

Characterizing the Healthcare Resource Utilization and Costs in Patients with Geographic Atrophy Secondary to Age-Related Macular Degeneration Stratified by Disease Severity

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CONCLUSIONS



This is the first study to characterize GA patients by severity

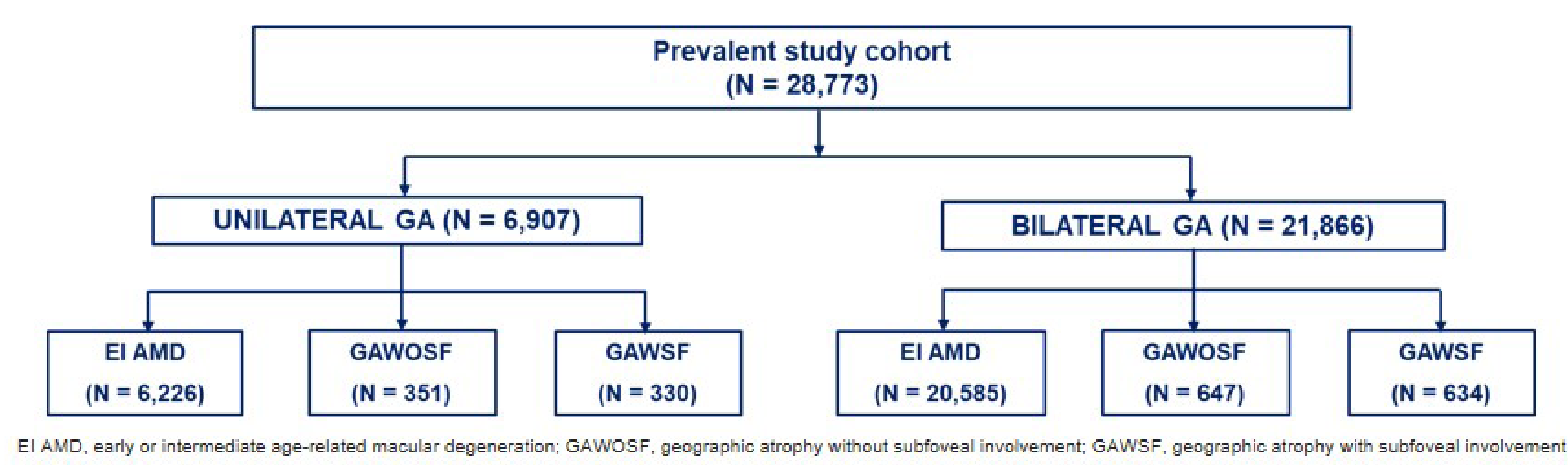


This study highlights a significant unmet medical need in this patient population, for which no medical treatment is available



Patients with more severe GA at baseline have higher resource utilization in the OP setting and incidence of fractures

Figure 2. Patient Attrition



Patient Characteristics

- A total of 28,773 patients with GA were identified, with 76% of patients having bilateral GA (Figure 2)
- The prevalence of GA increases with age, with the average age at baseline of 68.7 years
 - The mean age of patients with GA also increases with severity and laterality
- The impact of comorbidities of interest was greater in individuals with more severe GA
- About 30% of patients had a baseline ocular comorbidity, with the most common being neovascular AMD (17%) (Table 1)
- Table 2 shows the total annual GA-specific healthcare resource utilization

Table 1. Baseline Demographic and Clinical Characteristics by GA Severity at Baseline

Characteristics	Unilateral			Bilateral		
	EI AMD (n=6,226)	GAWOSF (n=351)	GAWSF (n=330)	EI AMD (n=20,585)	GAWOSF (n=647)	GAWSF (n=634)
Demographic						
Age, mean (SD)	67.9 (10.1)	71.9 (10.5)	75.1 (9.7)	68.4 (9.8)	73.5 (10.3)	75.4 (9.7)
Female, n (%)	3,402 (54.6)	204 (58.1)	187 (56.7)	12,200 (59.3)	419 (64.8)	418 (65.9)
Geographic region, n (%)						
Northeast	1,919 (30.8)	107 (30.5)	91 (27.6)	6,912 (33.6)	253 (39.1)	200 (31.6)
Midwest	1,624 (26.1)	102 (29.1)	115 (34.9)	4,499 (21.9)	132 (20.4)	115 (18.1)
South	1,573 (25.3)	84 (23.9)	53 (16.1)	4,805 (23.3)	130 (20.1)	109 (17.2)
West	1,109 (17.8)	58 (16.5)	71 (21.5)	4,369 (21.2)	132 (20.4)	210 (33.1)
Type of insurance, n (%)						
Commercial ^a	4,875 (78.3)	261 (74.4)	201 (60.9)	15,847 (77.0)	423 (65.4)	327 (54.7)
Medicaid	32 (0.5)	3 (0.9)	5 (1.5)	148 (0.7)	7 (1.1)	5 (0.8)
Medicare Advantage	882 (14.2)	55 (15.7)	82 (24.9)	3,555 (17.3)	165 (25.5)	229 (36.1)
Medicare Supplemental	311 (5.0)	31 (8.8)	41 (12.4)	615 (3.0)	41 (6.3)	52 (8.6)
Prevalence of comorbid condition, n (%)						
Neovascular AMD	2,941 (47.2)	203 (57.8)	248 (75.2)	1,290 (6.3)	151 (23.3)	185 (29.2)
Diabetic retinopathy	263 (4.2)	21 (6.0)	20 (6.1)	1,022 (5.0)	44 (6.8)	25 (3.9)
Glaucoma	414 (6.6)	31 (8.8)	26 (7.9)	1,521 (7.4)	65 (10.0)	63 (9.9)
Anxiety	978 (15.7)	54 (15.4)	56 (17.0)	3,290 (16.0)	118 (18.2)	106 (16.7)
Depression	909 (14.6)	38 (10.8)	61 (18.5)	3,125 (15.2)	118 (18.2)	124 (19.6)
CCI Score, mean (SD)	1.3 (1.9)	1.5 (1.8)	2.1 (2.4)	1.5 (2.0)	1.7 (2.1)	1.9 (2.2)

^aIncludes self-insured patients
CCI, Charlson Comorbidity Index; EI AMD, early or intermediate age-related macular degeneration; GAWOSF, geographic atrophy without subfoveal involvement; GAWSF, geographic atrophy with subfoveal involvement; SD, standard deviation

Table 2. Total Annual GA-Specific Healthcare Resource Utilization

	Unilateral			Bilateral		
	EI AMD (n=6,226)	GAWOSF (n=351)	GAWSF (n=330)	EI AMD (n=20,585)	GAWOSF (n=647)	GAWSF (n=634)
OP Visits, n	16,281	960	997	33,461	1,249	1,368
No of Pts ^a , n (%)	5,296 (85.1)	299 (85.2)	275 (83.3)	16,884 (82.0)	486 (75.1)	521 (82.2)
No of unadjusted visits ^a , mean (SD)	3.1 (2.8)	3.2 (2.5)	3.6 (2.8)	2.0 (1.5)	2.6 (1.8)	2.6 (1.8)
IP Admissions, n	905	63	66	3078	118	149
No of pts, n (%)	533 (8.6)	41 (11.7)	41 (12.4)	1872 (9.1)	81 (12.5)	83 (13.1)
No of unadjusted visits ^a , mean (SD)	1.7 (1.5)	1.5 (1.1)	1.6 (1.3)	1.6 (1.4)	1.5 (0.8)	1.8 (1.8)
Length of stay, mean (SD)	8.0 (14.7)	8.2 (12.1)	8.6 (11.3)	7.1 (13.8)	5.7 (6.9)	8.8 (16.5)

^a with > 1 visit
Number of patients and visits are based on a per-user basis
EIAMD, early or intermediate age-related macular degeneration; GAWOSF, geographic atrophy without subfoveal involvement; GAWSF, geographic atrophy with subfoveal involvement; OP, outpatient; IP, inpatient; SD, standard deviation

Background

- Geography Atrophy (GA) is an advanced form of dry age-related macular degeneration (AMD) that accounts for approximately 10% of blindness in elderly patients in the United Kingdom and the United States¹⁻³
- GA is usually bilateral, with a major impact on vision-related quality of life, thereby affecting daily activities such as reading, writing, driving, and recognizing faces
- Globally, there are no approved treatments to prevent the onset, or slow down the progression, of GA
- Current literature on the clinical and economic burden of GA is sparse and not stratified by disease severity or laterality

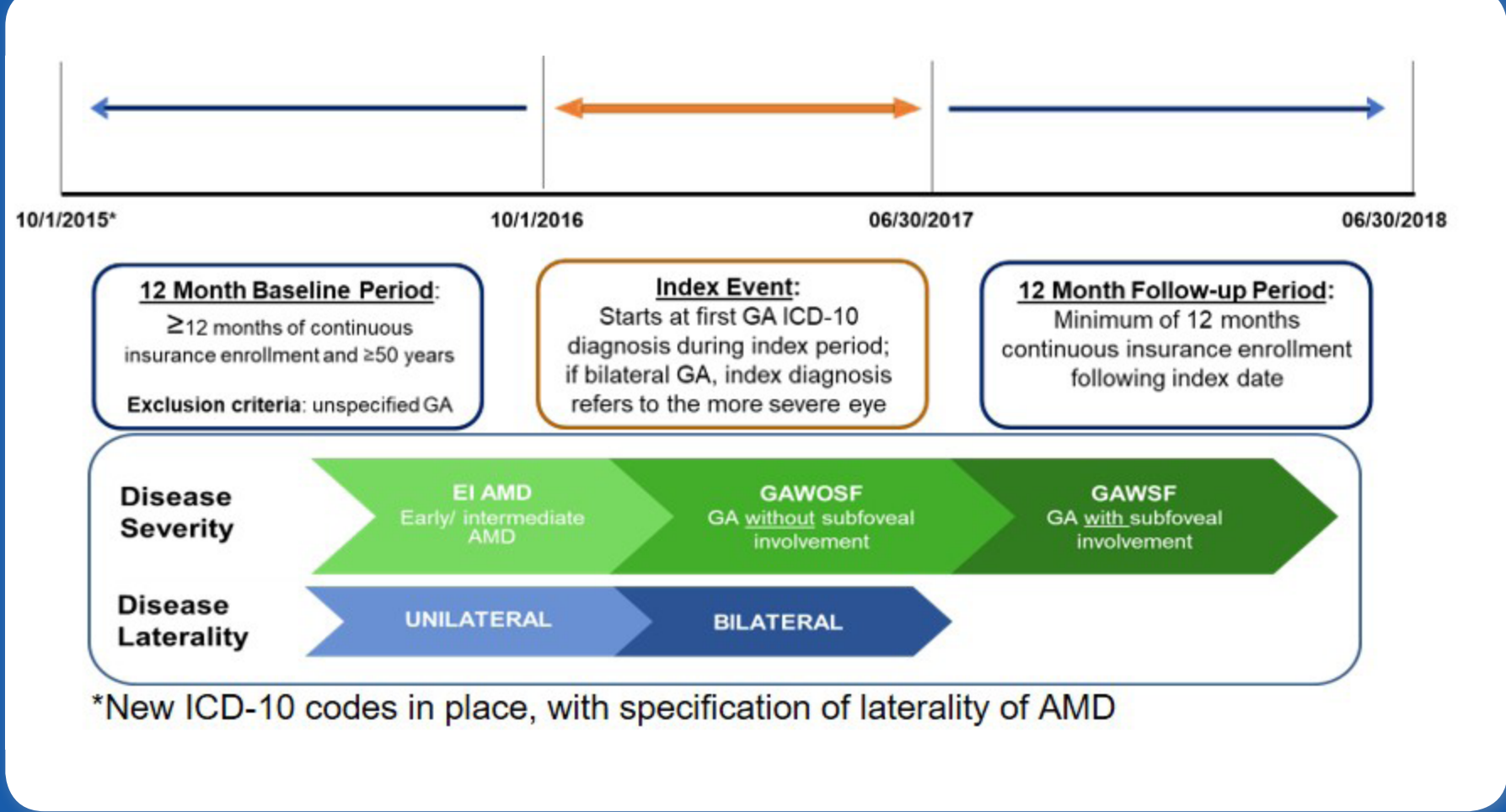
Objectives

- Determine the annual disease-specific healthcare resource utilization (HCRU) and costs, by baseline severity and laterality, and the occurrence of falls and fractures

Study Design

- A retrospective analysis was conducted using claims data from IQVIA's PharMetrics Plus Database
- Patients aged ≥50 with a prevalent diagnosis of GA were identified between October 1, 2016 and June 30, 2017 and classified by disease severity and laterality (Figure 1)
- Disease-specific HCRU and costs by disease severity and laterality were assessed during the 12-month follow-up period on a per user basis
- Multivariate analyses were conducted to assess associations between severity levels of GA and outcomes of interest, and the adjusted risk of fall and fractures were estimated

Figure 1. Study Design



^aNew ICD-10 codes in place, with specification of laterality of AMD

DISCLOSURES

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INTRODUCTION

METHODS