OF: REJECTION	SIGNS & SYMPTOMS OF: INFECTION
<ul style="list-style-type: none"> · Increased creatinine <ul style="list-style-type: none"> ○ Your doctor will notice this in your labs · Fast weight gain · Fever · Decreased Urine Output · Soreness around kidney · Flu-like symptoms 	<ul style="list-style-type: none"> · Chills or Fever · Cough with yellow, green, or bloody sputum · Headache · Shortness of breath · Pain/burning with urination · Bloody urine · Diarrhea, loose or bloody stools · Redness or drainage from incision · Sore throat, swollen lymph nodes around neck · Any unusual type of pain

Teaching Tool

(page 3)

KEEP YOUR CHILD SAFE	
STAY HEALTHY	FLU SHOTS
<ul style="list-style-type: none"> Wash your hands often Avoid sick people Have your child wear a mask when you go to clinic, lab, emergency rooms, airplanes for 6 weeks after a transplant 	<ul style="list-style-type: none"> All members of the household must get a flu shot every year AVOID vaccine that goes in your nose (FluMist)
OTHER SHOTS	WATER
<ul style="list-style-type: none"> NEVER get a live virus vaccine NEVER get a shingles vaccine Ask your transplant doctor before your child receives any vaccines other than the flu shot 	<ul style="list-style-type: none"> After wounds are healed, OK to swim in clean ocean water and chlorinated pools Avoid public hot tubs, lakes, rivers, and ponds Clean home hot tubs For more information: www.healthyswimming.org
DIRT & MOLD	ANIMALS
<ul style="list-style-type: none"> Dirt & mold can cause lung infections Avoid digging in the dirt for the first 6 months after transplant <ul style="list-style-type: none"> After 6 months, OK to wear gloves & mask when digging dirt Wear mask if you are in dusty air, digging in dirt, working on heating ducts, water pipes, and other damp areas ALWAYS wash hands after touching dirt 	<ul style="list-style-type: none"> Keep pets healthy; avoid animals if they are sick Wash hands after touching pet Do not touch pet's poop. Do not clean cat litter box Cats & dogs OK Do not get pet bird or reptile Talk to the transplant team if you already have a reptile or bird
MOSQUITOS	
<ul style="list-style-type: none"> Avoid mosquito bites because they can cause West Nile Virus Infection Mosquitos are out usually at dawn and dusk Protect your child with: Mosquito repellent, Long sleeves, Getting rid of standing water in your yard For more information: www.cdc.gov.westnile 	

Conclusion and Recommendation

- Recommendation on T8 is to require annual training and provide updates during quarterly staff meetings.
- Recommendation on PICU is to continue educating staff on pediatric transplant topics and complete a competency form to ensure knowledge of the material.

References

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Questions???



Thank you 😊