

# Trends in Attainment of the Kidney Health Evaluation for Patients with Diabetes Measure among Insured Individuals in the US, 2021-2024

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## Background

- A kidney health evaluation for individuals with diabetes, involves two main tests: an estimated **glomerular filtration rate (eGFR)** and a **urine albumin-creatinine ratio (uACR)**. Together these tests assess kidney function and the presence of kidney damage, helping to identify **chronic kidney disease (CKD)** and stratify and manage patients’ risk of further kidney damage.
- Unmanaged diabetes can result in CKD progression and related outcomes, including kidney failure and death. Results derived from these lab tests can help guide clinicians in assessing the risk of kidney failure, prescribing interventions, and transplant waitlisting.

## Objectives

- The KHE measure, developed by the **National Kidney Foundation (NKF)** and introduced in 2020, was first published as an electronic clinical quality indicator (eCQI) in 2023 to improve detection and awareness of CKD among individuals with diabetes.
- We sought to examine trends in attainment of the **Kidney Health Evaluation (KHE)** clinical quality measure (**CMS0951v1**) among patients with diabetes.

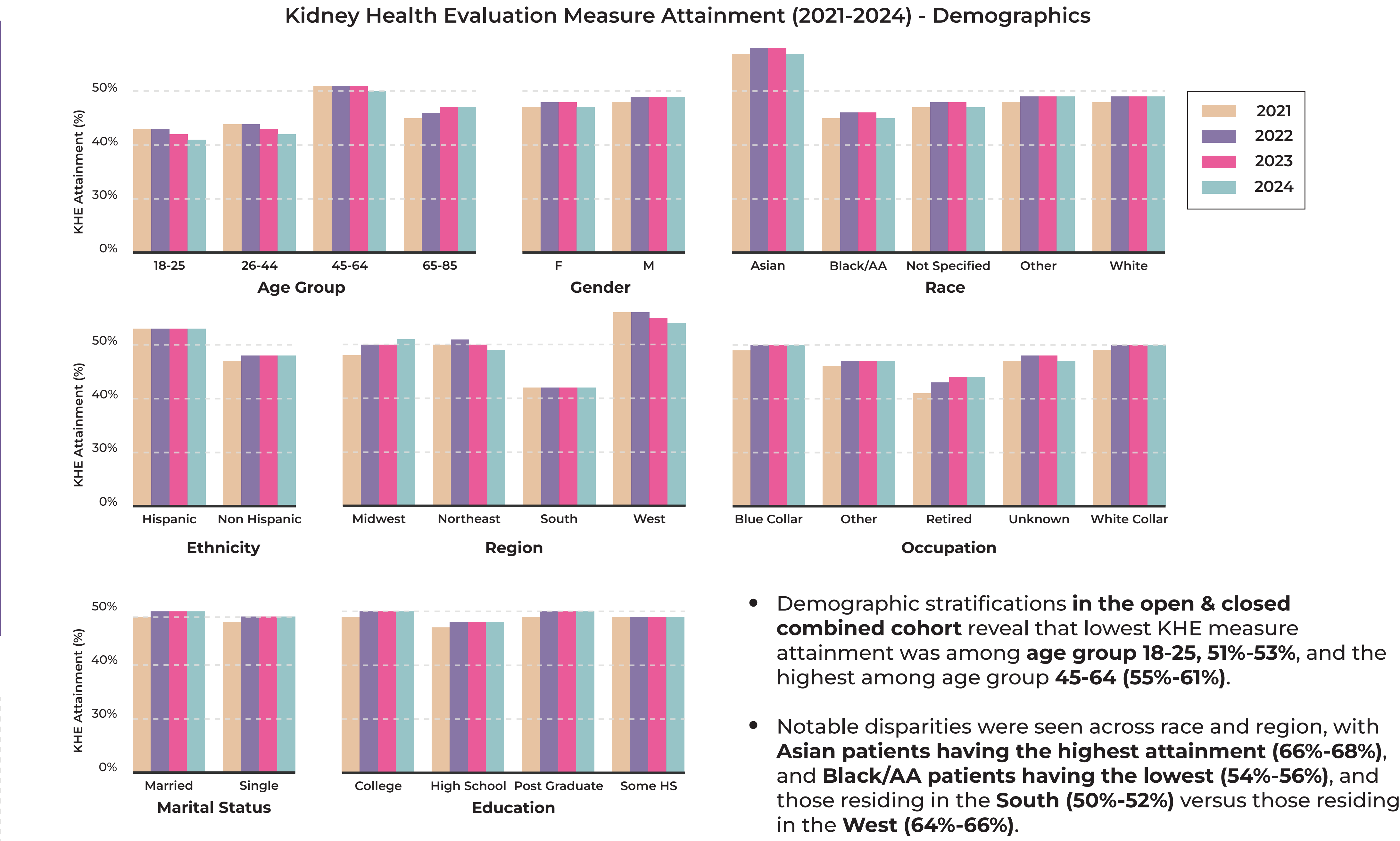
## Methods

- Diabetic patients were identified using **PurpleLab® CLEAR™ Claims**, as of January 1 for each measurement year (2021–2024), including individuals aged 18–85 who had at least one outpatient visit during the measurement year.
- Denominator cohorts were defined in mutually exclusive open and closed claims sources and then combined for overall assessments.
- Patients found in both claims sources were excluded from the open cohort.
- Full kidney health evaluation was defined as having **both an eGFR test and a quantitative uACR diagnostic procedure** recorded during the measurement year.
- Proportions of patients receiving a full kidney evaluation were calculated overall and within each claims source cohort (Open and Closed).
- Results were stratified by patient characteristics, including age group, gender, race, ethnicity, region, and other social factors.

## Results

Kidney Health Evaluation Measure Attainment (2021-2024) - Open vs Closed Claims				
	2021	2022	2023	2024
Denominator				
Overall	10,068,964	10,650,927	11,301,022	10,423,922
Open	6,238,098	6,573,266	6,893,407	6,674,413
Closed	3,830,866	4,077,661	4,407,615	3,749,509
Numerator				
Overall Full Attainment	5,793,845	6,215,519	6,599,270	6,035,732
Open	3,185,100	3,405,240	3,580,192	3,452,257
Closed	2,608,745	2,810,279	3,019,078	2,583,475
Rate				
Overall	57.5%	58.4%	58.4%	57.9%
Data Source				
Open	51.1%	51.8%	51.9%	51.7%
Closed	68.1%	68.9%	68.5%	68.9%
Percentage Point (pp) Difference	17.0%	17.1%	16.6%	17.2%
Relative % Attainment in Open	75.0%	75.2%	75.8%	75.1%

- Applying all denominator eligibility criteria, we defined KHE measure-eligible patients from **2021-2024 of 10.1M, 10.7M, 11.3M, and 10.4M**, respectively.
- Overall, KHE attainment was stable across the assessment period, **2021-2024 (57.5%, 58.4%, 58.4% and 57.9%, respectively)**.
- Stratifying by claims type KHE attainment ranged from **51.1%-51.9% in Open claims**, and **68.1%-68.9% in Closed claims**, translating to a **17 percentage point (pp) difference** in attainment between claims source types, suggesting that open claims numerator capture was consistently about **75%**.



## Discussion

- For a relatively new quality measure, performance trends appear remarkably stable and high, though with room for improvement, particularly with some of the noted variability in attainment by age group, race and region.
- Similar stability and disparities patterns were seen between open and closed claims sources, as well as across strata within each of the respective source types.
- Differences seen by claims source type were expected, given that closed source claims are considered “payer-complete” sources, and open sources are characteristically less complete data sources.
- In our analysis, open claims sources contributed roughly **62% of patients** to the overall denominators in each measurement year, but had lower numerator capture as compared to Closed claims.
- It is generally accepted that Closed claims are a truer and more complete representation of health services than Open claims, but the high degree of capture and consistent patterns seen in this well-defined open claims cohort are promising for considering other applications.

## Conclusion

- Overall, full attainment of **Kidney Health Evaluation** is notably high for a recently introduced measure. Additionally, the data reveal disparities in measure attainment, suggesting opportunities for health equity improvement.
- Consistent with prior research, **we found that nearly all who receive the uACR tests achieve full measure attainment** (Ferrè et al, 2023). Further analysis could reveal how KHE attainment strata is associated with related outcomes.