

David Tognarini¹ PhD, Sherif Youssef¹ PhD, and Kathryn Fenton¹ PhD

¹Aesir Health PTY LTD, 85 Argus St Cheltenham VIC AUSTRALIA 3192

INTRODUCTION

Subcutaneous Immunoglobulin (SCIg) therapy is a growing treatment option for patients with immunodeficiencies as an alternative to Intravenous Immunoglobulin (IVIg) infusions, the option for SCiG depends on various factors including patient suitability and choice¹. In order to support suitable patients being transitioned to SCiG in the home setting, a patient support program CSL Behring Cares, was established. CSL Behring Cares has been designed to support Primary and Secondary Immunodeficiency patients (PID and SID) prescribed Hizentra® or Evogam® SCiG therapy with education and training in the home. More recently, the program has been extended to also support Chronic Inflammatory Demyelinating Polyneuropathy (CIDP) patients who are prescribed Hizentra® SCiG therapy.

PROGRAM STRUCTURE

Commissioned by CSL Behring, Aesir Health Pty Ltd (Aesir) is an independent, national healthcare provider with over 15 years experience in patient education on self-administered injectable medications. Aesir Health currently has 20 Registered nurses trained in the CSL Behring Cares program across Australia, with extensive experience in community nursing and patient education services.

CSL Behring Cares was designed, built and is managed by Aesir Health, as an in-home education and support service using qualified registered nurses. The program aims to ensure patient competency in SCiG self-administration and offers 3 levels of service for enrolled patients: Coach, Check-In and Support. Patients enrolled into the Coach level of service by their treating specialist receive up to 6 in-home educational visits by a registered nurse (RN) trained in the administration of SCiG. SCiG education was offered to both patients, and carers within their support network. The other service levels of CSL Behring Cares, includes support via Aesir Telehealth services (Check-In service), or access to 1800 support line or email as needed (Support service).

OBJECTIVE

To assess the effectiveness and quality of the CSL Behring Cares program, a review of a cohort of patients who were enrolled into the Coach service, and who had completed the program, was undertaken.

METHOD

Following a series of face to face visits, patients were assessed by the visiting RN to ensure patient competency in SCiG self-administration techniques with a focus on the following criteria: 1. Medication storage and handling; 2. Competence in reconstitution/preparation of product; 3. Understanding and implementation of aseptic technique; 4. Appropriate injection site selection, and, 5. Correct administration of infusion and post procedure care.

The total number of visits per patient, was determined by the RN's assessment of the patient's competency in the above areas. Patients who were deemed competent to self-manage their ongoing treatments, received no further in-home visits following RN sign-off.

Upon completion of the in-home face to face nurse visits, patients were asked to provide feedback via a survey for their assessment of the quality of education and training they received.

PATIENT ENROLMENTS

The number of patients enrolled into the Coach service was 44. This included enrolments for patients across Australia: Figure 1.

Figure 1: Geographical mapping of patients enrolled into the Coach service

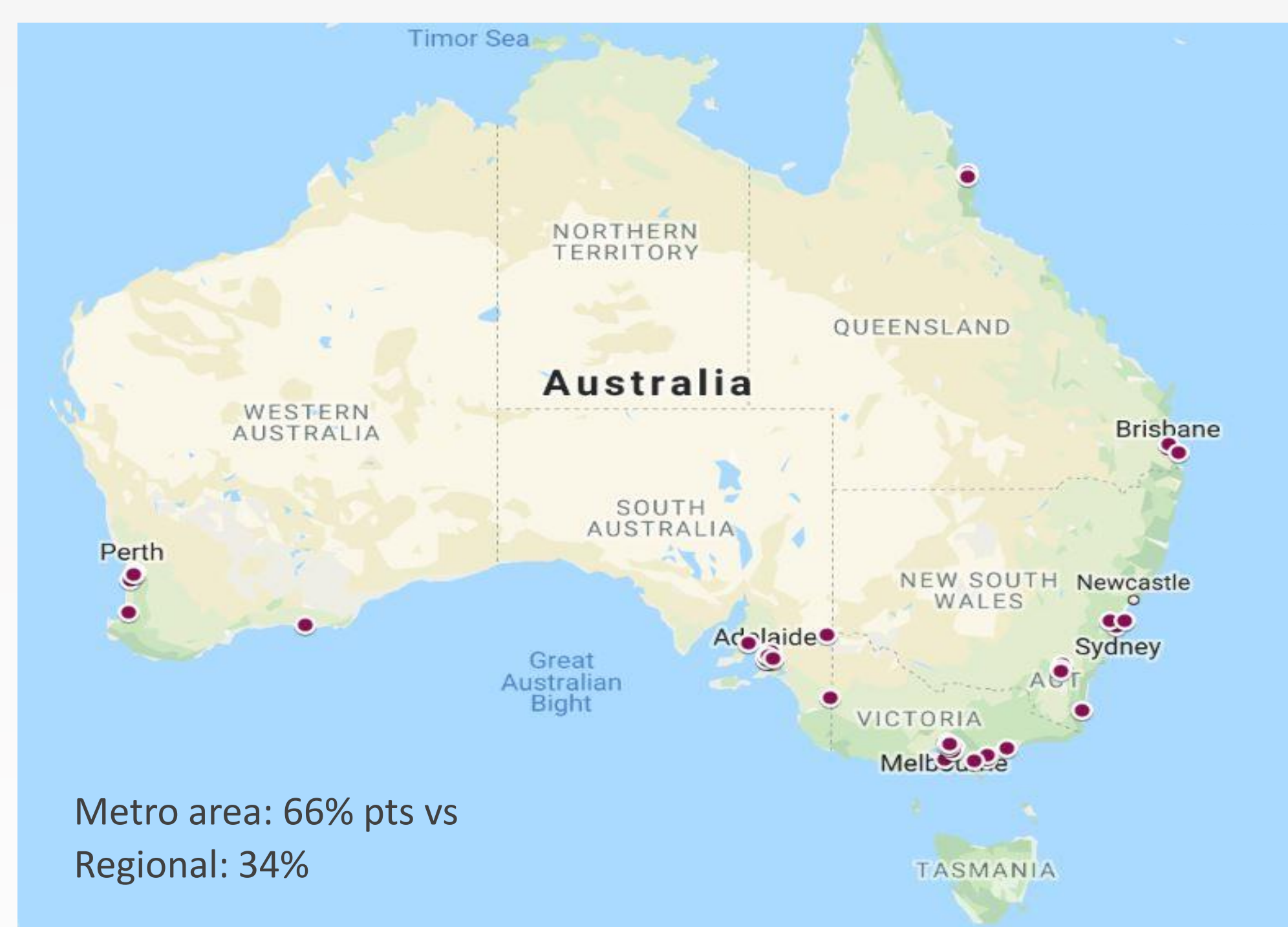
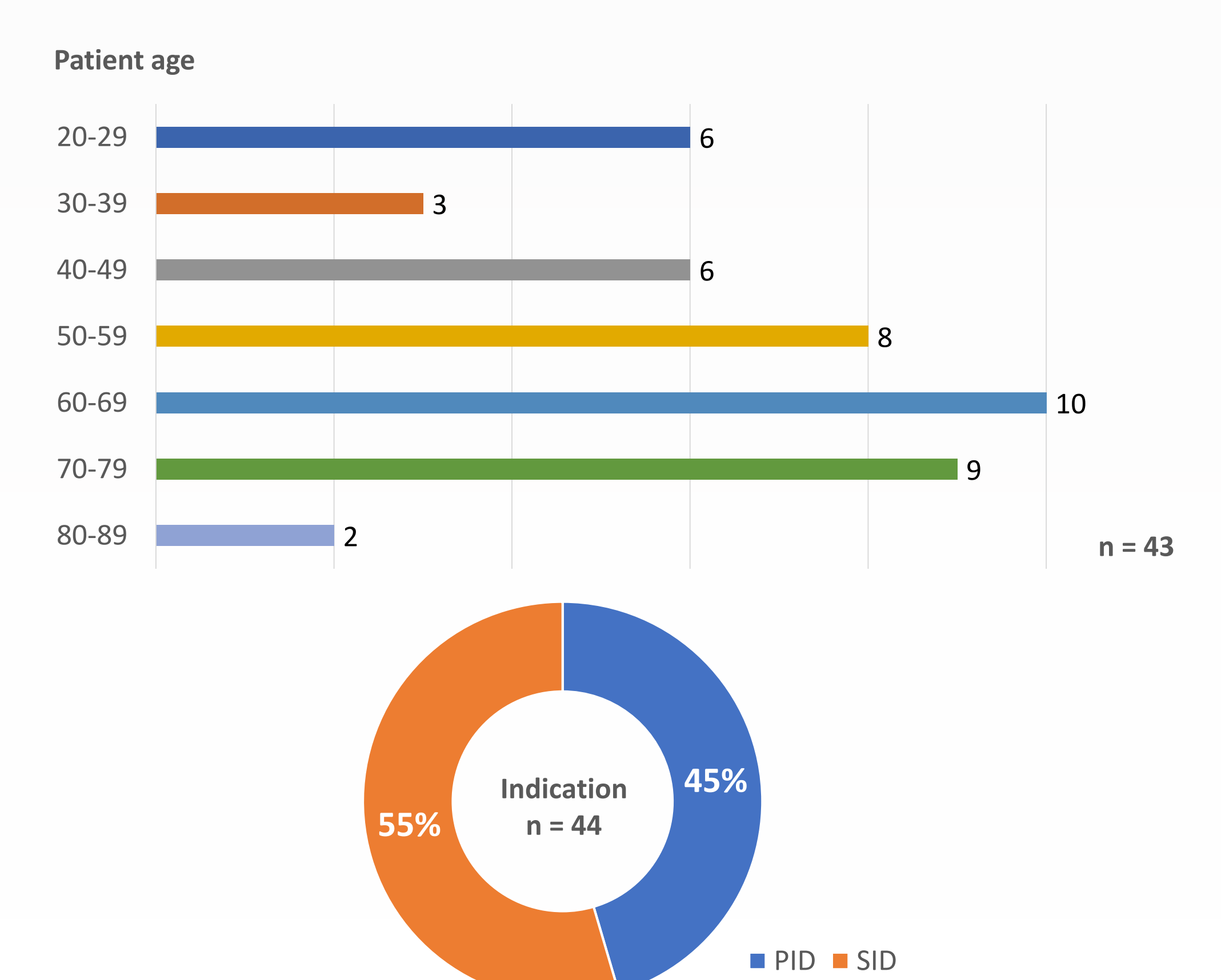


Figure 2: Patient demographics



RESULTS

Of the 44 patients enrolled into the Coach service, 43 received face to face nurse education and training and of this group, 42 patients completed the program and were deemed competent. One patient was determined to be unsuitable for SCiG prior to commencement of the program and another patient was not able to complete training due to tolerability. Of the 43 patients who completed education and training, 95% have continued with their SCiG therapy following completion of the program.

A summary of the program activity is provided:

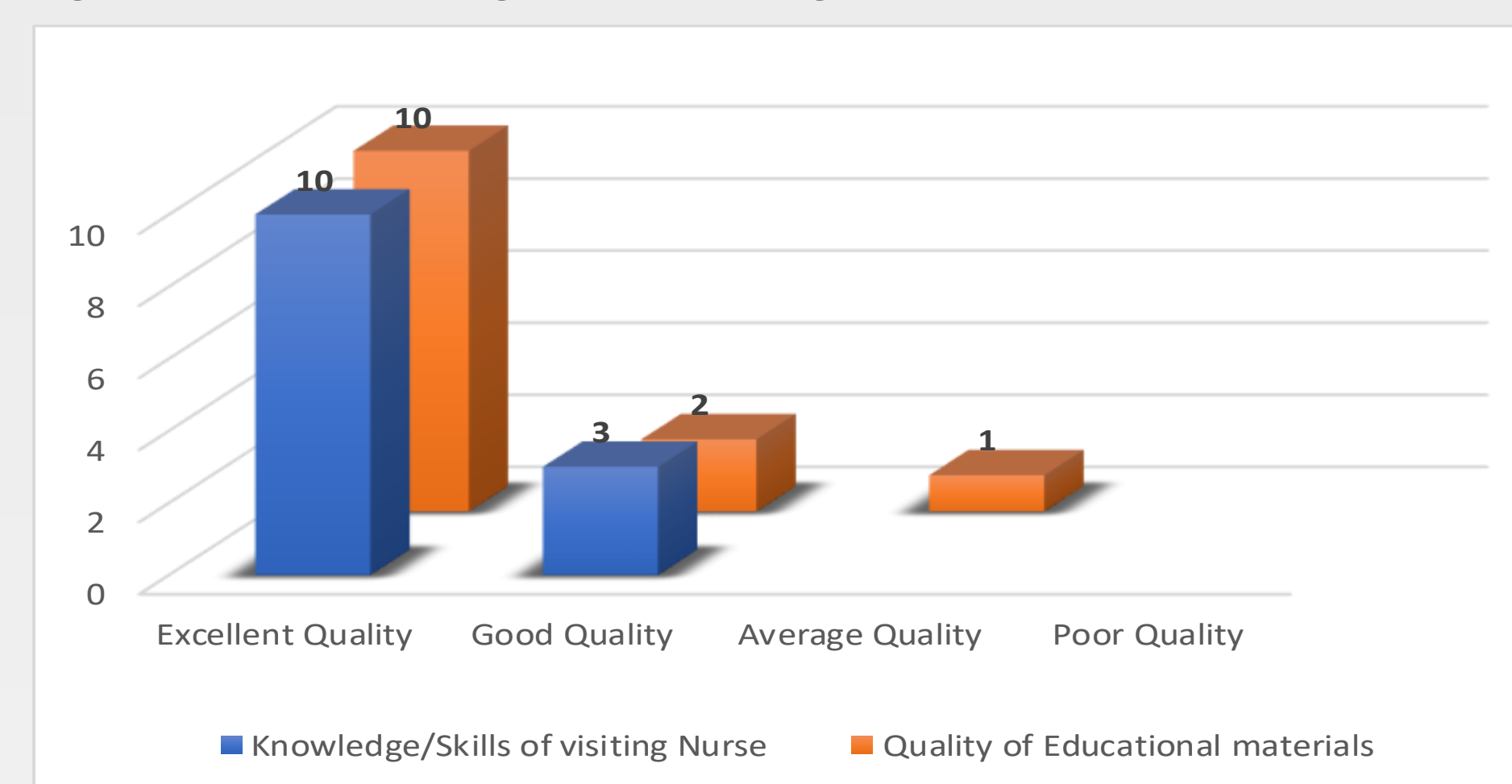
Table 1: SCiG Training Experience

Competency achieved	98% of trained patients (42/43)
Average number of visits	2.6 in-home visits (1 - 6)
SCiG experience	93% new to SCiG infusions (n = 41)
Volume infused	25 mL to 125 mL
Dosing frequency	80% on weekly dosing

PATIENT SATISFACTION

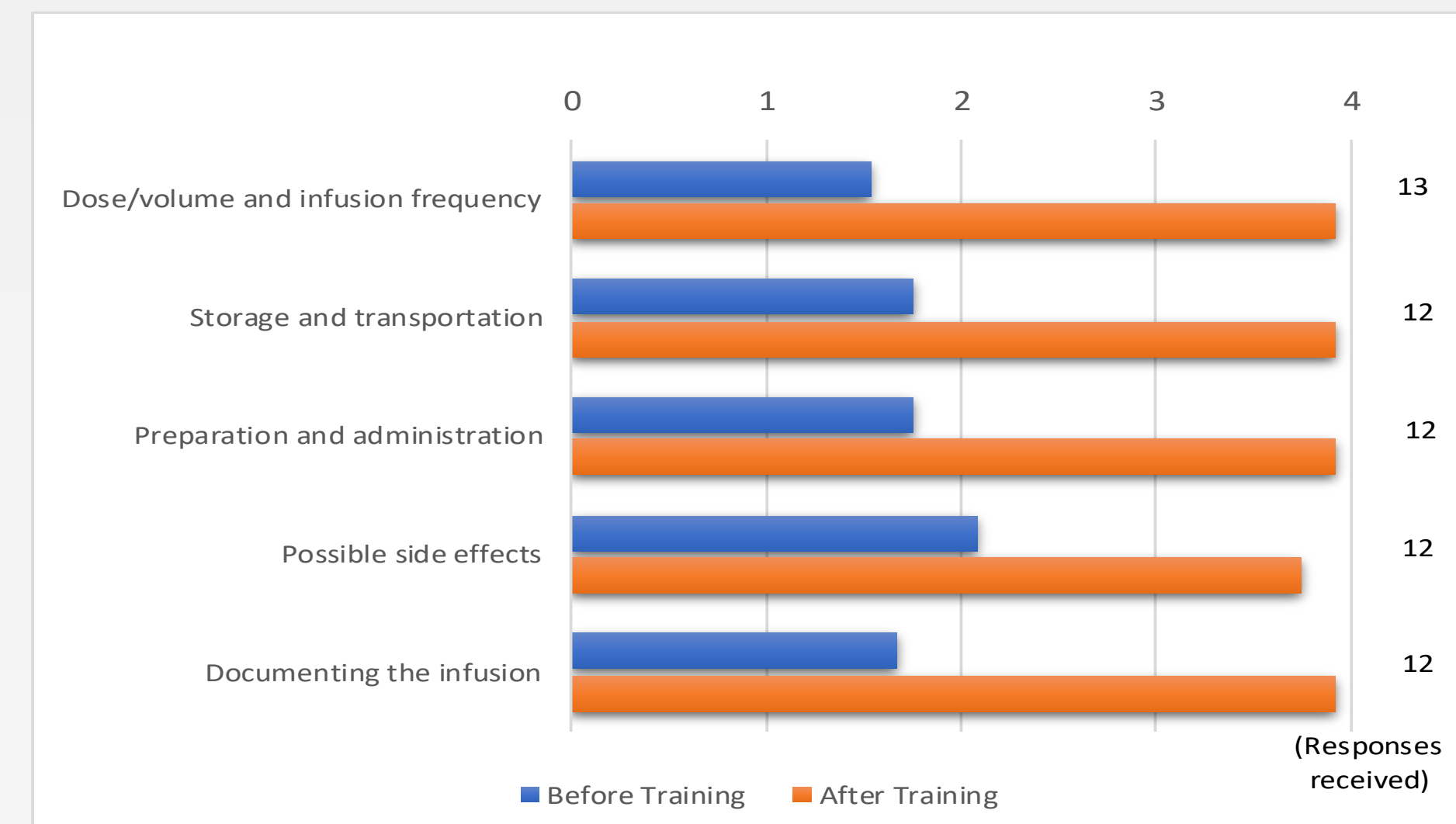
Of the 42 completed patients, 30% provided their assessment of the program via a Feedback survey.

Figure 3: Patient rating of CSL Behring Cares nurses and educational materials



- 100% of respondents rated Nurse knowledge and skill as good and excellent
- Program Education and materials were rated as good and excellent by 92% of respondents

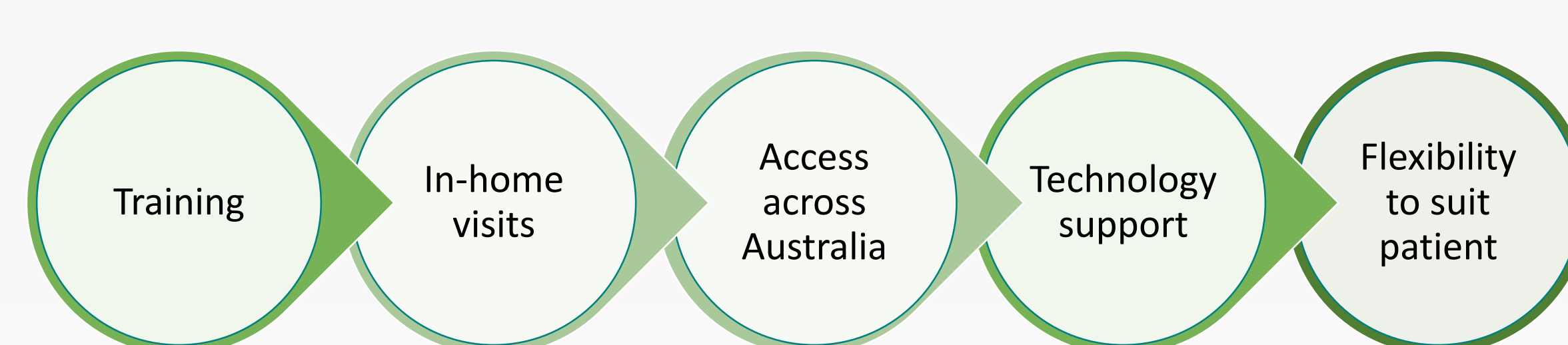
Figure 4: Patients' understanding/knowledge of SCiG pre/post training



- All those surveyed, rated significant improvements in their level of understanding and knowledge following training

KEY ELEMENTS TO SUPPORT LEARNING OUTCOMES

Figure 5: Elements which have proven to be critical in the success of the program thus far.



DISCUSSION AND CONCLUSION

The CSL Behring Cares patient support program has demonstrated effectiveness in supporting Primary and Secondary immunodeficiency patients prescribed SCiG treatment and providing positive outcomes, whilst ensuring quality use of medicines.

Patients from a broad range of ages (20 to 86 years of age), were referred to the program by their treating specialist for the Coach level of service. Of these 44 patients reviewed, 98% of trained patients were deemed competent to continue with their in-home therapy independently following completion of the program. The average number of nurse education visits was 2.6 to completion of training, which is in line with previous reports² and suggests the quality of the education and support provided through the program, was effective in achieving competency for most patients and empowering self-administration. Patient feedback also revealed the program was effective in improving patients' understanding and knowledge of SCiG, and was considered of a high quality.

The consideration for each individual's treatment, home circumstances and supporting networks were important in undertaking both the design and execution of the program, and, has contributed to the success of the program thus far. 95% of patients trained and competent in SCiG administration are continuing with therapy following completion of their education. Of the 3 patients referred back to clinic for continued IVIg therapy, 2 were a result of tolerability, and 1 was based on personal preference, suggesting that the flexibility and ease of use associated with in-home SCiG therapy is suitable for a considerable proportion of immunodeficiency patients who transition to SCiG.

This initial review of CSL Behring Cares, has demonstrated the program has effectively provided home-based training for Primary and Secondary immunodeficiency patients across Australia. This program has facilitated the transition of patients to home therapy and complements patients' care while alleviating hospital nurse training resource.

As the Program expands, further analysis will be carried out in a larger group of PID and SID patients as well as patients being enrolled for Hizentra® SCiG therapy in CIDP.

References
 1. ASCIA HP SCiG Position Statement. 2018 <https://www.allergy.org.au/patients/immunodeficiencies/scig-therapy-general-information>
 2. AAAAI 2018 Poster; Henderson TS et al. Patient-reported experience on training associated with subcutaneous immunoglobulin (SCiG) therapy self-administration. 2-5 March 2018 (Orlando, FL, USA).

Disclosure of interest. This program was supported by CSL Behring Australia. The company was involved in the review of this poster. Aesir Health has been engaged by CSL Behring as an independent third-party provider of patient support services including CSL Behring Cares. Dr David Tognarini has participated in CSL Behring Advisory Boards for other therapeutic areas.