Transforming C3G/IC-MPGN Care: Impact of Coordinated, Sequential Education on Clinicians and Patients

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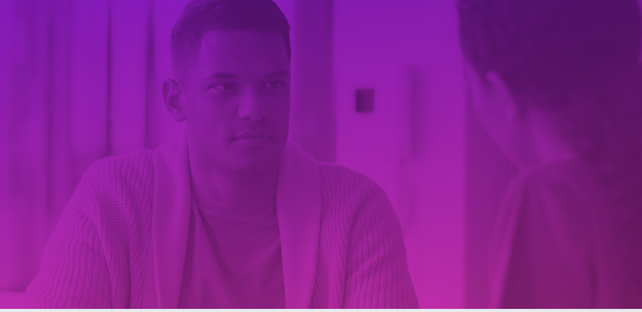


INTRODUCTION

Therapeutic options for complement 3 glomerulopathy (C3G) and primary immune complex membranoproliferative glomerulonephritis (IC-MPGN) are expanding. However, poor disease awareness and the inconsistent application of diagnostic algorithms impede optimal care and adoption of new therapies. We evaluated the impacts of serial, aligned education for health care providers (HCPs) and patients/caregivers (P/Cs) on clinical decision-making and patient empowerment.

METHODOLOGY

Educational Program

- Four CME activities for HCPs, one long-form P/C educational activity, and six social media-based P/C educational videos launched between March and September 2025 (CME activities remained online for one year).
- Micro-learning segments disseminated to NPI-verified nephrologists via LinkedIn and to P/Cs via NephCure's Facebook page.

Evaluation

HCPs

- Pre- and post-activity knowledge/competence questions (National Board of Medical Examiner guidelines*)
- Areas of evaluation
  1. Role of complement pathway dysregulation
  2. C3G diagnostic process
  3. New therapies
- Post-activity evaluation to evaluate intended practice changes and barriers to change
- Statistical tests of significance applied to comparisons of individual questions ($P<0.05$)

P/Cs

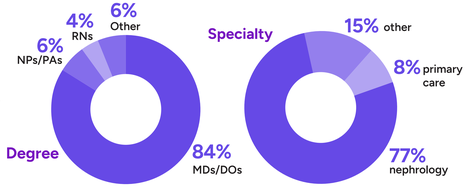
- Perceptions of care quality
- Views, completions, and engagements (e.g., clicks, comments, and shares)

Reference:
*NBME Item-Writing Guide. Constructing written test questions for the health sciences. Nov 2020. www.nbme.org/educators/item-writing-guide.

RESULTS – ENGAGEMENT

HCP Education

6,813 Participants
2,150 CME enduring + 4,663 micro-learning to NPI-verified nephrologists



71% of CME learners identified as treaters who saw ≤5 patients with C3G per month

29% participated in >1 CME activity

P/C long-form activity

5,308 Participants
3,741 education views + 1,567 micro-learning

P/C social media videos

15,800 Completions
9,743 clicks, 34 comments, 155 shares

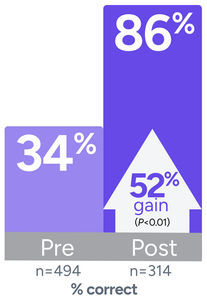
Of the 5,308 participants:

40% individuals diagnosed with C3G	20% caregivers of a person with C3G	20% HCPs	20% not specified

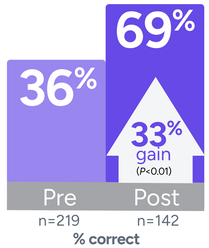
40% 0 to 11 years old	20% 41 to 50 years old	40% 51 to 70 years old

Changes in Knowledge/Competence: HCP Education

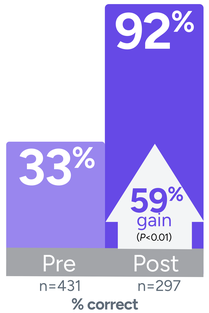
Topic: Role of complement pathway dysregulation
(aggregate result: % correct across 4 pre/post assessments)



Topic: Diagnostic process
(aggregate result: % correct across 4 pre/post assessments)



Topic: New therapies
(aggregate result: % correct across 4 pre/post assessments)



84% reported enhanced overall competence in managing patients with C3G (n=69)

32% reported they would consider prescribing a complement inhibitor for C3G (n=102)

HCP agreement with the following statement:
My overall competence (skills or strategy) in managing patients with C3G was enhanced by this activity.

Changes in Knowledge: P/C Education

40% of P/Cs reported to be satisfied with their current treatment regimen for C3G or IC-MPGN

60% were confident talking to a doctor about managing their disease

Areas of Future Education

Areas patient/caregivers would like to learn more about:

- How complement-mediated kidney disease evolves over time
- Causes of C3G
- Finding resources and support
- How to know if treatments are working
- How to manage side effects
- How well medications control C3G or IC-MPGN
- Lifestyle changes that may help optimize care of C3G or IC-MPGN

Live questions:

"I heard that patients with C3G should reduce protien in their diet. Is that true, and if so why?"

"Does having a genetic form of C3G or IC-MPGN change how it is treated?"

"With two new treatments now out, how will my doctor decide which is best for me?"

"Might the new treatments replace supportive care?"

"How do immunosuppressive treatments affect my child's growth and ability to fight infections?"

CONCLUSION

The aligned, longitudinal educational models meaningfully improved HCP's knowledge of evidence-based C3G/IC-MPGN management and supported patient understanding of their disease and shared decision-making. This model of education to HCPs and P/Cs could be scaled for accelerating the translations of new research into improved care for rare kidney diseases.