

# Variations in Chronic Refractory Gout Management between Rheumatologists and Nephrologists

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## CONCLUSION

- There were differences in dosing and the frequency of monitoring patients sUA levels, with rheumatologists being significantly more likely to utilize higher doses and monitor sUA levels more frequently.
- Additionally, patients managed by nephrologists had a higher disease burden (i.e. higher presentation of renal disease and chronic heart failure, and significantly higher rates of hospitalization, and hospital length of stay).
- Regardless of specialty, there is little escalation of ULT to uricase therapies for UG.
- Both groups of specialists agreed that there are treatment gaps and unmet needs in the current management of UG with patients impacted by the burden of current gout treatments.

## INTRODUCTION

- Gout is one of the most common forms of inflammatory arthritis in the United States, affecting over 9 million adults in the United States alone.<sup>1</sup>
- Chronic refractory gout, also uncontrolled gout (UG) is a persistent form of gout that is characterized by-active gout symptoms (i.e., gout flares, tophi, arthritis) and high serum uric acid (sUA) levels >6.0 mg/dL despite the use of urate lower therapies.<sup>2</sup> UG can lead to increased morbidity among other outcomes. An estimated 2% of gout patients have UG.<sup>3</sup>
- Patients with chronic kidney disease (CKD) have a higher prevalence of gout (>70% in patients with stage 2 CKD and higher).<sup>4</sup> Both rheumatologists, who manage gout regardless of chronic kidney disease (CKD), and nephrologists, who treat patients with compromised kidney function with or without gout, are involved in the management of patients with UG.

## OBJECTIVES

- The objective of this study was to describe the current management and treatment practices, unmet needs, and gaps associated with gout treatment in UG patients from rheumatologists and nephrologists' perspectives.

## METHODS

- A retrospective medical chart review of patients with UG was conducted in the United States from March to June 2024 via a web-enabled case report form.
- Along with the medical chart review, participating physicians (rheumatologists and nephrologists) completed an online survey related to their perceptions of UG management and treatment using a 1-7 Likert scale. Scores ≥6 indicates higher/strong satisfaction or agreement, while scores <6 indicates lower/moderate perceptions.
- Key variables from the medical chart abstraction included patient demographic and disease characteristics (including comorbidities), treatment history and experience, treatment adherence, and healthcare resource utilization.
- Data for continuous variables are presented using means, standard deviation (SD) and t-tests. For categorical variables, frequencies, column percentages are utilized along with chi-square tests for associations among categorical variables.
- All statistical analyses were conducted using Q Research Software 5.12.4.0.

### Physician Key Inclusion Criteria

- ≥ 3 years of clinical practice.
- Spend at least 70% of their professional time providing direct patient care.
- Treating and managing at least ≥ 25 patients with gout over the last 12 months, including ≥ 5 patients (for nephrologists) or ≥ 10 patients (for rheumatologists) presenting with UG.

### Chart Inclusion Criteria

- Patient is ≥ 18 years of age.
- Patients who have been diagnosed by a physician with UG for at least 12 months.
  - UG is defined as the following:
    - Inadequate control of symptoms and failure to normalize sUA with xanthine oxidase inhibitors, or where these drugs are contraindicated for the patient.
    - Serum uric acid (sUA) > 6 mg/dL.
    - A history of symptomatic gout > 2 gout flares within 12 months, and/or presence of > 1 gout tophus, and/or current diagnosis of gouty arthritis).
- Patients who are currently on or have a history of taking medication in the last 12 months for their UG.

## RESULTS

### Sample Description

- Overall, 250 physicians (175 Rheumatologists [67%] & 75 Nephrologists [33%]) participated (**Table 1**).
- Nephrologists had slightly more years in clinical practice than rheumatologists.
- Rheumatologists managed more gout patients and UG patients per year than nephrologists.

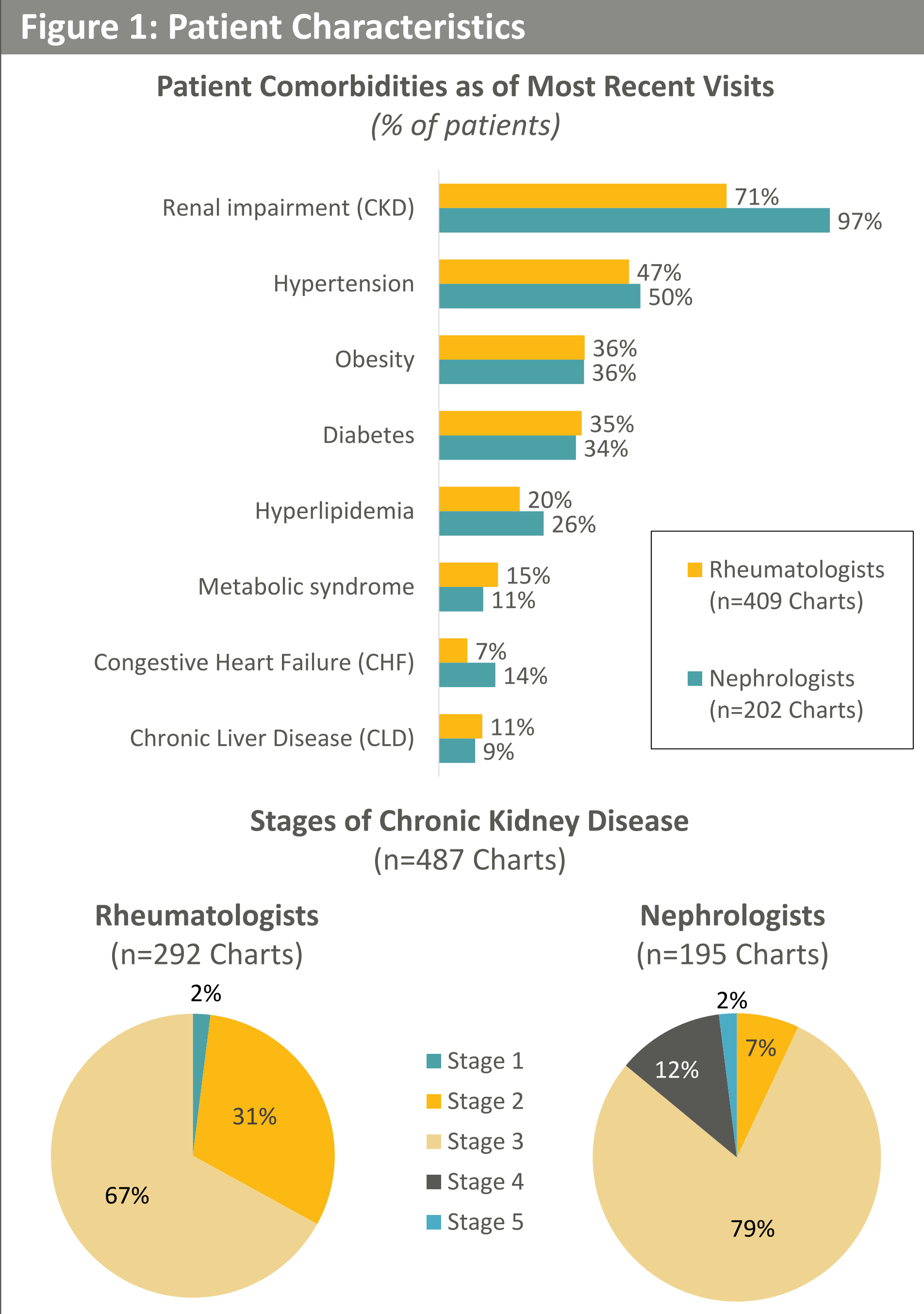
Table 1. Physician Demographics		
	Rheumato- logists (n=175)	Nephro- logists (n=75)
Years as a Practicing Physician (Mean [SD])	14.9 (6.9)	17.5 (7.3)
Gout Patients Managed per Physician in the Last 12 Months (Mean [SD])	149 (98)	122 (184)
UG Patients Managed per Physician in the Last 12 Months (Mean [SD])	68 (39)	52 (42)
Gender, Male	65%	75%
Primary Practice Setting		
Academic/Teaching Hospital	11%	13%
Local or Community Hospital	8%	1%
Other	80%	85%
Primary Practice Location (US)		
Urban	72%	71%
Rural	1%	3%

- Overall, there were 611 patient charts abstracted. At initial gout diagnosis, majority of patients, had visible tophi, swollen joints, and gout (**Table 2**).
- More patients managed by rheumatologists experienced pain around joints at diagnosis (72% vs 54%) (**Table 2**).

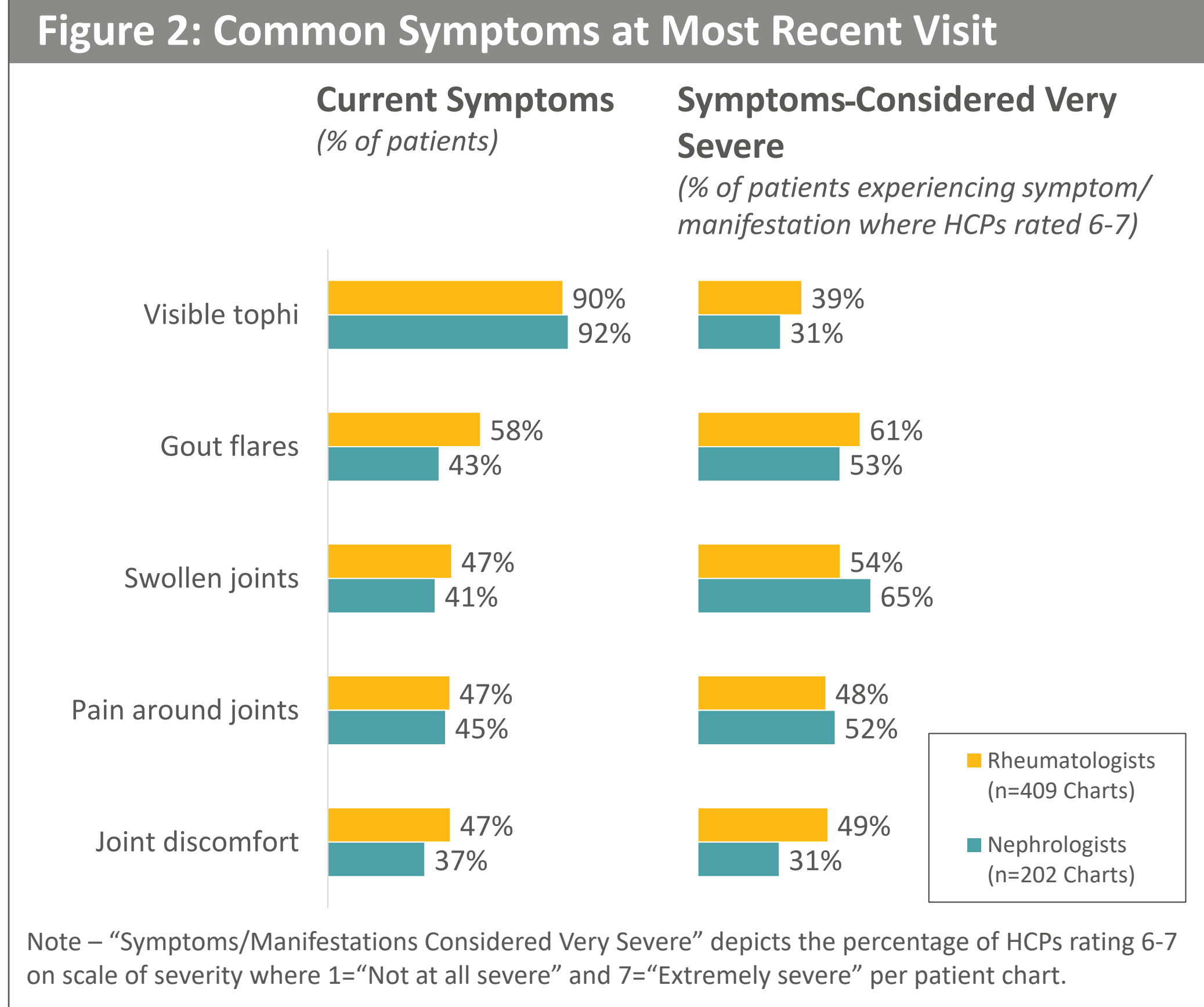
Table 2. Patient Demographics		
	Rheumatologists (n=409 Charts)	Nephrologists (n=202 Charts)
Current Age (Mean [SD])	53.3 (10.4)	55.7 (10.6)
Biological Sex, Male	91%	80%
White	73%	61%
Non-Hispanic	82%	77%
Age at Gout Diagnosis (Mean [SD])	46.2 (10.6)	47.8 (12.0)
sUA at Gout Diagnosis (Mean [SD])	9.2 (1.3)	9.4 (1.3)
Clinical Symptoms at Diagnosis		
Visible Tophi	75%	70%
Number of visible tophi (Mean [SD])	1.9 (1.1)	2.0 (1.0)
Swollen Joints	78%	70%
Pain around joints	72%	54%
Number of joints involved (Mean [SD])	2.6 (1.6)	2.2 (1.0)
Gout flares	76%	67%
Number of gout flares (Mean [SD])	2.5 (1.2)	2.2 (0.9)

### Comorbidity and Clinical Symptom Burden

- Regardless of specialty, the most common comorbidities reported were CKD, hypertension and obesity with nephrologists managing a higher proportion of CKD patients vs rheumatologists (**Figure 1**).

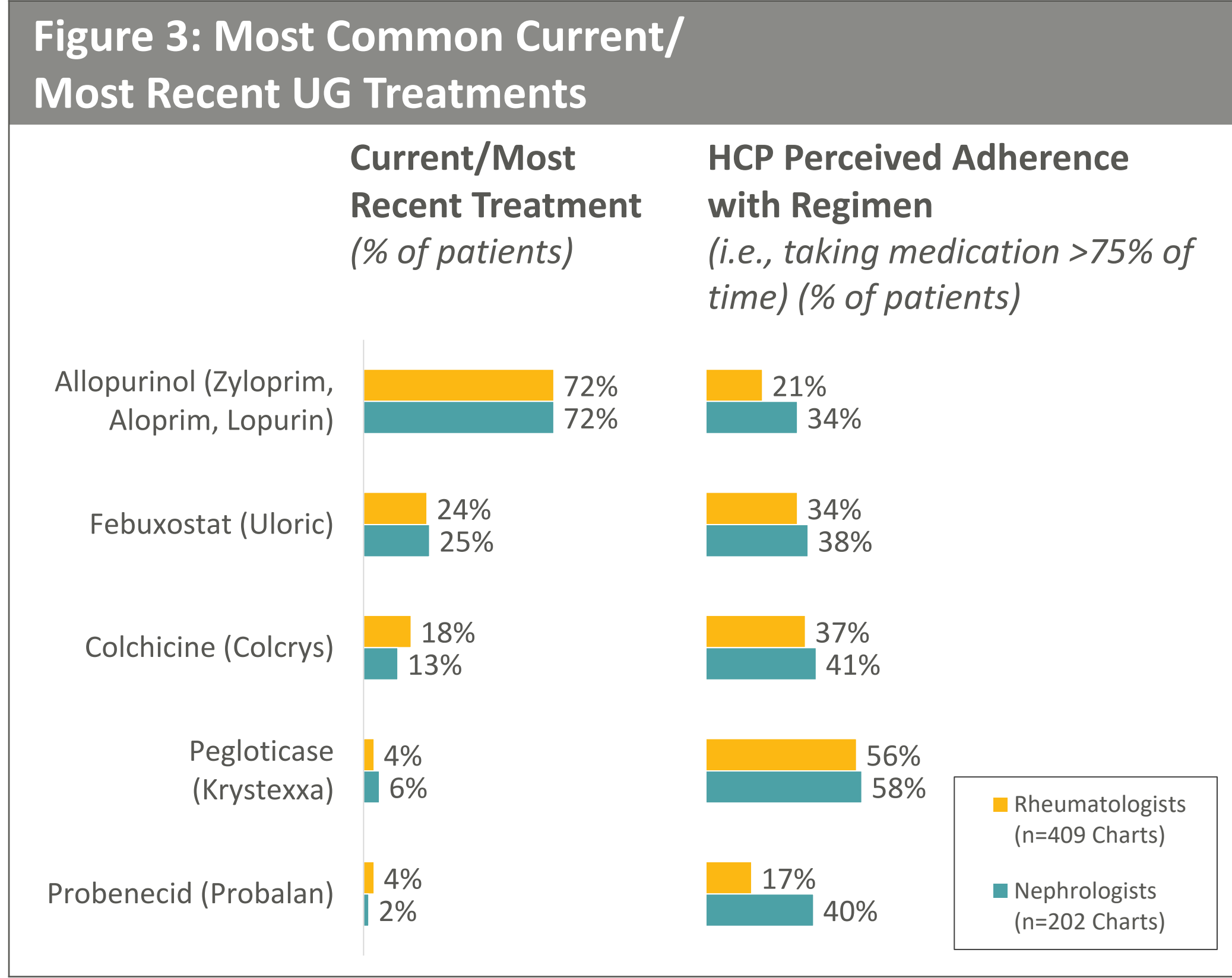


- As of their most recent visit, patients most commonly were experiencing visible tophi, gout flares, and swollen joints, with gout flares considered most severe among patients managed by rheumatologists and swollen joints considered most severe among patients managed by nephrologists (**Figure 2**).



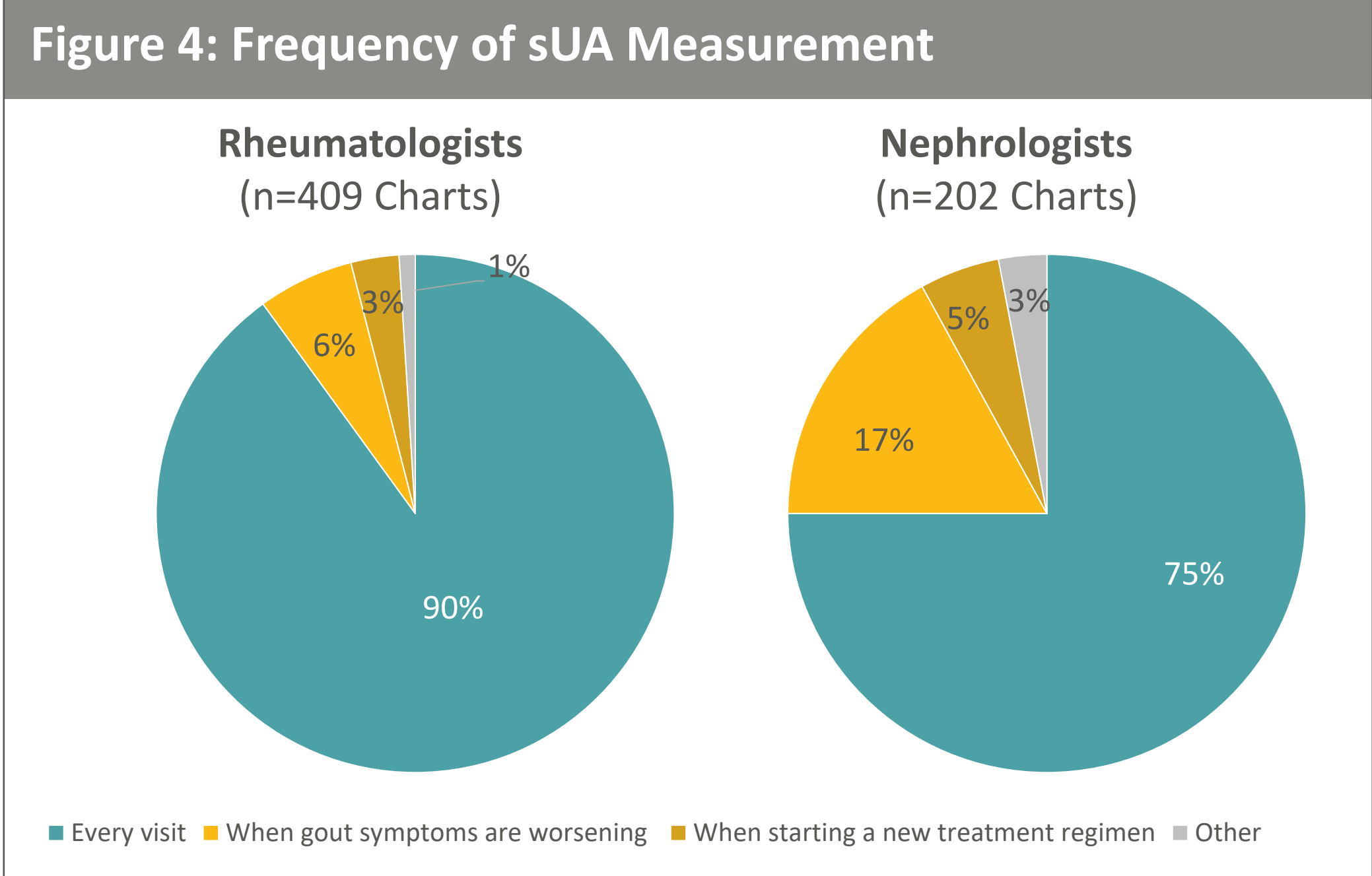
### UG Treatment Experience

- Overall, patients were currently or most recently treated with allopurinol regardless of specialty (**Figure 3**).
  - Rheumatologists were more likely to treat patients with a higher dose of allopurinol (32% prescribed >300 mg/day [median dose among patients] vs 14% for nephrologists), with doses ranging from 50 – 800 mg among patients managed by rheumatologists vs 50 – 600 mg among patients managed by nephrologists.
  - Among patients with UG, uricase lowering treatment use is low regardless of specialty, attributed mostly to the burden of biweekly IV dosing/administration (61%-67%), the burden associated with getting to an infusion center (48%-52%), and challenges for patients to acquire insurance approval (40%).
- Adherence varied by treatment with the majority of patients not considered adherent; however, patients managed by nephrologists were perceived as more adherent than patients managed by rheumatologists (**Figure 3**).
- Lack of adherence was mostly due to forgetfulness (56-68%), lack of health literacy around medication/dosing (46-53%), and lack of health literacy around gout (35-39%).



### Healthcare Resource Utilization and sUA Monitoring

- In the past 12 months, 17% of all patients had a history of emergency room visits and 3% of patients were hospitalized due to their gout for an average of 3.7 days (SD: 5.4).
- Patients managed by nephrologists were more likely to be hospitalized (6% vs 1%); and spent on average more time in the hospital due to gout (4.4 days [SD 6.1] vs 1.7 [SD 0.6] days).
- Patients managed by nephrologists were more likely to visit the ER (without inpatient admissions) than patients managed by rheumatologist (24% vs 13%).
- Rheumatologists were more likely to measure sUA among their UG patients at every visit (**Figure 4**).



### HCP Perceptions of UG and UG Treatment

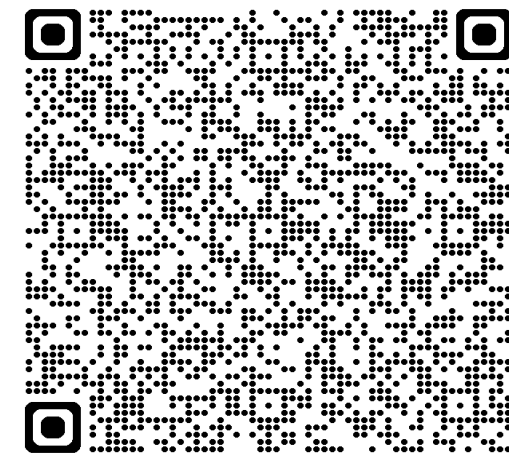
- Regardless of specialty, nearly all physicians indicated that unmet needs exist in the management of UG and believed their patients are impacted by the burden of current gout treatments.
- Physicians generally reported that UG at least moderately impacted overall quality of life (97%), their social life (90%-94%), hobbies (93%), family life (89%-93%), professional life (89%-92%), health (91%-94%) and day-to-day lives (91%-92%) of patients among other dimensions.

## FUNDING AND DISCLOSURES

- This study was funded by Sobi Inc.
- NK is an employee of Sobi. BD, and AO are employees of Sobi Inc. KS and HC are consultants for Sobi Inc. AA, AG, and BS are employees of Trinity Life Sciences, which was contracted for this study by Sobi Inc. AA also holds equity in Trinity Life Sciences.
- This poster was previously presented at the European Crystal Network Workshop | 6-7 March 2025 | Paris, France

## REFERENCES

- Chen-Xu, M., Yokose, C., Rai, S. K., Pillinger, M. H., & Choi, H. K. (2019). Contemporary prevalence of gout and hyperuricemia in the United States and decadal trends: The National Health and Nutrition Examination Survey, 2007-2016. *Arthritis & Rheumatology*, 71(6), 991-999. <https://doi.org/10.1002/art.40807>
- Francis-Sedlak, M., LaMoreaux, B., Padnick-Silver, L., et al. (2021). Characteristics, comorbidities, and potential consequences of uncontrolled gout: An insurance-claims database study. *Rheumatology and Therapy*, 8, 183-197. <https://doi.org/10.1007/s40744-020-00260-1>
- Schlesinger, N., & Lipsky, P. E. (2020). Pegloticase treatment of chronic refractory gout: Update on efficacy and safety. *Seminars in Arthritis and Rheumatism*, 50(3S), S31-S38. <https://doi.org/10.1016/j.semarthrit.2020.04.011>
- Kannuthurai, V., & Gaffo, A. (2023). Management of patients with gout and kidney disease: A review of available therapies and common missteps. *Kidney360*, 4(9), e1332-e1340. <https://doi.org/10.34067/KID.0000000000000221>



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