

Title: IgA Nephropathy (IgAN) In Adults: A Retrospective Analysis Of US Prevalence And Impacts Of Proteinuria And Kidney Function Decline On Healthcare Resource Utilization (HRU) And Costs

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OBJECTIVES: Globally, IgAN is the most common primary glomerulonephritis and, if not controlled, results in progression to end-stage kidney disease (ESKD). This study examines the US prevalence of IgAN and the impacts of proteinuria and kidney function decline to ESKD on HRU and costs.

METHODS: Descriptive, retrospective analysis based on Optum[®] de-identified Market Clarity and proprietary Natural Language Processed (NLP) Data (2007-2020). Inclusion criteria: ≥ 2 IgAN NLP terms within 180 days at least 30 days apart without associated negation terms. For patients with available claims data (subset of the prevalence cohort), HRU/costs analyses were completed (exclusions: pregnancy, cancer, COVID-19). All costs were normalized/discounted and adjusted to 2020 USD using the Consumer Price Index.

RESULTS: Estimated standardized US prevalence of IgAN (2016–2019) is 130.17 per 1,000,000 based on US Census Bureau data. Among 253 patients with proteinuria data in the HRU/costs cohort, 45% had high-risk proteinuria (≥ 1.0 g/g). HRU (mean outpatient visits, 1.93 vs 4.24; pharmacy claims, 2.69 vs 3.84) and total costs (mean \$1,408 vs \$3,721), all per-patient-per month (PPPM), are higher ($p < 0.05$) among patients with elevated proteinuria (< 1.0 g/g [n=139] vs ≥ 1.0 g/g [n=114]). Advancing chronic kidney disease stage to ESKD (stage I [n=171] vs stage III [n=171] vs ESKD [n=148]): PPPM outpatient visits, mean 1.84 vs 2.70 vs 7.40; pharmacy claims, 2.30 vs 3.68 vs 4.97; PPPM total costs, mean \$1,455 vs \$2,499 vs \$8,479) was also associated with significantly higher HRU and costs ($p < 0.05$).

CONCLUSIONS: A substantial proportion of patients with IgAN have elevated proteinuria. Elevated proteinuria and progression to ESKD are associated with a significant HRU and cost burden. Treatments that reduce proteinuria and prevent decline in kidney function have the potential to reduce the resource intensity and economic burden of IgAN.