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Background

A 20% increase in adult diabetes is anticipated by 2030 when 58% of the Credentialed Diabetes Educator (CDE) workforce will have reached retirement age. Fundamental to increasing equity in safe diabetes healthcare access across the health spectrum is a competent, flexible and adaptive workforce. Higher demand for health professionals with both diabetes and non-medical prescribing competencies warrants a more efficient means of developing the workforce. On any given day, up to a quarter of the consumers accessing healthcare services have diabetes. Consumers access health professionals in all areas of Australia who have different levels of diabetes experience. Conflicting health messages often leads to disengaged with health services. Health professionals cite lack of skills, confidence, time and, limited access to practical resources as common barriers. Further, competency frameworks nationally and internationally often focus more broadly on type 2 diabetes.

Aim

To inform the development of a Capability Framework to guide the practice of future health professional workforce involved in diabetes care



Definition of 'diabetes expert' for Delphi panel: Five years post-registration experience and credentialed as a CDE. Alternatively, their employment has a focus on diabetes education and care or research.

Figure 1: Location of practice

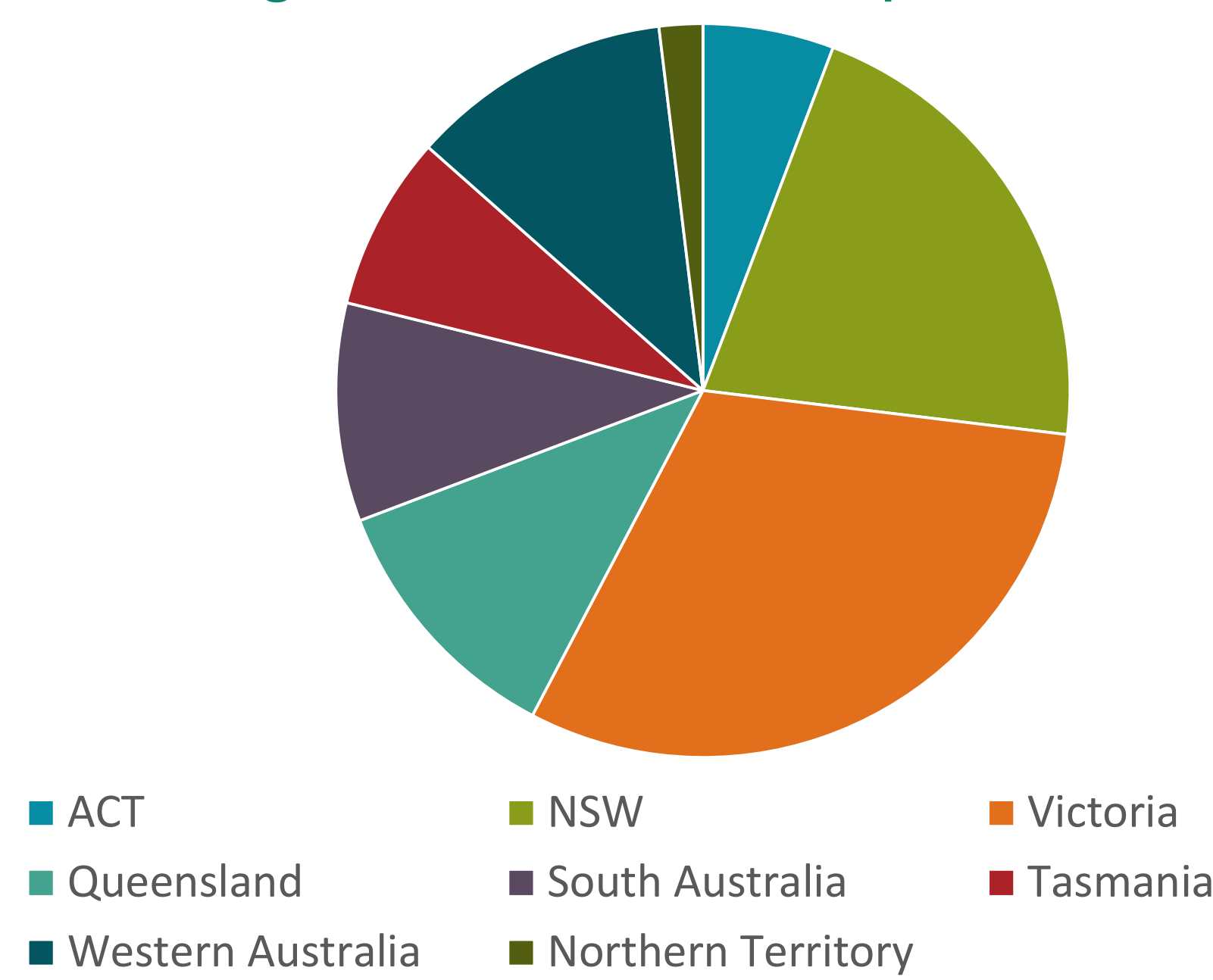


Figure 2: Area of remoteness

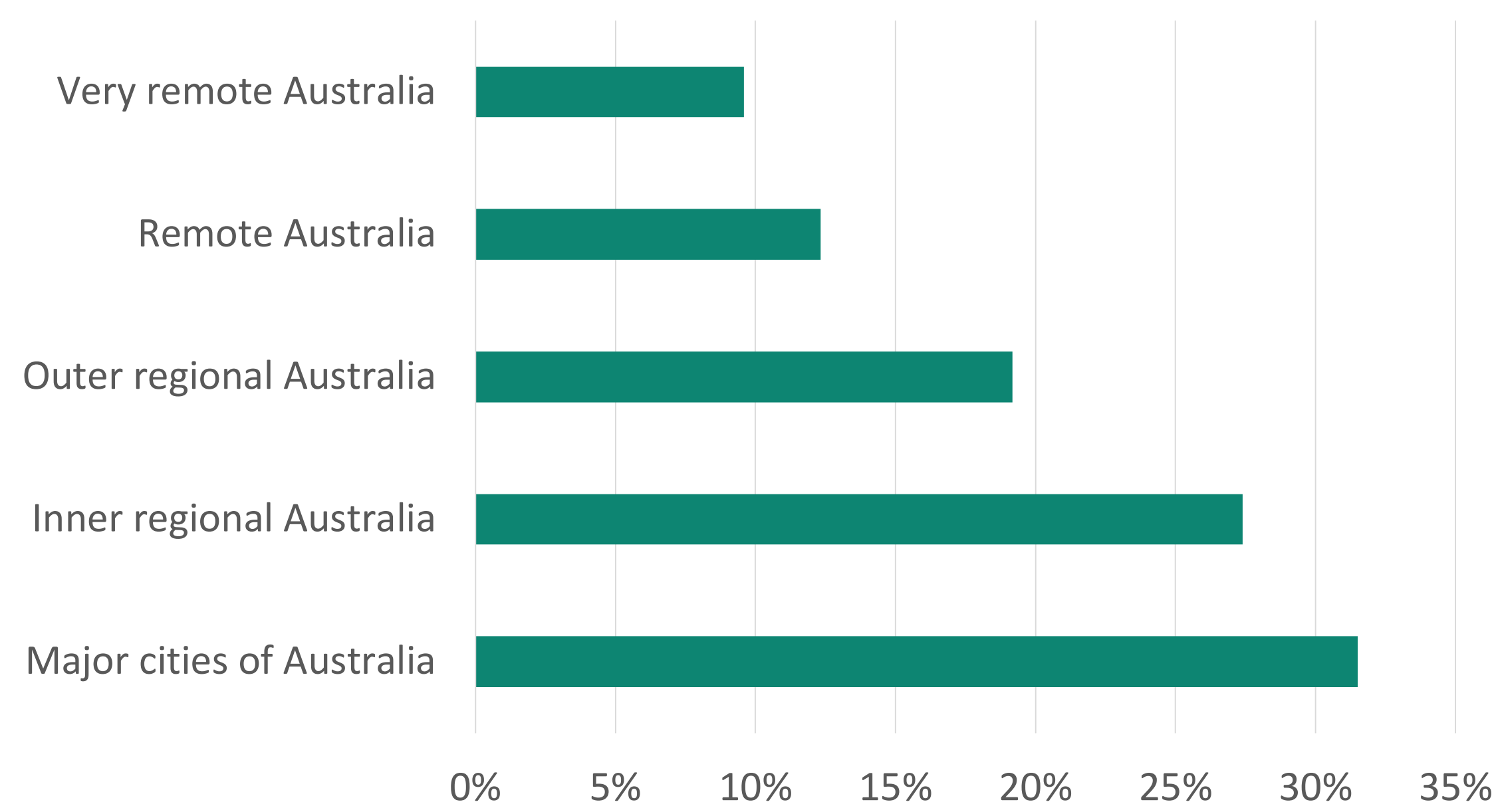
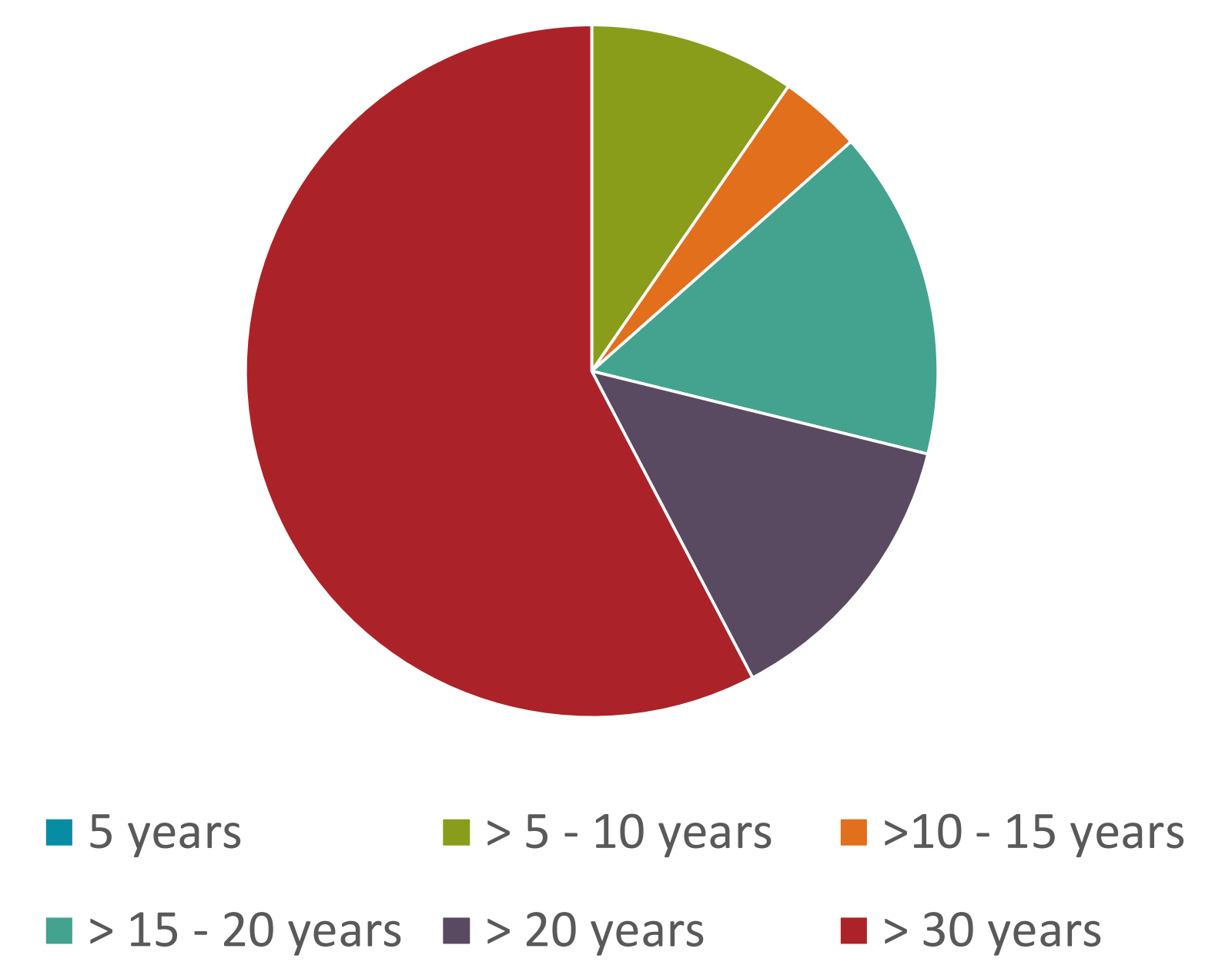


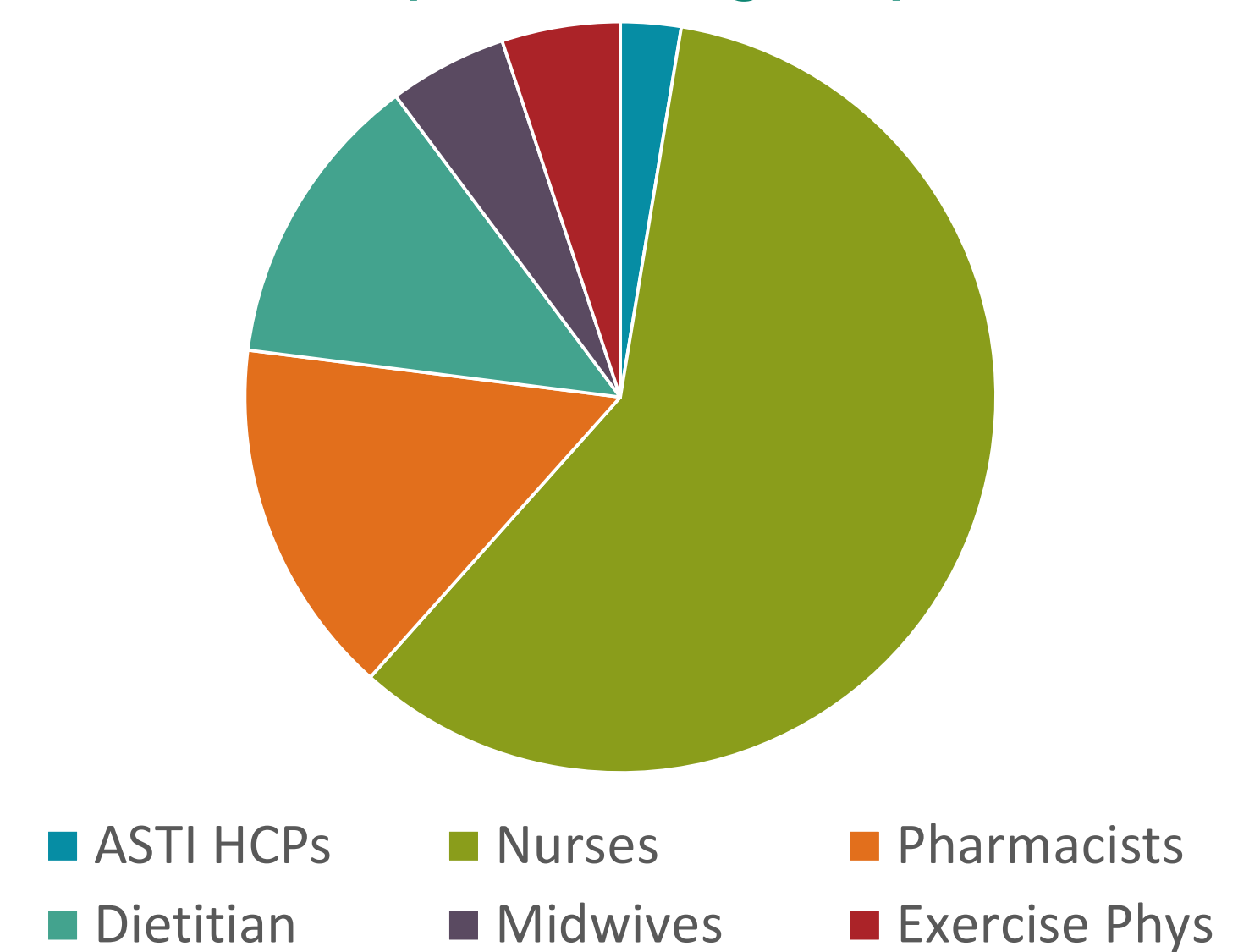
Figure 3: Diabetes practice



Method

The qualitative research used an online modified *Delphi* method to gain consensus. Accessing the opinions of a diverse range of diabetes expert health professionals and academics, of different disciplines and work settings was critical. A *Consultation Group* was engaged to inform the *Delphi* survey development phase. A pilot *Delphi* survey was administered via Qualtrics, an online platform, to six diabetes experts to test *Qualtrics* features and confirm questions captured the intended information. Open recruitment was used as the sampling approach. Once recruited an expert panel of diabetes health professionals from across Australia commenced the *Delphi* survey. The *Delphi* survey consisted of two phases, each with two rounds. Analysed data obtained from the first *Delphi* survey phase identified four key tiered health professional models to guide the Framework and a list of nine broad capabilities and their relevant competencies. An *Expert Advisory Group* (EAG) of five, were engaged to review the positioning of competencies, wording and omissions. The EAG also engaged in 'member checking' to ensure the trustworthiness of results. The *Delphi* expert panel ranked the preferred model for the Framework in phase one and the level of importance of the identified competencies for each of the capability areas until consensus achieved in phase two. Next, a *Focus Group* tested the practicality of the Framework.

Figure 4: Distribution of disciplines in groups



Results

- Near 100 diabetes expert health professionals were recruited to the consensus-building study
- 30 diabetes HCPs were engaged via the consultation and focus groups [$n=16$, 2018; $n=14$, 2019]; 5 diabetes experts made up the EAG and 6 supported the pilot study
- 57 from nursing, dietetics, podiatry, pharmacy, exercise physiology and academic backgrounds were administered the *Delphi* survey, *Delphi* panel representation included:
 - all Australian states and territories, as seen in Figure 1; the highest proportion from Victoria ($n=16$, 31%)
 - all areas of Australian Statistical Geography Standard - Remoteness Area, as seen in Figure 2; 32% worked in 'major metropolitan areas' and 22% worked in either 'remote' or 'very remote areas' of disadvantage
 - diverse work settings, tertiary (52%), primary (26%), academia (15%) and private practice (8%)
 - extensive experience, 87% had >15 years' experience in diabetes care, see Figure 3 and the majority from nursing discipline ($n=42$, 80%)
- Broader distribution of content experts from allied health disciplines was seen in the consultation groups ($n=14$, 41%), see Figure 4, EAG ($n=2$, 40%) and pilot group ($n=3$, 50%)

Discussion

The more significant number of nursing and Victorian involvement in the *Delphi* panel aligns with the current nursing versus allied health membership distribution of the Australian Diabetes Educators Association. The consultation groups and EAG saw a higher level of engagement by allied health professionals that allowed a broader consideration of practice issues. Area of remoteness is also an important consideration, as health professionals will often work differently, with limited resources and in isolation. The online *Delphi* and public consultation processes captured health professionals from all levels of areas of remoteness, work environments and settings.

Conclusion

Using *Delphi* as a method enables ease of access and reach to the breadth of diabetes health professionals across the nation. Also, it allows for the re-examination of valuable information to support a deeper understanding of essential features for diabetes care.

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