

Evolution of the Infusion Science Specialist

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Introduction

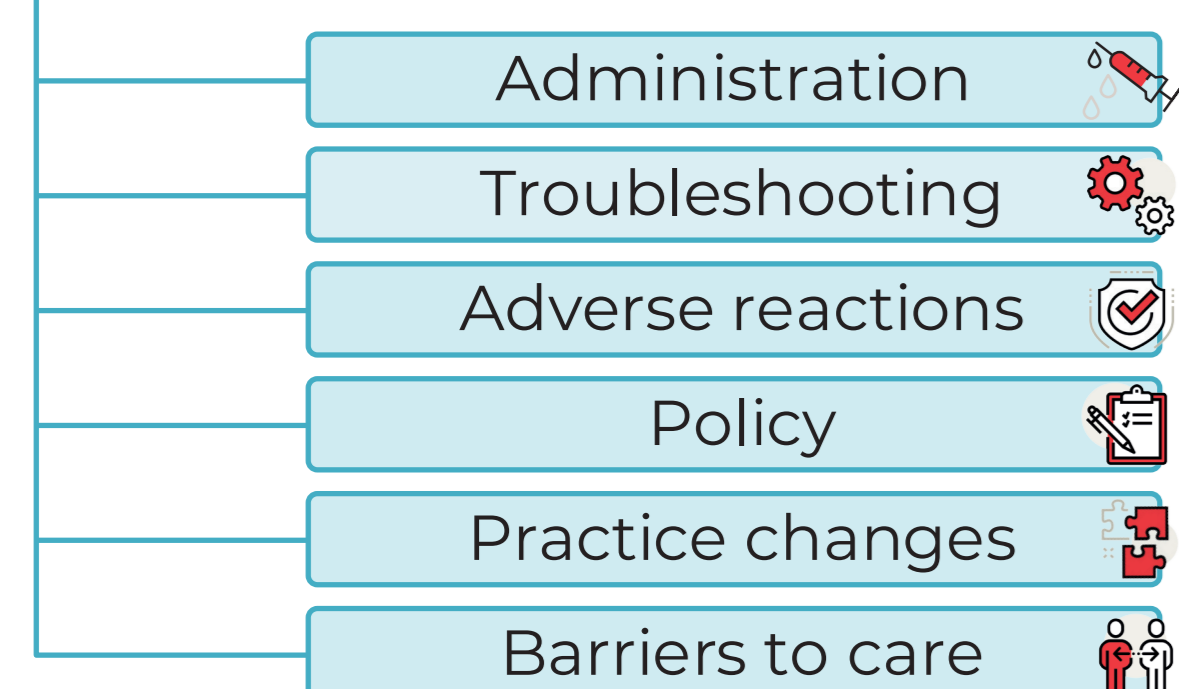
- Immunoglobulin (Ig) therapy administration has evolved since it was first introduced in 1952 as a simple intramuscular injection¹ to intravenous (IVIg)² and subcutaneous (SCIg)³ forms
- This evolution of Ig therapy necessitated an expansion in the role of nurses to include practical education on infusion therapy to providers, patients, and caregivers
- Infusion nurses are responsible for administering therapy in various settings, including clinics, infusion centers, homes, and specialty pharmacies
- A high level of clinical competency is required, however, formal education on infusion science is rare

Infusion Science Specialist (ISS)

- The first SCIg was approved by the Food and Drug Administration in 2006⁴
- Recognizing both a gap in practical infusion therapy education and a lack of resources, the role of ISS was created in 2014⁵
- As part of medical affairs, the ISS team is dedicated to education on the proper administration of Ig products

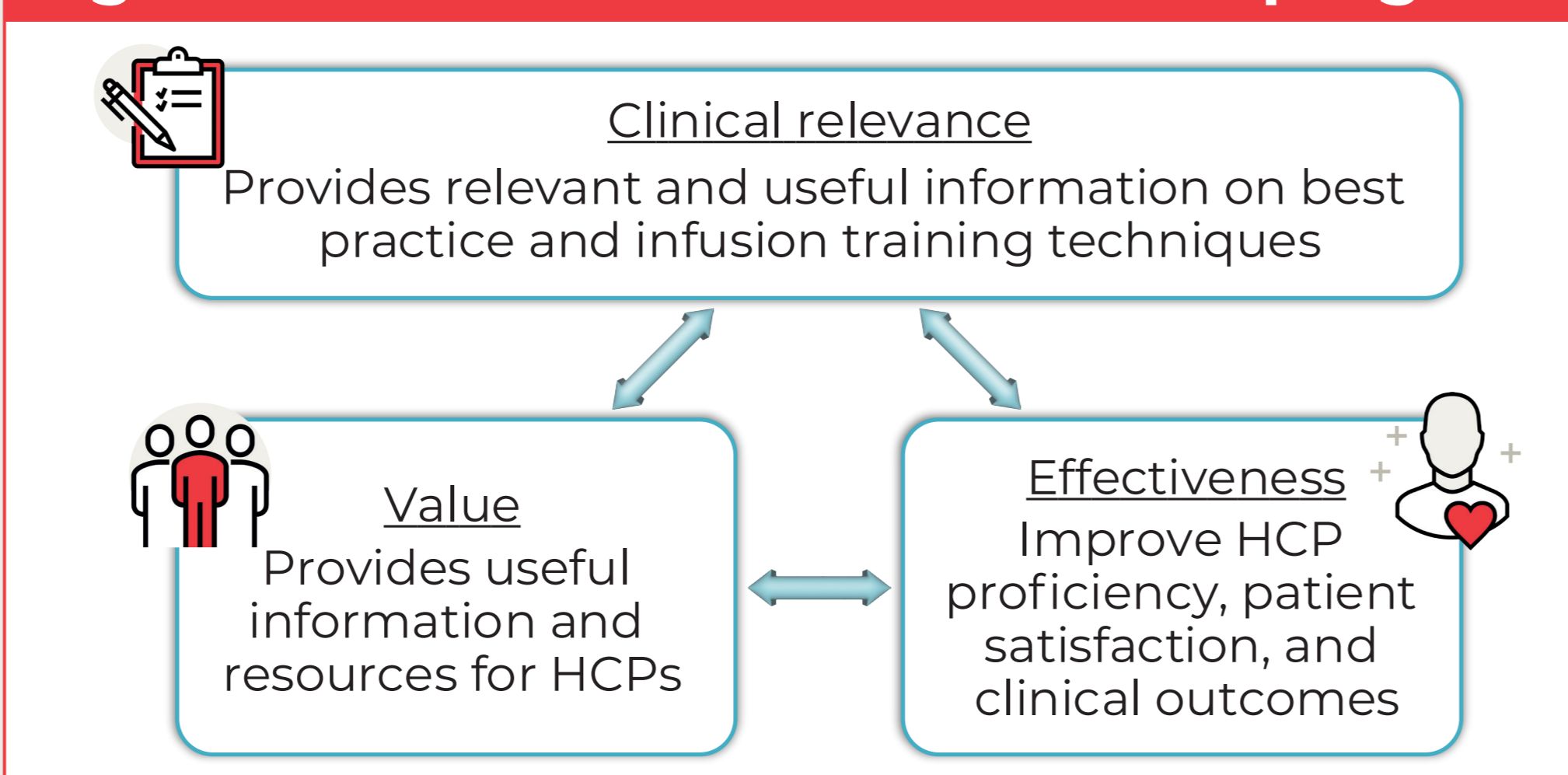
Figure 1. Responsibilities of ISS

ISS educate healthcare professionals (HCPs), including nurses, pharmacists, advanced practice providers, and physicians on the most current information regarding Ig infusion therapies:



- Each ISS is a registered or advanced practice nurse with extensive clinical and scientific expertise
- By utilizing multiple educational resources, programs, and hands-on demonstrations, the ISS ensures that HCPs are well-equipped to provide appropriate care and infusion training to patients

Figure 2. Benefits of an educational program



Purpose

Demonstrate the overall clinical relevance, effectiveness, and value of the ISS

Methods

- One field-based educational program in which the ISS serves as faculty for is Starting Hizentra[®] Administration with Resources and Education (S.H.A.R.E.)
- The S.H.A.R.E. program is an interactive, promotional presentation which educates HCPs on SCIg administration, providing training on the best practices and techniques to optimize patient care
- Following the completion of the program, participants are asked to complete a survey, rating aspects of the overall value of the program using a Likert scale from one to five (where five was 'excellent')

Acknowledgements
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Results

- In post-program surveys from 2022–2024, 94% of participants rated the S.H.A.R.E. program as 'excellent' when asked of its clinical relevance to their practice (**Figure 3**)
- The majority (95%) of program attendees rated the effectiveness and experience of the ISS presenter as 'excellent' (**Figure 4**)
- Additionally, 95% of attendees rated the value of the presentation materials (being clear and informative) as 'excellent' (**Figure 5**)

Figure 3. Clinical relevance

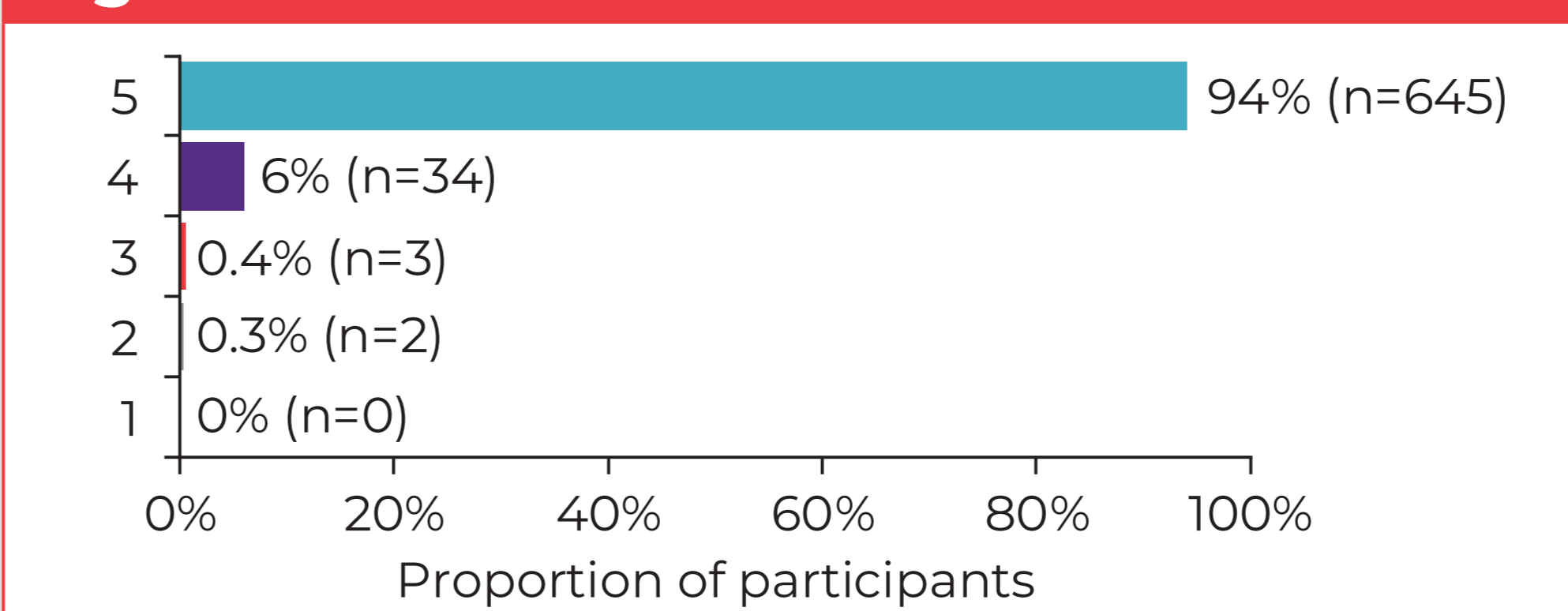


Figure 4. Effectiveness and experience*

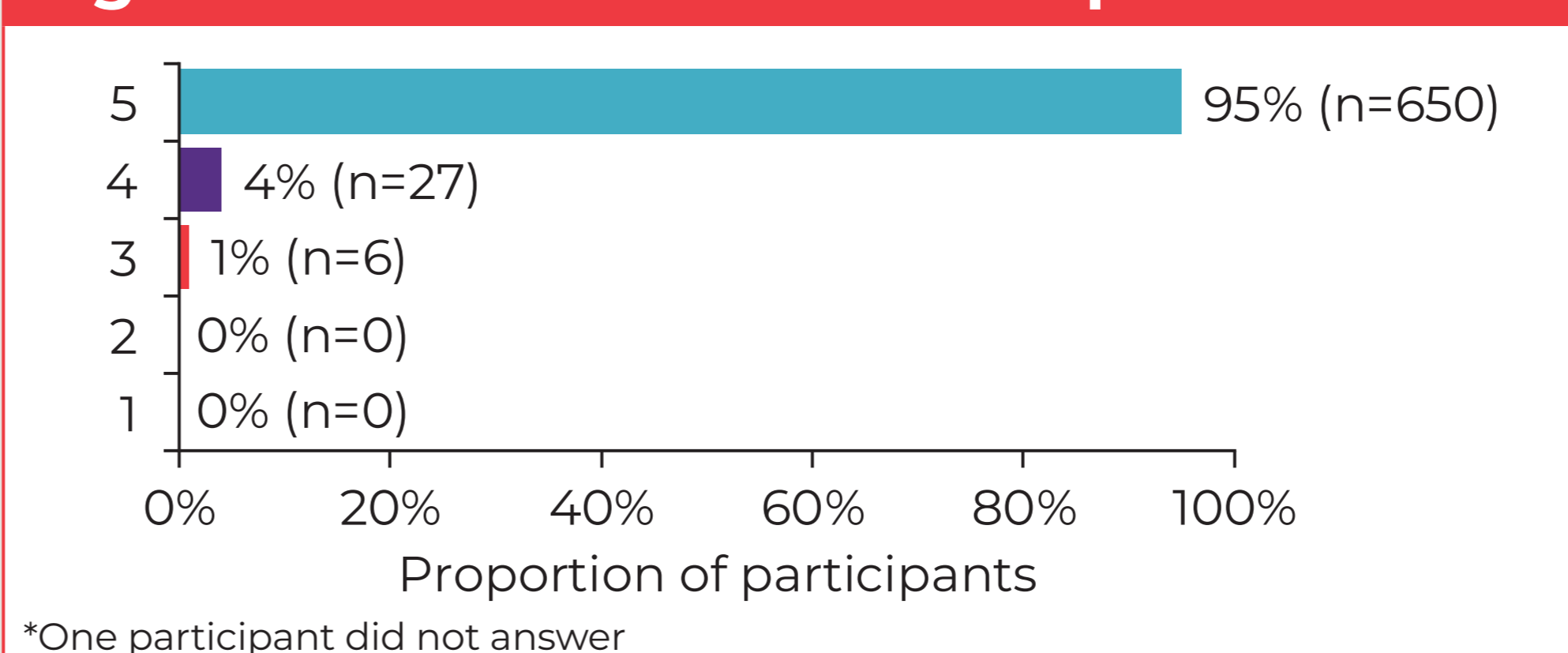
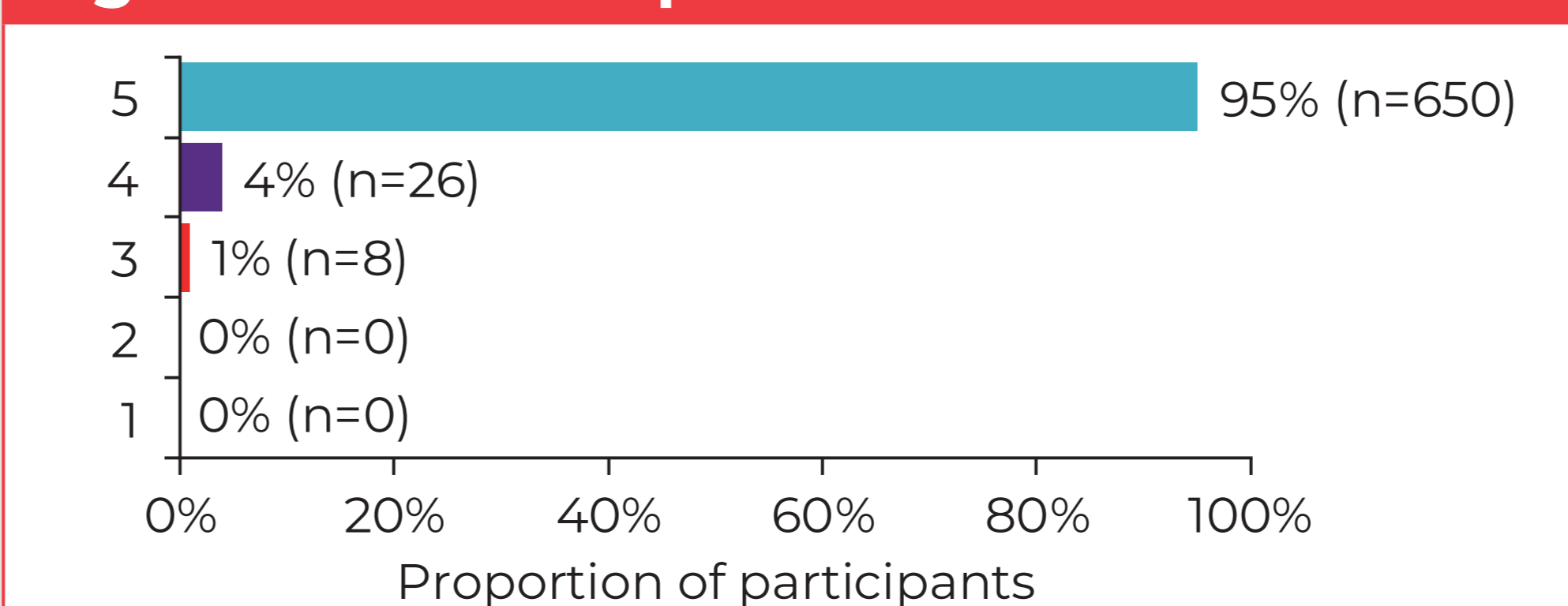


Figure 5. Value of presentation materials



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Discussion

- The role of infusion nurse educators has become more important due to the increasing number of complex infusion therapies
- The success of Ig therapy vitally depends on the quality of the education provided to HCPs⁶
- One of the challenges in recent years is the high turnover rate of HCPs. Health-system pharmacies are experiencing turnover rates of between 21% and 30%.⁷ The turnover rates for Registered Nurses, Licensed Practical Nurses, and home care aides was 28% in 2023⁸
- The need for HCP education at regular intervals is critical to provide consistency in infusion delivery, and ultimately in patient outcomes

Conclusions

- **Infusion nurses have been recognized for their clinical expertise in providing safe, quality patient care**
- **ISSs are vital members of the educational ecosystem, acting as peer educators to “train the trainer” and ensure HCPs are adequately prepared to educate patients and mentor other nurses**
- **HCPs often appreciate the ability to utilize the ISS as an educational resource**
- **The value of education the ISS provides to HCPs extends to the patients through the educational resources provided and improves the management of lifelong/life-threatening diseases**

References
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Disclosures
Employee of CSL Behring.

