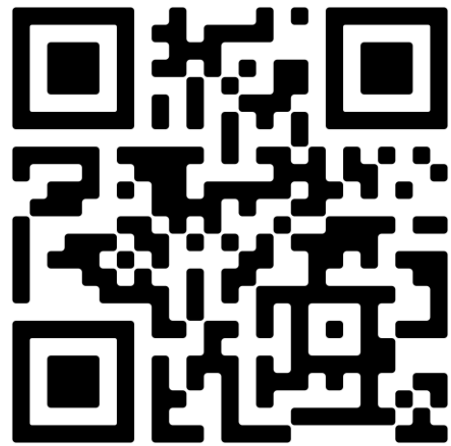


# PATIENT SUPPORT PROGRAM ENHANCEMENTS FOR PATIENTS DIAGNOSED WITH GENERALIZED MYASTHENIA GRAVIS FACING SOCIAL DETERMINANTS OF HEALTH CHALLENGES

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## Introduction and objectives

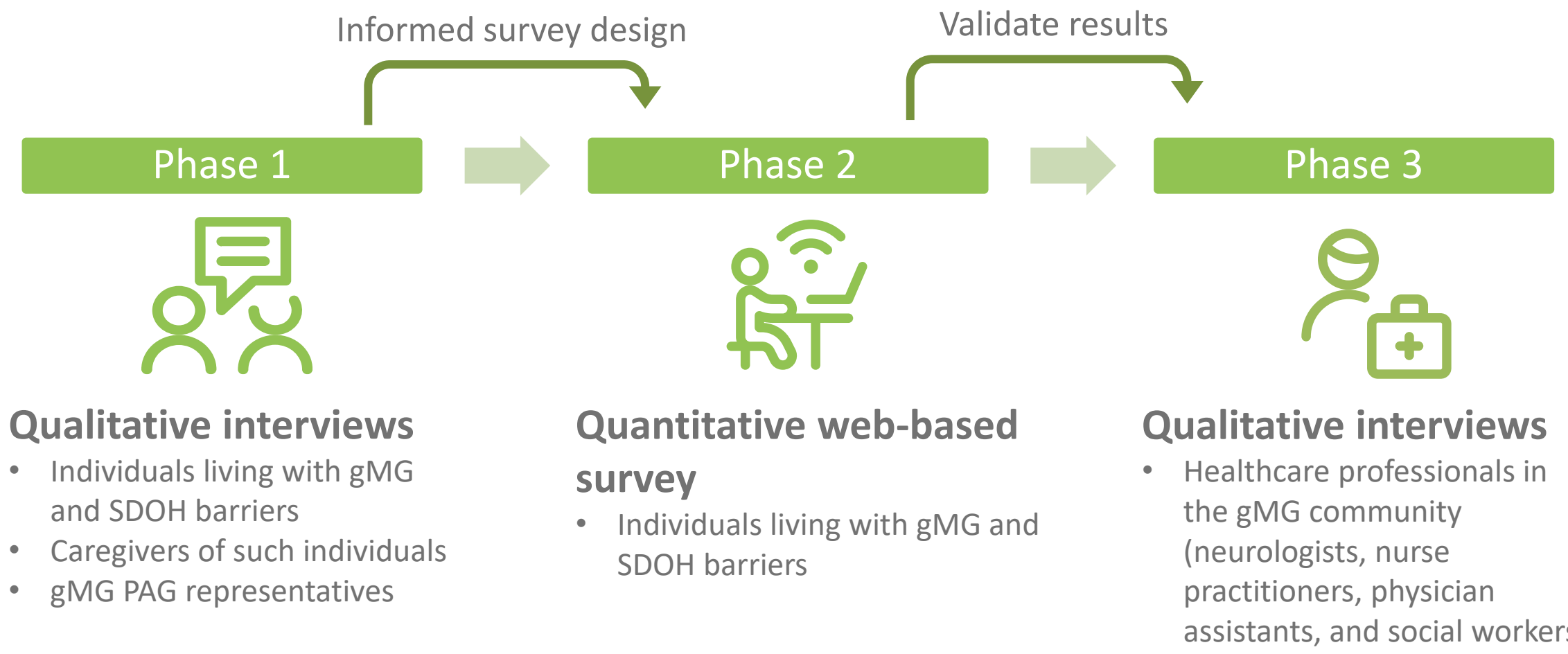
- Myasthenia gravis (MG) is a rare autoimmune disorder impacting neuromuscular junction transmission that affects ~60,000 individuals in the United States (US).<sup>1,2</sup> Most MG cases progress to generalized MG (gMG) affecting bulbar, limb, trunk, and respiratory muscles,<sup>3</sup> which contribute to significant patient burden.<sup>4</sup>
- Social determinants of health (SDOH) are important contributors to health outcomes,<sup>5,6</sup> and better understanding their impact on individuals diagnosed with rare, chronic diseases with high burden and unmet need is critical. Characterizing SDOH burden can help improve the design of patient support programs (PSPs), which offer interventions that aim to improve access to treatments and disease management.<sup>7,8</sup>
- The objective of this study was to better characterize how SDOH barriers impact individuals living with gMG in the US. We investigated their awareness and utilization levels of existing PSP resources, with the aim of identifying and prioritizing interventions that can help mitigate specific challenges associated with SDOH barriers.

## Methods

### Study design

- This cross-sectional mixed-methods study included 3 phases and involved individuals living with gMG and SDOH barriers, caregivers of such individuals, healthcare professionals, and representatives of gMG patient advocacy groups (PAGs) in the US (Figure 1). Protocols and materials used in the study received Institutional Review Board approval (IRB#20220823), and all participants received compensation for their time.

Figure 1. Study design.



### Participant recruitment and inclusion criteria

To overcome a **challenging process** of recruiting individuals who historically do not participate in research studies:

- The survey, with optional telephone assistance, was offered in both English and Spanish
- We directly partnered with vendors with robust networks of patients with rare disease, and gMG PAGs

The screener questionnaire was customized to **capture diversity** among several SDOH dimensions:

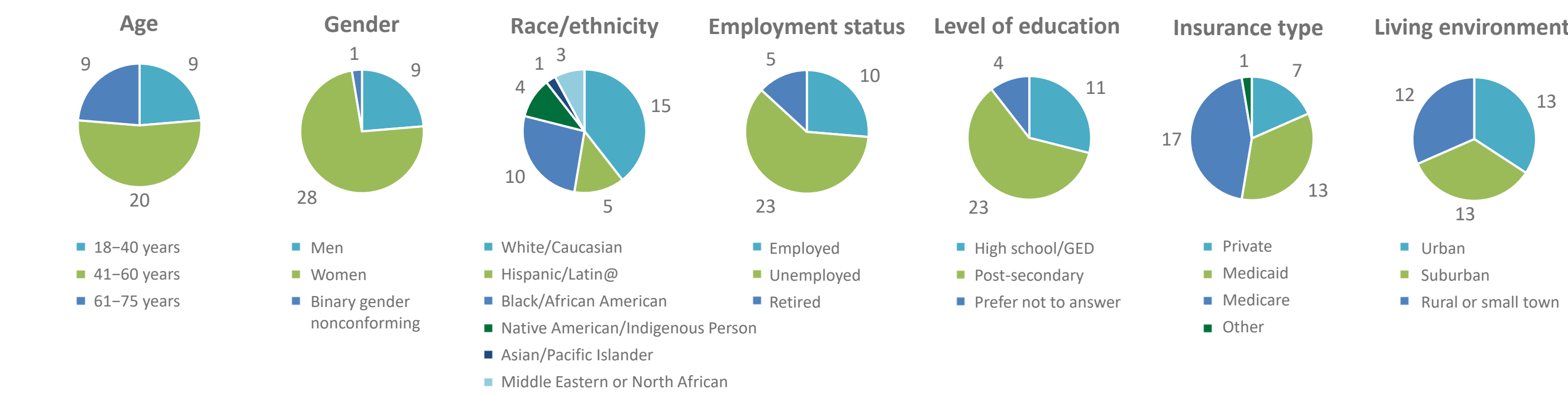
- Age
- Gender
- Racial/ethnic background
- Employment status
- Level of education
- Insurance type
- Living environment

## Results

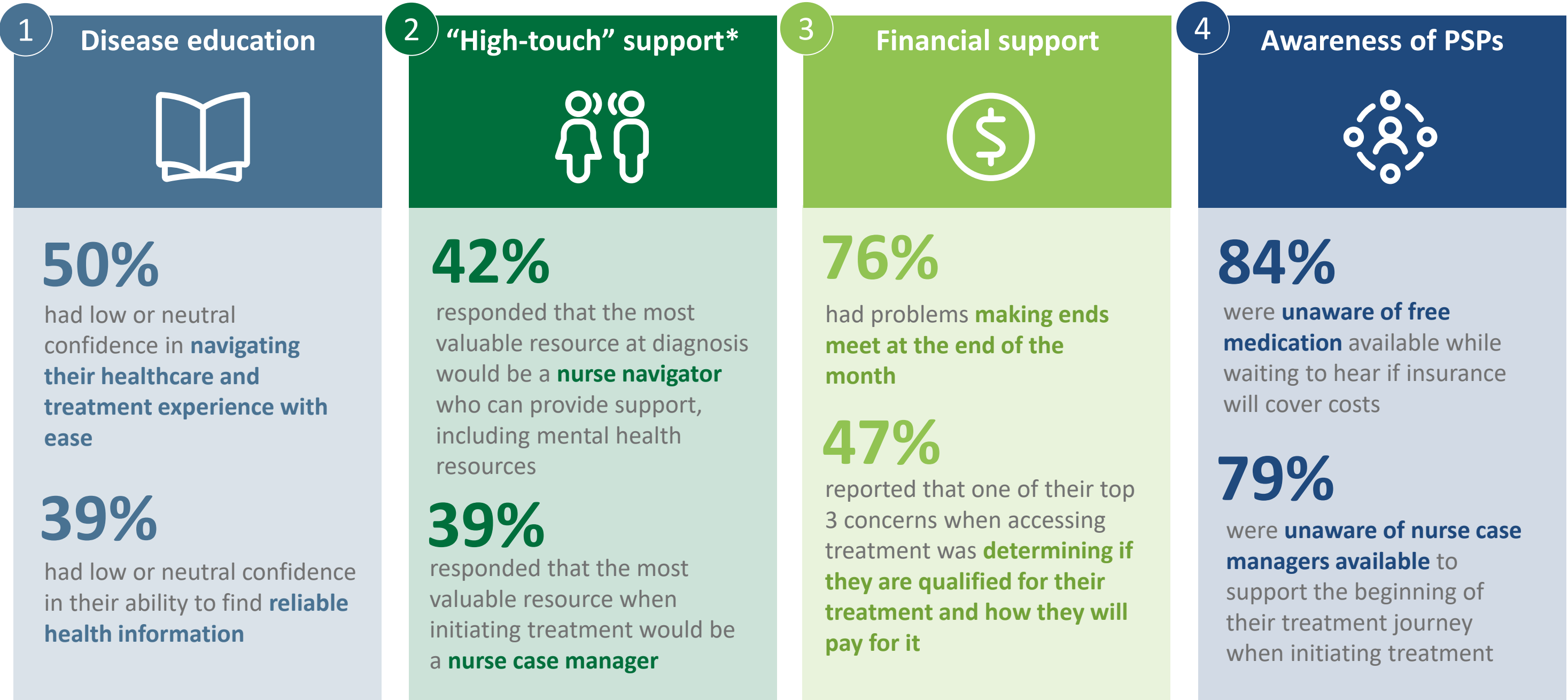
### 1. Study population

- Phase 1: N=15, including 11 individuals living with gMG and SDOH barriers, 2 caregivers, and 2 PAG representatives.
- Phase 2: N=38 individuals living with gMG and SDOH barriers (Figure 2).
- Phase 3: N=11, including 7 neurologists, 2 nurse practitioners, 1 physician's assistant, and 1 social worker who have managed ≥3 individuals with gMG in the past 12 months.

Figure 2. Self-reported participant demographics and characteristics in Phase 2 (N=38).



### 2. Key unmet needs for 38 individuals living with gMG and SDOH barriers (Phase 2)



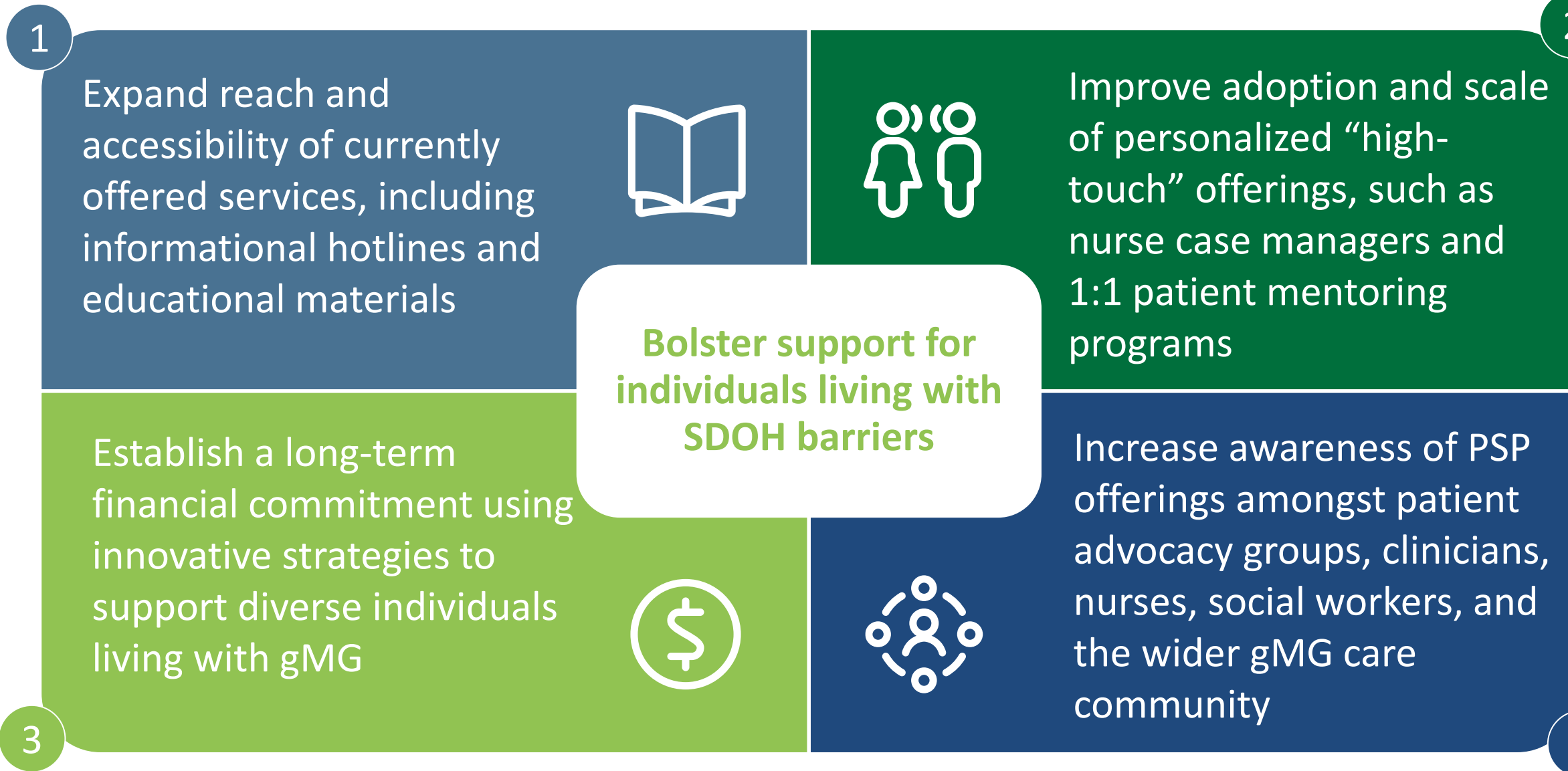
\*“High-touch” support is a form of care that encourages frequent direct person-to-person interactions between individuals receiving and providing support.

### 3. Key unmet needs identified from 11 healthcare professionals (Phase 3)



## Potential solutions for PSPs

- Synthesizing the results from all phases of the research, the following 4 recommendations were identified to help PSPs bolster support for individuals living with gMG and SDOH barriers, each corresponding to current unmet needs.



## Conclusions

- Individuals living with gMG and SDOH barriers face a complex and compounding set of challenges. Disease education, 1-on-1 “high-touch” support, and financial support were especially highlighted as persisting unmet needs. Strikingly, their awareness and current usage of existing PSPs that offer such services were low.
- Some limitations of this study should be noted. Data from this cross-sectional descriptive analysis are not intended to be comparable to the perspectives of a general population of individuals living with gMG. Additionally, longitudinal studies in a larger population are needed to further contextualize or generalize how SDOH barriers may contribute to health inequities in gMG.
- Nevertheless, our study captured one of the most diverse cohorts of individuals living with gMG in the US, and based on their robust insights, 4 clear and actionable recommendations were formulated for PSPs to consider in improving their support for individuals living with SDOH barriers. To further improve the experiences of historically marginalized individuals, researchers should continue to spotlight these communities and work together to address their specific needs.

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**Abbreviations** gMG, generalized myasthenia gravis; PAG, patient advocacy group; PSP, patient support program; SDOH, social determinants of health; US, United States.

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