

# Clinical Decision Support Flow Diagram for Management of Chronic Kidney Disease by Primary Care Physicians

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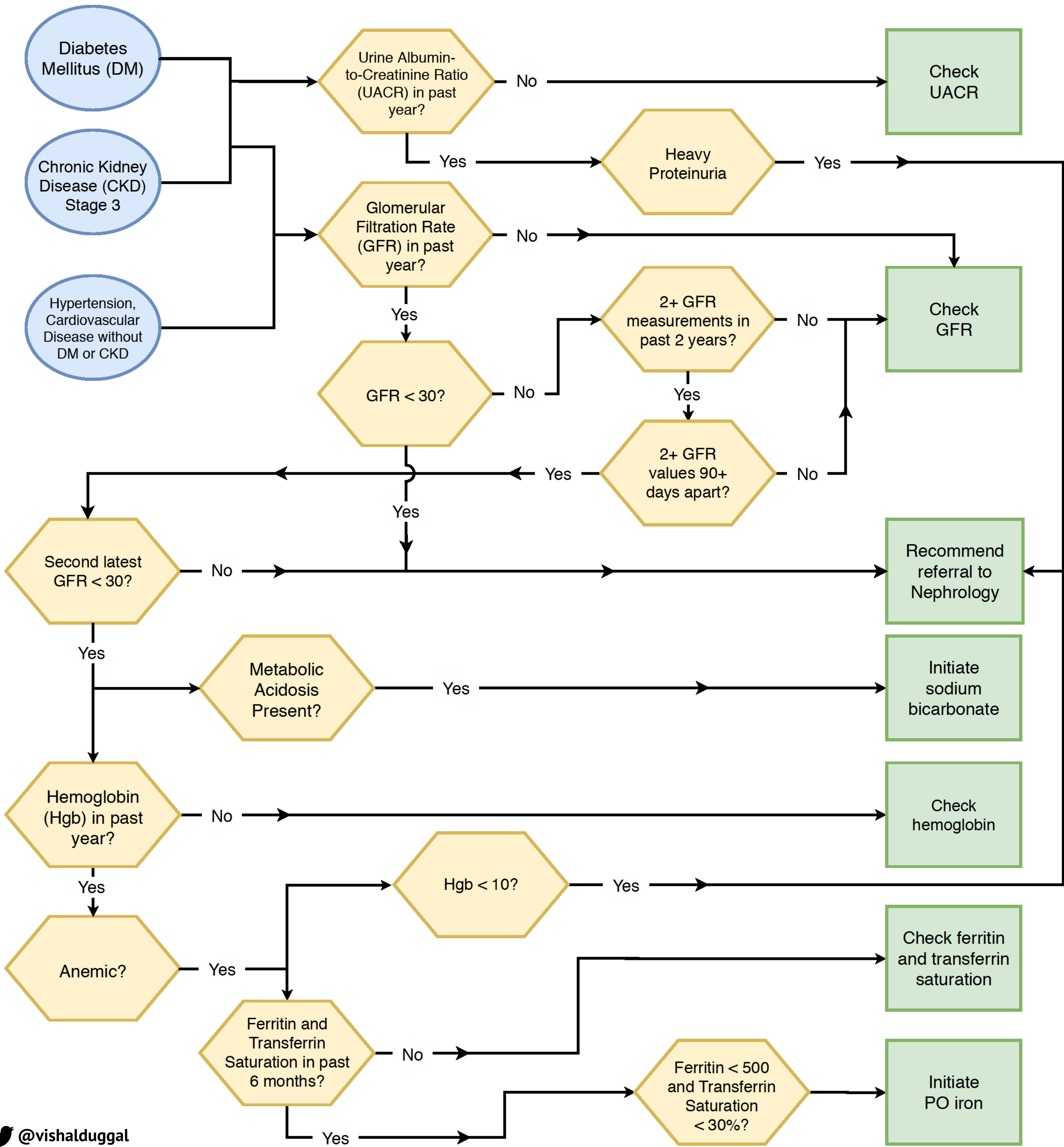
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Views expressed are those of the authors and not necessarily those of the Department of Veterans Affairs.

## References

- Chronic Kidney Disease Basics | Chronic Kidney Disease Initiative | CDC. <https://www.cdc.gov/kidneydisease/basics.html>. Published January 16, 2019. Accessed March 12, 2019.
- U.S. Department of Veterans Affairs. Kidney Disease and Dialysis Services Fact Sheet. April 2015. [www.healthquality.va.gov/guidelines/CD/ckd/KidneyDiseaseAndDialysisServicesFactSheetApril2015.pdf](http://www.healthquality.va.gov/guidelines/CD/ckd/KidneyDiseaseAndDialysisServicesFactSheetApril2015.pdf)
- Kidney Disease: Improving Global Outcomes (KDIGO) CKD Work Group. KDIGO 2012 clinical practice guideline for the evaluation and management of chronic kidney disease. Kidney Int Suppl. 2013;(3):1-150.



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## Background

- Chronic kidney disease (CKD) affects more than 15% of adults in the United States<sup>1</sup>, and the Veterans Affairs (VA) health system is the single largest provider of health services in the U.S. for patients with CKD<sup>2</sup>.
- The MEDSAFE-CDS is a knowledge-based system developed jointly by the VA and Stanford University designed to aid PCPs within the VA Health Care System in the management of chronic health conditions.
- This in-development clinical decision support (CDS) tool will guide PCPs in the management of CKD Stage 3

## Objectives

- While phenotypic determinations exist for CKD, they do not identify groups specifically amenable to care via CDS.
- This flow diagram illustrates a treatment pathway adhering to VA/Department of Defense (DoD) Clinical Practice Guidelines for the Management of CKD in Primary Care, augmented by with those of Kidney Disease International Improving Global Outcomes (KDIGO)<sup>3</sup> guidelines. Recommendations generated by this CDS are provided in online reports for PCPs
- Filtering steps are included to reduce computational processing requirements. It can be extended to add functionality, such as risk prediction tools or organization-specific resources.

## Eligible Population

- Patients with hypertension, diabetes mellitus, or cardiovascular disease enter the decision pathway as shown above
- Patients with more complex or advanced presentations can be directed to nephrology care and bypass recommendations
- Due to the diagnostic complexity of patients with moderate or severe proteinuria but higher glomerular filtration rates, patients with CKD Stages 1-2 are also excluded.
- Patients with CKD Stages 4-5, end-stage kidney disease, and a history of kidney transplant are also excluded.