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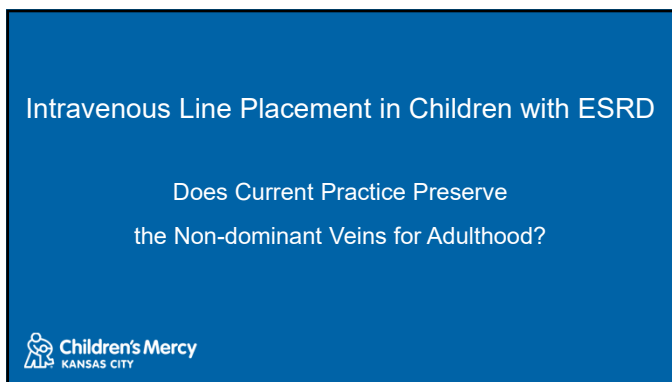
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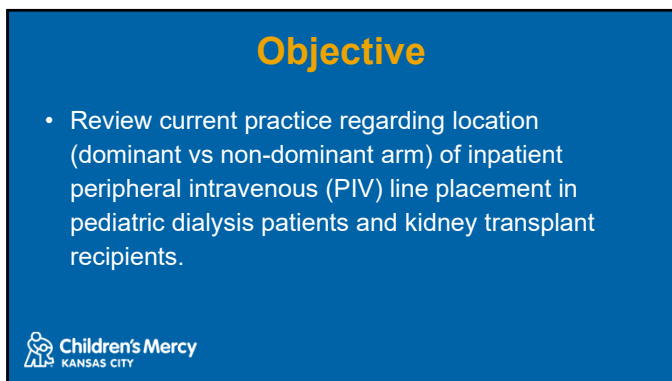
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## Method

- Retrospective chart review of inpatient experiences of patients  $\geq 2$  years of age hospitalized from January to June 2017.
- Data regarding intravenous line location, age, sex, and primary renal diagnosis were available in the electronic medical record (EMR).
- Information regarding dominant arm was collected by patient and parent interview.
- SAS was used for statistical analysis.



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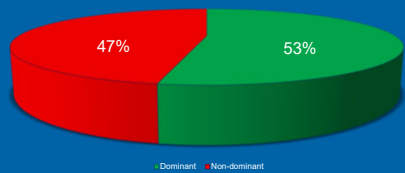
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## Retrospective Data Jan - June 2017

Percentage of IV placement in dominant or non-dominant arm  
n = 72 encounters



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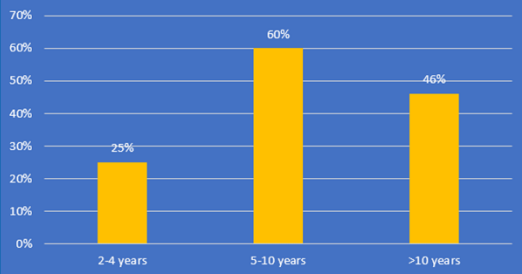
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## Placement of IV in Dominant (Preferred) Arm



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## Conclusion

- Data provided evidence that in an inpatient setting, a near equal percentage of patient encounters were associated with PIV placement in the dominant and non-dominant arms, in patients with ESRD.
- This data indicated the need for education and strategies regarding vein preservation in these patients and served as the baseline data for a quality improvement initiative.




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## Getting Started (Vein Savers)

Kidney Center	Renal Floor (inpatient)
Emergency Room	Interventional Radiology
CRRT/PICU	Vascular Access Team (VAT)
Infusion Team	Pre-Admissions Testing
Same Day Surgery/ Operating Room	Child Life




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## Identifying Patients

### WHO

- CKD stage 3-5
- Dialysis Patients
- Kidney Transplant Patients




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# Critical Information Note

Source Type	Source Name	Effective Date
Share the Web Critical Information Note	Schellberg, Kathryn L, RN	10/02/18
Endocrinology Critical Information Note	Mohr, MD, Team G	03/02/19

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# Critical Information Note

**"RESTRICTED EXTREMITY"**

This patient has *end-stage kidney disease (dialysis/kidney transplant)* and vein preservation is mandatory!

This patient has a **PORT** and this is the preferred method for venipuncture and IV placement  
 If additional access is needed, venipuncture and IV placement in this patient's **\_Right/Left** arm is preferred

Venipuncture and IV placement in this patient's **\_Right/Left** arm is preferred.

For patients under age 2, the **RIGHT** arm is preferred.

Always begin as DISTAL as possible.

Please limit attempts to 2 sticks. If unsuccessful, please contact the Vascular Access Team (VAT).  
 The VAT team is aware of and supportive of these efforts.

A pink **"Restricted Extremity"** armband will be placed on the **\_Right/Left** wrist upon admission.

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# Restricted Extremity Armband



- If patient is admitted to the renal floor, the admitting nurse will apply the restricted extremity armband to the patient's non-dominant wrist per critical information note.




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## Staff Education

**Green Zone**

- Place IV in the dominant arm -> first arm with visible vein of dominant extremity (red, yellow or green zone)
- Place IV in the non-dominant arm -> first arm with visible vein of non-dominant extremity (red, yellow or green zone)

**Yellow Zone**

- Place IV in the dominant arm -> second choice of arm -> first arm with visible vein of dominant extremity (red, yellow or green zone)
- Place IV in the non-dominant arm -> second choice of arm -> first arm with visible vein of non-dominant extremity (red, yellow or green zone)

**Red Zone**

- Place IV in the dominant arm -> starting from the pink (restricted) side of the arm, moving to the thumb (radial) side of the arm
- Place IV in the non-dominant arm -> starting from the pink (restricted) side of the arm, moving to the thumb (radial) side of the arm

**Children's Mercy KANSAS CITY** 19

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## Audits

- Did the patient require an IV?
  - If yes, was the IV placed in the dominant extremity?
- Where was the IV placed (red, yellow or green zone from education chart)
- How many attempts were made and location of attempts
- Was Vascular Access Team involved
- Was there a Save The Vein Critical Information Note on patient?
  - If no, did the patient/family receive education?
  - Did a Save The Vein Critical Information Note get entered prior to discharge?
- Did the patient receive a pink "restricted extremity" armband on their non-dominant arm?

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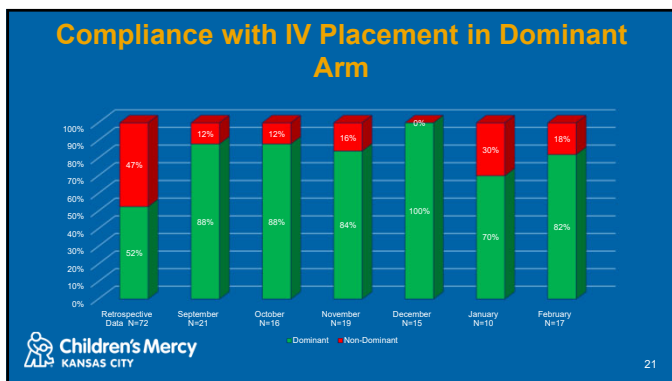
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## Reasons for Non Compliance

- Patient had limited access sites
- Patient didn't have a critical information note

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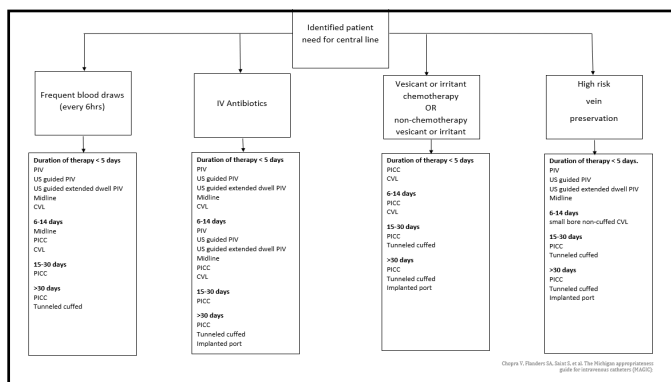
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## "Behind" the scenes




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