



# Analysis of Health Care Utilization in Emergency dialysis versus scheduled dialysis at Northeast Georgia Health System

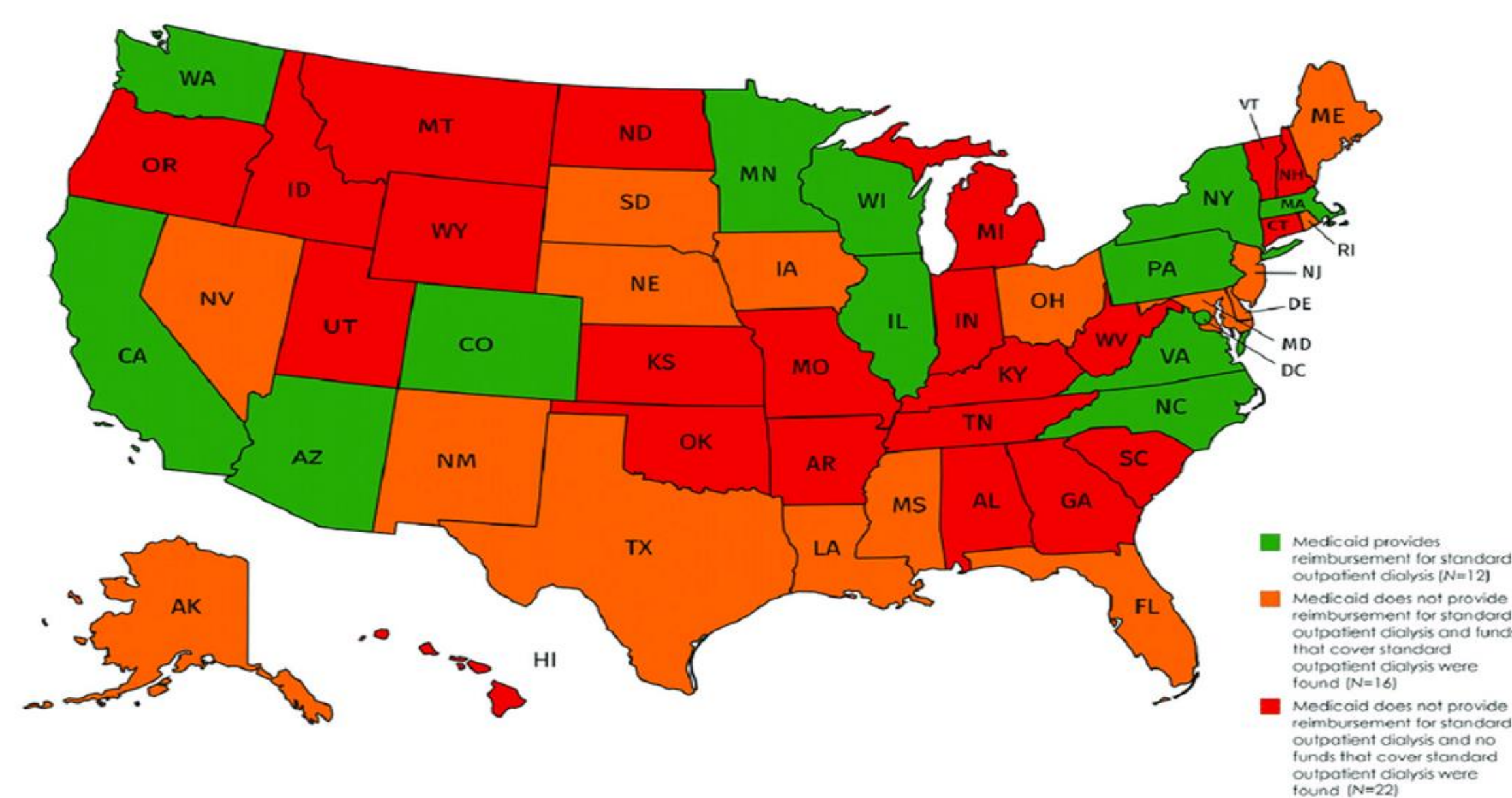
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## Objectives:

- We proposed to perform a retrospective observational study selecting manually undocumented who comes to our facility to receive their dialysis in the emergency setting.
- We analyze different components: first emergency dialysis, risk factors, complications of vascular catheterization, date of vascular catheterization placement, date of permanent catheterization placement, readmissions, infection, hospitalization more than 24 and 48 hours, sepsis.
- We hypothesize that emergency dialysis increases mortality, morbidity, and health care utilization, and placing as outpatient reduces patients' cost and mortality.

## Background:



This map showed in red states that Medicaid does not provide reimbursement for standard outpatient dialysis and no funds that cover standard outpatient dialysis

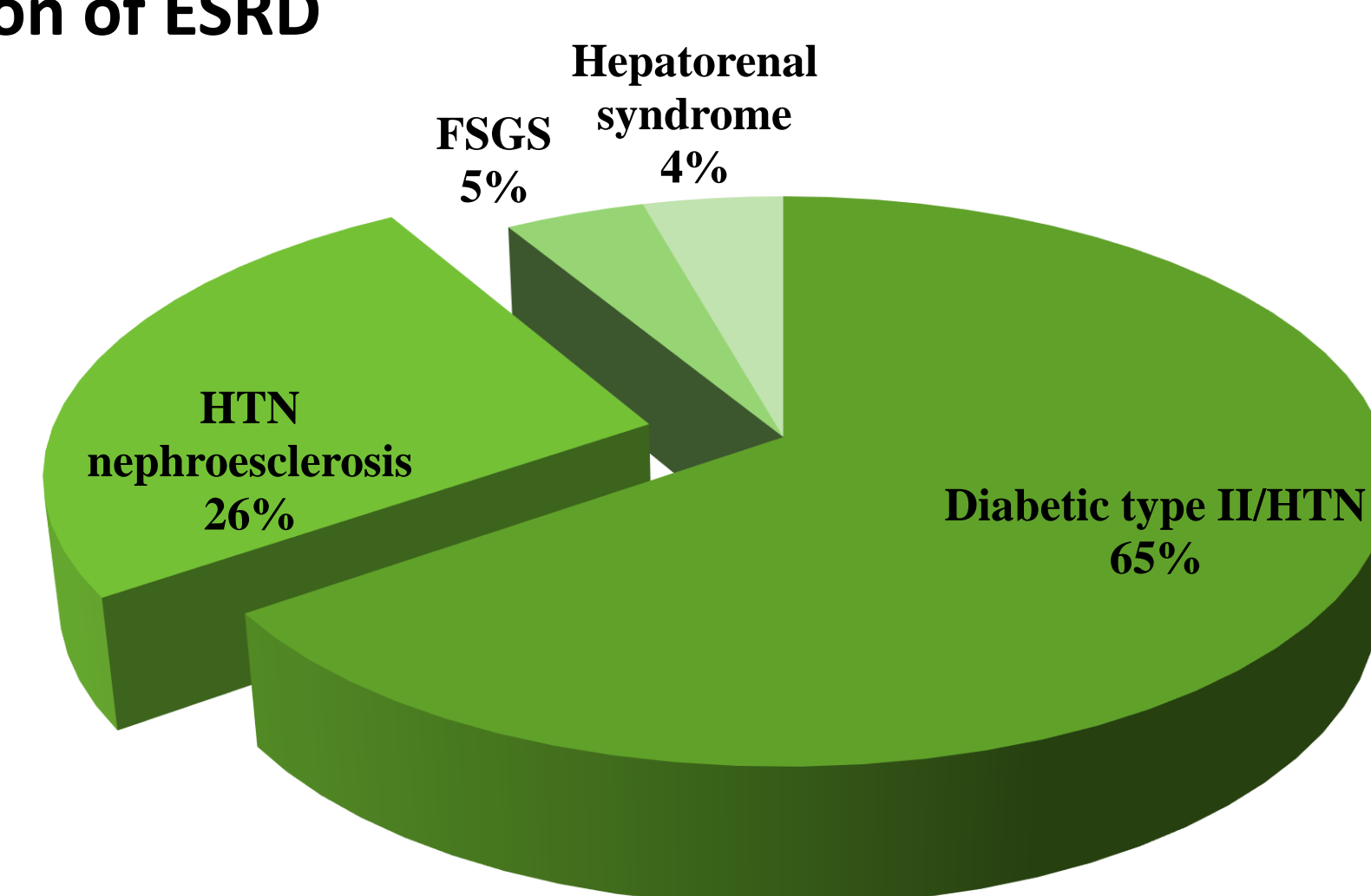
- Between 5,500 and 8,857 undocumented immigrants with kidney failure in the United States in 2019<sup>1</sup>
- Permanent residents and citizens of the United States with chronic renal failure typically qualify for coverage for dialysis and associated services through eligibility in Medicare or Medicaid.
- Georgia is part of 22 states that Medicaid does not provide reimbursement for dialysis to undocumented population.
- Due to fear of deportation and the costs associated with dialysis, most of the undocumented immigrants suffering from chronic renal failure do not regularly follow with nephrologists as is the standard of care.
- The city of Gainesville, Georgia has a population of 41,646, of which 42% are Hispanic. Portion of these individuals are undocumented immigrants who work in the factories within the city<sup>2</sup>

## Study and results

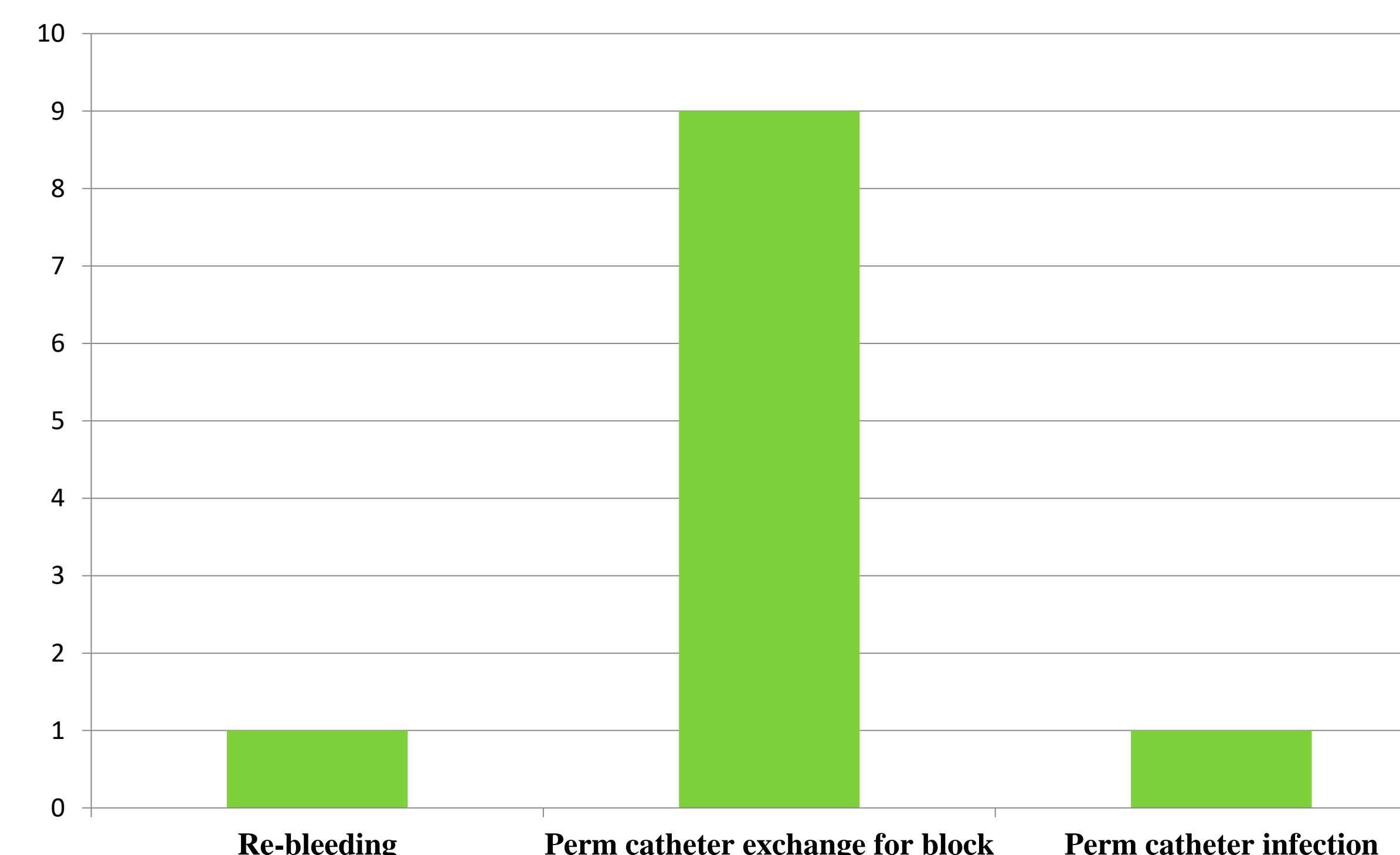


23 patients were selected who present to our hospital for emergency dialysis as regular basis from 2019-2020  
15 Patient were male

Reason of ESRD



Complication of vascular catheterization



- The average rate of hospitalization among 23 patient was 6.7 admissions > 48 hours
- The most common cause of admission was fluid overload, and the second most common cause was hospital acquired pneumonia
- The average admission for dialysis was a total of 104 times over 2 years
- Among 23 patient 1 patient died for sepsis

We compare with the National Kidney Registry for ESRD:<sup>3</sup>

- Admission rate >48 hours for 2 years was an average of 3 admission
- The most common cause was cardiac disease (14%) and peritonitis (8%)
- Most of the patient in schedule dialysis transitioned was started on AV fistula or PD dialysis

## Discussion

- According to study by Nguyn, et al., there was a significant reduction of mortality in schedule dialysis compare with emergency dialysis (Absolute risk reduction of 14%)<sup>4</sup>
- Patient on schedule dialysis had <6 visits to the ED per months compare to >10 in emergency-only hemodialysis
- Adjusted costs were significantly lower with scheduled hemodialysis vs emergency-only dialysis (\$4,316 vs. +\$1,452 per person per month; differences, -\$5,768)<sup>4</sup>
- Our preliminary data shows that the patient on emergency dialysis (ED) has almost 90% higher admission than scheduled dialysis
- The ED dialysis patient has different cause of hospitalization for more 48 hours: fluid overload vs cardiac disease.

## Future directions

- The same patients were recently transitioned to schedule dialysis. We are planning to compare the same reference and add the cost of the health care utilization.
- We will extend possible collaboration with other hospitals to increase the number of patients to our study

## Limitations

- The sample of our study was very low, only 23. The reason is that it is very hard to identify which patients are on ED dialysis
- The data was gathering manually for our team, this can promote some human errors
- This is a preliminary data of our project

## References

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