

# Optimizing the treatment of iron deficiency in end-stage renal disease at London Health Sciences Centre



Zhubo D. Zhang, Joey Liu, Mohammad Faraz, Dilraj Sanghera, Omar Assiri, Abdulaziz Bari, & Michael Chiu Division of Nephrology, Department of Medicine, Schulich School of Medicine & Dentistry, Western University

AIM Statement: By June 2024, we aim to decrease the proportion of hemodialysis patients with iron deficiency by 20%

#### BACKGROUND

Iron deficiency is common in patients with end-stage renal disease (ESRD). Despite multiple guidelines since 2008 addressing the treatment of iron deficiency in these patients, no standardized protocol exists across LHSC.

#### **METHODS**

As part of a quality improvement initiative, we first collected baseline laboratory data between July and December 2022 to identify the prevalence of iron deficiency. Then, we administered an online survey to nephrologists and nephrology nurse practitioners at LHSC between January and February 2023. The survey explored iron deficiency treatment approaches, reasons for holding iron supplementation, and perceived barriers to standardization.

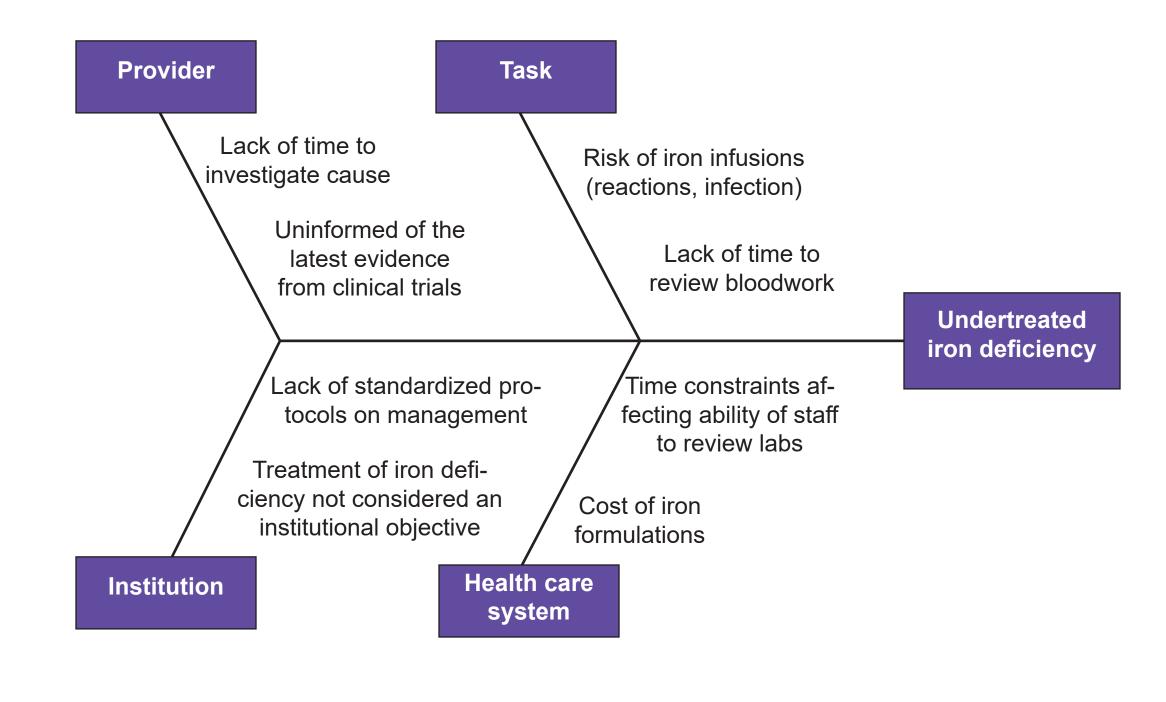
### **RESULTS**

From the baseline data collection, 195/470 (41%) patients were iron deficient based on Kidney Disease Improving Global Outcomes criteria and 48 (10%) had anemia, defined as a hemoglobin less than 95 g/L. 23/26 practitioners (88%) responded to the survey. All support developing a standardized local protocol for treatment of iron deficiency. 20 respondents (87%) currently have their own approaches to treatment, although their approaches varied between three major strategies. The most common reasons for delaying iron supplementation include active infection, patient hesitancy or refusal, and risk of iron overload. The most common reported barrier to standardization was the lack of consistency between guidelines.

#### CONCLUSION

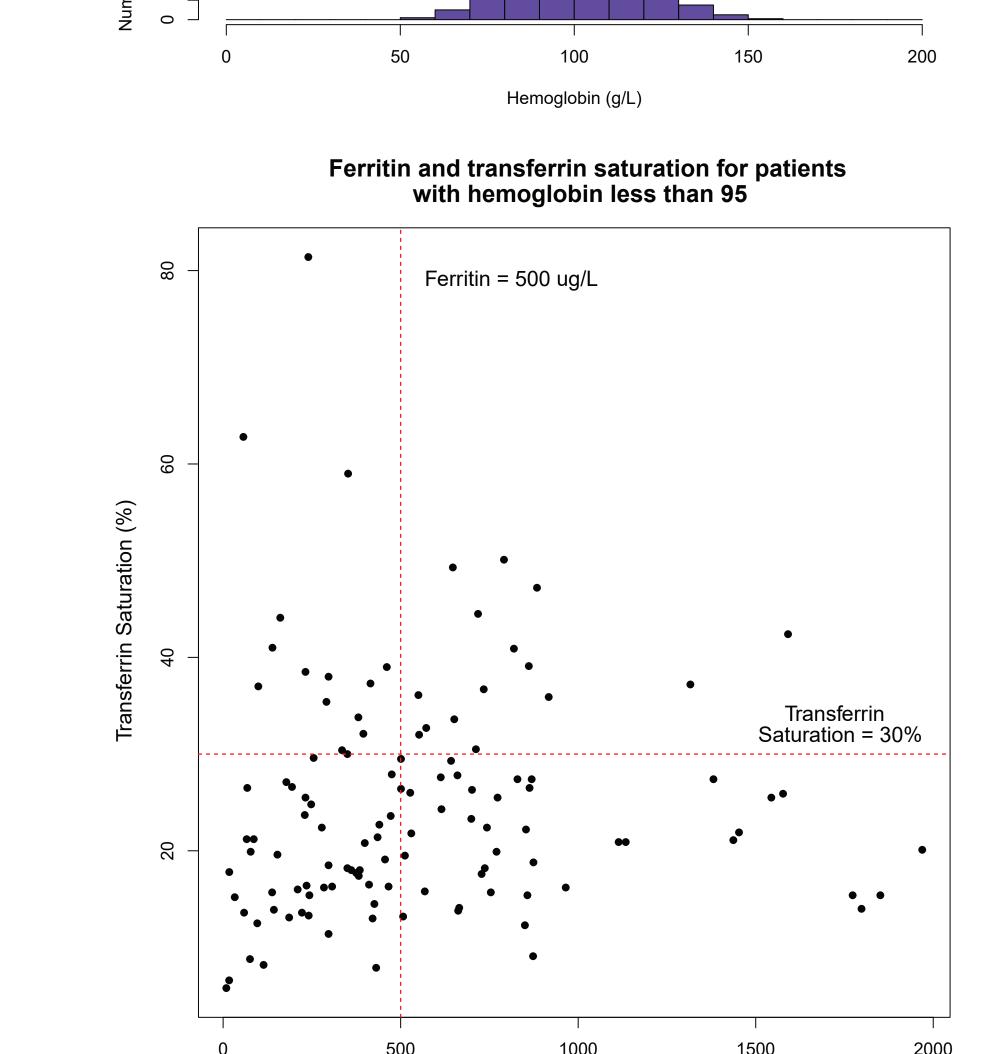
Iron deficiency is present in a significant amount of ESRD patients at LHSC and there exists substantial practice variability with regards to its treatment. This study provides a starting point for further studies to clarify and eliminate barriers to a standardized protocol across LHSC.

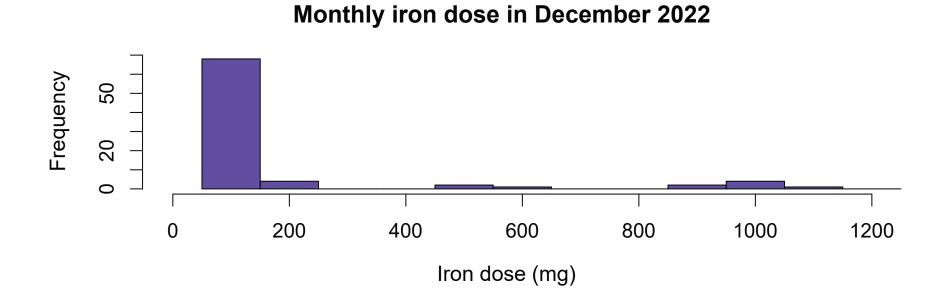
#### **Root Cause Analysis**



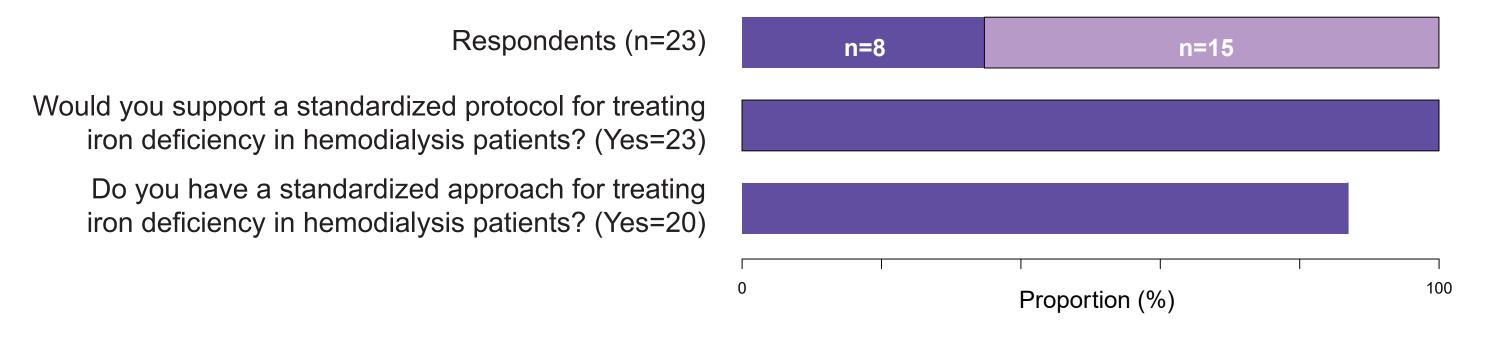
Serum hemoglobin ending 2022

#### **Baseline Data**

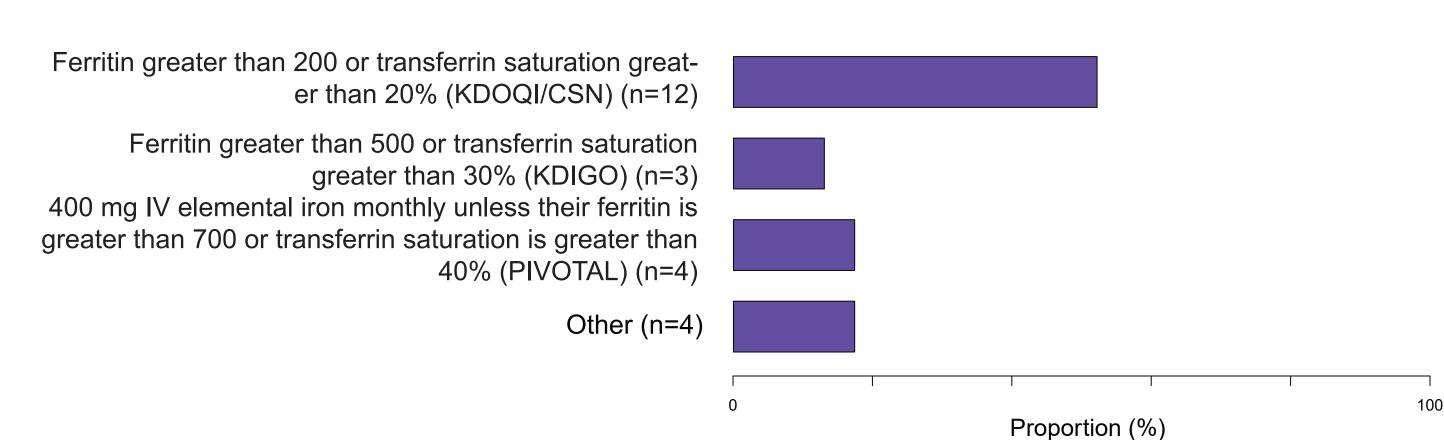




#### **Survey Results**

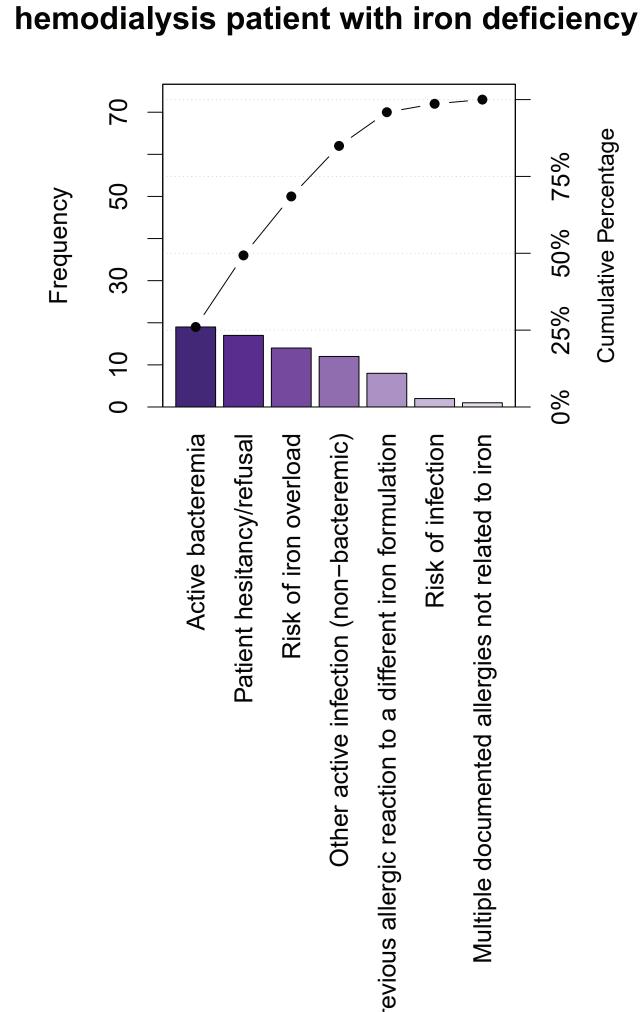


#### What targets, if any, are you using to determine that a hemodialysis patient is iron replete?



Iron deficiency is present in a significant number of ESRD patients at LHSC and there exists substantial practice variability with regards to its treatment





## In your opinion, what are some of the barriers to standardization of treatment of iron deficiency in hemodialysis patients?

