2018

NMBA Proposed registration standard: Endorsement for scheduled medicines for registered nurses prescribing in partnership – Public consultation paper

Submission from the

Australian Diabetes Educators Association

1 INTRODUCTION

This document is the response from the Australian Diabetes Educators Association (ADEA) to the NMBA public consultation paper regarding the proposed registration standard: endorsement of scheduled medicines for registered nurses prescribing in partnership. ADEA members were consulted in the preparation of this submission. This response relates to ADEA members, particularly registered nurse credentialled diabetes educators (CDEs).

This response addresses the questions posed in the current NMBA public consultation paper and is an extension of our previous submission at Attachment A.

Please forward any inquiries to the ADEA National Office.

Australian Diabetes Educators Association

Post: PO Box 163

Woden ACT 2606

Ph: 02 6287 4822

Email: inquiries@adea.com.au

Contact:

Dr Joanne Ramadge – CEO

2 COMMENTS AND KEY POINTS RELATING TO THE SPECIFIC QUESTIONS IN THE NMBA DISCUSSION PAPER

ADEA recognises that NMBA are proposing a model of prescribing in partnership for generalist registered nurses, acknowledging that there is already a pathway for midwives to prescribe through endorsement.

ADEA is supportive of expanding the scope of registered nurses to prescribing in partnership, however recommend that specialty areas be recognised and that prescribing in partnership is extended to all registered nurses, not just those working for an employer.

Prescribing in partnership

In general, ADEA agrees that suitably qualified and experienced registered nurses should be able to hold an endorsement to prescribe scheduled medicines in partnership with a partner prescriber, within their scope of practice.

It is unclear from the public discussion paper exactly what 'prescribing in partnership' means. That is, what is the role of the authorised (partner) prescriber? Who oversees the partner prescriber role and that the governance framework is in place and being followed satisfactorily?

ADEA is aware of RNs working in primary health care/ medical centres, where programs have been designed to upskill primary health care nurses in insulin titration. The anecdotal evidence is that some RN's are not comfortable performing this role and would prefer to continue to rely on the private practice CDE and GP to supervise insulin titration. The primary health care nurses are happy to assist and review the person with diabetes regarding their insulin dose adjustments, but they do not wish to take this role on themselves. Although nurses who are able to prescribe in partnership will have to undertake additional education in pharmacotherapy and prescribing, it is the nature of the medication and the complexity of prescribing in a complex condition, requiring specific knowledge that is the issue.

Governance Framework

ADEA agrees that a specified governance framework is important to be in place for the proposed registration standard, however there needs to be consideration of how to meet a similar framework for registered nurses working in private practice, and perhaps medical centres/GP practices and privately funded health services.

The guidelines state 'RNs endorsed to prescribe in partnership are required to be employed in a health service'. ADEA queries the wording and definition of 'health service'. Does this include privately funded services, primary health networks and general practice surgeries/medical centres?

A mechanism should be in place for all RNs, not just those who are employed in a public health service.

There are over 480 RN CDEs who are self-employed and provide exceptional patient care, having years of experience in diabetes self-management education. Not recognising this cohort of RNs in the proposed registration standard is doing the people with diabetes who consult private practitioners, a disservice. It may force people with diabetes to seek public services and medical centres with already lengthy waiting periods.

RN CDEs in private practice have a close working relationship with doctors and other members of the diabetes care team. A governance framework could be established with appropriate guidelines, a period of supervision and undertaking of ongoing professional development. A number of CDEs specialise in diabetes pregnancy, paediatrics and pump initiation, where the ability to prescribe would better support their patients.

As the proposal stands at present, the scope of practice and expertise of RNs working in private practice will be diminished. In this regard it seems at odds with the Federal Government's agenda to shift care of chronic disease into the community, and potentially reduces the standard of care currently offered to people with diabetes by allowing lesser skilled primary care nurses to perform insulin dose adjustment and prescribing, but not RN CDEs who have a wealth of experience in a particular area of specialty.

It is noted in the NMBA consultation paper that the clinical governance framework is not a prerequisite for endorsement by the NMBA. Therefore, all RNs could meet the requirements of the endorsement standard with a suitable prescribing in partnership arrangement that addresses the governance framework requirements.

ADEA is aware that a similar model of prescribing in partnership regarding insulin dose adjustment advice is in place for Queensland Health employees (RNs and accredited practising dietitians); feedback to ADEA by RNs and Dietitians working in Queensland suggests that many health services have not taken this up due to the additional work that is required to establish the governance framework. ADEA therefore recommends that an example governance framework could be specified by NMBA that could be adapted across all health services both private and public.

It is ADEA's understanding following the recent consultation forum at the Canberra Hospital presented by Katrina Halloran, that ADEA could develop and facilitate the governance policy for RN CDEs in private practice who wish to be endorsed for prescribing in partnership and have undergone the appropriate education and supervision.

ADEA proposes that they be the body to provide that governance structure for RN CDEs who are self-employed, and seeks approval from, and collaboration with, NMBA regarding this.

- ADEA is a self-regulating body and already has governance processes in place for CDEs, including a complaints and disciplinary action process.
- ADEA has experience in setting accreditation standards, credentialling standards and develops national clinical guidelines and standards of practice for CDEs.

- ADEA has in place a mechanism for ongoing monitoring through ADEA annual re-credentialling program.

Proposed education pathway for prescribing in partnership endorsement

ADEA suggests that the proposed education pathway for prescribing in partnership is inadequate:

- Two years' full time equivalent post initial registration experience is inadequate and should be three years at least. Additionally, the three years full time equivalent experience should be within their proposed scope of practice for prescribing in partnership. (For example, an RN working for three years in an acute medical ward who then moves into a primary healthcare nurse role where their scope of practice is chronic disease management should not be able to prescribe medications that pertain to that new role until they have been working in primary health care for three years).
- Minimum 3 months FTE supervised practice, either direct or indirect of a partner prescriber needs to be better defined. What is supervision and how is that different from prescribing in partnership once the period of supervision is completed?
- ADEA queries the definition of 'indirect' supervision. A definition would assist in understanding this term and requirement of the proposed education pathway in the discussion paper.

ADEA does agree that the following is appropriate:

- Two units of study that addresses the NPS Prescribing Competencies Framework
- Observation of practice and report provided by the authorised prescriber at the end of the supervision period.

Guidelines and registration standard content and structure

The content and structure for the registration standard: *Endorsement for Scheduled Medicines for Registered Nurses Prescribing in Partnership,* and the proposed *Guidelines for Registered Nurses Applying for Endorsement for Scheduled Medicines - Prescribing* in Partnership are not clear.

1. It is unclear from the public discussion paper exactly what 'prescribing in partnership' means. That is, what is the role of the authorised (partner) prescriber? Who oversees the partner prescriber role and that the governance framework is in place and being followed satisfactorily?

2. What is the definition of 'indirect' supervision? A definition would assist in understanding this term and requirement of the proposed education pathway in the discussion paper, particularly how this may relate to rural and remote services where the partner prescriber is not always present.
3. ADEA suggests that an example governance framework could be specified by NMBA that could be adapted across all health services both private and public. In lieu of an NMBA framework ADEA would be able to develop one for CDEs working in private practice to enable them to prescribe.
4. There is some concern from CDE nurse practitioners. The following quotes were provided by ADEA members who are also nurse practitioners:

"I believe the proposed partner prescribing model will lead to confusion regarding the roles of nurses. It will result in many different types of nurses; those nurses (EENs and RNs) who cannot prescribe and RN's who are endorsed to prescribe autonomously (NPs) and those who can only prescribe under a partnership/as an employee. I feel more work should be done to clarify and promote the autonomous prescribing role of the NP before another non-medical prescribing role is introduced."

"I do not know why this is happening when there is already a framework that exists for nurse practitioners. 2 years practice experience as an RN is nowhere near enough."

Appendix A

INTRODUCTION

This document outlines the response from the Australian Diabetes Educators Association (ADEA) to the NMBA and ANZCCNMO discussion paper regarding registered nurse and midwife prescribing, 2017. ADEA members were consulted in the preparation of this submission. This response relates to ADEA members, particularly registered nurse credentialled diabetes educators (CDEs) and midwife CDEs.

Please forward any inquiries to the ADEA National Office.

Australian Diabetes Educators Association

Post: PO Box 163

Woden ACT 2606

Ph: 02 6287 4822

Email: inquiries@adea.com.au

Contact:

Dr Joanne Ramadge – CEO

About the Australian Diabetes Educators Association

The Australian Diabetes Educators Association (ADEA) is the leading organisation for health professionals providing diabetes education and care and is committed to the highest standards of practice and professional conduct. The organisation sets a national benchmark of excellence in diabetes education and care through:

- Actively promoting evidence based diabetes education to ensure optimal health and wellbeing for those affected by, or at risk of, diabetes.
- Setting national standards and developing guidelines for the practice of diabetes education.
- Offering professional development programs and accrediting those developed by other organisations.

ADEA publications and standards include the National Standards of Practice for Credentialled Diabetes Educators (1), National Competencies for Credentialled Diabetes Educators (2), ADEA Code of Conduct (3) and Role and Scope of Practice of Credentialled Diabetes Educators (4).

Since 1986, ADEA has been implementing the ADEA Credentialling program, a professional recognition and development program to support healthcare professionals providing diabetes education and care. The ADEA Credentialling Program ensures Credentialled

Diabetes Educators™ (CDEs) are the healthcare practitioners qualified to provide a person-centred approach to diabetes education and care, empower patients and assist them in dealing with their daily self-management. Credentialled Diabetes Educators also support, advise and assist other health professionals, including general practitioners and endocrinologists in diabetes related health care (5) (4).

ADEA'S COMMENTS AND KEY POINTS RELATING TO THE SPECIFIC QUESTIONS IN THE NMBA and ANZCCNMO DISCUSSION PAPER

ADEA is supportive of expanding the scope of registered nurses and midwives to prescribing.

ADEA proposed framework

ADEA recognises that NMBA and ANZCCNMO are proposing a model of prescribing for general nurses and midwives. The framework presented by NMBA and ANZCCNMO in the Registered nurse and midwife prescribing – Discussion paper in Tables 1, 2 and 3, are generally appropriate when considering nurses and midwives in generalist roles.

The discussion paper refers to various terminology regarding prescribing. It is ADEAs view that the terminology used in any proposal going forward requires further consideration and review to ensure that terminology is well understood. For example for the second level 'designated prescribing/prescribing under supervision (however termed)':

- ADEA interprets this as a RN or midwife may have some level of '*autonomy*' and could be initiating, titrating and adjusting a medication without immediate consultation or direct supervision with an 'autonomous prescriber' (medical practitioner or nurse practitioner), therefore the word 'autonomous' becomes somewhat confusing.
- Similarly, 'prescribing under supervision' may not be an appropriate term as it could be interpreted as 'direct' supervision, rather than an element of mentoring/support to practice, with again a level of autonomy by the 'designated prescriber'.

ADEA interprets the first level, 'autonomous prescribing' as appropriate for nurse practitioners and endorsed midwives.

ADEA proposes a fourth category to assist in more clearly defining prescribing at different levels of RN and midwife scope of practice and that would apply more appropriately to RN and midwife CDEs practising at an advanced specialist level. We have used particular examples in this consultation paper relating to diabetes education to place context around the suggested framework in Table 1 below.

Table 1. Suggested framework for RN and midwife prescribing

	Prescribing via a structured prescribing arrangement (protocol prescriber)	**Designated Prescriber - supervised**	***Semi - autonomous prescriber (eg. CDE endorsed prescriber)***	**Autonomous prescriber – Nurse Practitioner**
Scope of prescribing	Able to identify the need for and supply medicines via approved protocol	Able to access and treat a range of conditions or specific conditions in collaboration with an autonomous prescriber (NP/MO) and local workplace guidelines	*Able to semi-autonomously prescribe in a specific area of practice only, ensuring appropriate communication between team members and the person taking the medicine*	Able to independently diagnose and treat conditions within their scope of practice. Collaborates with other health professionals as required
Education and experience	Undergraduate curriculum	Post graduate curriculum, with competencies in pharmacotherapy, medication management, QUM Minimum 2 years post graduate experience as a RN/Midwife	*Post graduate qualifications (diploma) in prescribing within a specific area of practice* *Minimum post graduate experience of 3 years in specialty area*	As per current NP qualifications and Endorsed midwife criteria
Prescribing authority	Limited to agreed protocol	In accordance with jurisdictional regulations and/or policy	*Authorised prescriber in accordance with state and territory poisons*	Authorised prescriber in accordance with state and

		frameworks and guidelines	*legislation, following a specific formulary for area of practice.*	territory poisons legislation
Regulation	State and territory legislation and local policies	State and territory legislation and local policies	*State and territory legislation and local policies* *Endorsement by NMBA*	State and territory legislation and local policies Endorsement by NMBA
Example	'Stepping Up' program. Primary Health Care nurses follow protocol from GP in general practice setting to titrate insulin, with specialty input from CDEs	CDEs provide advice for dose adjustment of insulin according to titration tools with the supervision of MO/NP, ensuring appropriate team communication.	*CDE Prescriber has autonomy regarding prescribing glucose lowering agents as well as other 'diabetes-related' medicines following a specific formulary.*	Nurse Practitioner working in diabetes, orders pathology, makes diagnosis and can prescribe with their scope of practice.

Rationale

Prescribing via a structured prescribing arrangement

The model of prescribing via a structured arrangement is already in place and has been evaluated as effective. The 'Stepping Up Program' (6) evaluated a nurse-led model of care for insulin initiation for people with type 2 diabetes. This model of care continued within the trial practices even after the research period had ended. A single 3-hour training session was provided with ongoing mentoring and support from local diabetes educators and endocrinologists when required. Simple tools and algorithms were provided and deemed an appropriate framework for the skills of both the GPs and practice nurses involved.

ADEA sees this as an appropriate level of prescribing for generalist nurses and midwives, whereby CDEs are used for mentoring, support and training, and the responsibility for the medicine management of the person with diabetes still lies with the GP. After consultation

with the GP, the practice nurse initiates insulin according to the GP or endocrinologists order and follows up with the patient by phone every 3 days following a specific protocol for titration.

Designated prescriber - supervised

This model is currently being rolled out in Queensland. RNs working in diabetes are able to apply for 'credentialing' (different to ADEA CDE status) to provide advice on dose adjustment for insulin (7). The RN must have extensive experience working within the field of diabetes, complete a competency based education package regarding prescribing, continue to work within a diabetes care team, and follow appropriate dose adjustment and communication protocols that have been designed in consultation with the diabetes care team, particularly the relevant medical officer/nurse practitioner. There are elements of autonomy in this model – the RN/midwife would not require direct supervision from an autonomous prescriber but rather have a relationship with another prescriber that reviews case studies and decision making. This model would necessitate good communication between the RN/midwife and members of the diabetes team. The example of the 'credentialing' within Qld Health only applies to insulin dose adjustment advice and does not include prescribing or initiating insulin, or any other glucose lowering agents.

Semi-autonomous prescriber

This model should be specific to specialty areas that the RN or midwife work within as their main scope of practice only, for example, the specialty of diabetes education.

The minimum level of education and recognition for a RN or midwife to undertake prescribing in this model within a diabetes management role should be the CDE, with the appropriate post graduate qualification (diploma) that includes specific units and competencies for pharmacotherapy.

ADEA grants status as a CDE in recognition of demonstrated experience and expertise in diabetes education and commitment to professional development and ongoing learning that meets the ADEA's expected standards. Recognition as a CDE is ADEA's commitment to people with or at risk of diabetes, their families, carers and health care providers that they can expect to receive quality diabetes education and advice.

To attain credentialling by ADEA as a CDE, RNs and midwives must complete:

1- Post graduate certificate in diabetes education and management
2- 6 months mentoring with an experienced CDE
3- 1000 hours of practice in diabetes education
4- 20 hours of continuing professional development specific to diabetes.

A referee report is also required from a supervising health professional that demonstrates the RN or midwife meets the National Competencies of a CDE (5) (2).

This model of semi-autonomous prescribing as a CDE is proposed by ADEA to be similar to that which has been adopted by other countries and has been evaluated with the following benefits (8) (9):

- Timely commencement of glucose lowering medication and other related diabetes medications (for diabetes related co-morbidities) improves diabetes outcomes.
- Improved time efficiency for the person with diabetes.
- Reduced health care costs to the person with diabetes.
- Workforce flexibility and solution to gaps in workforce, particularly in rural and remote areas.
- Increases trust and confidence in the diabetes care, increasing motivation to continue prescribed treatment.
- Holistic patient management that includes assessment, self-management education and person-centred care accounting for the person's lifestyle, social complexities and desires when discussing introducing a new medication or changing medication doses.
- Role satisfaction of the diabetes nurse specialist.
- Access to a wider range of treatment due to more thorough knowledge of medicines available for diabetes management and their appropriate use in diabetes management as part of an overall care plan.
- Improved healthcare team communication and collaboration.

The evaluation reports from the UK and New Zealand diabetes nurse prescribing projects have demonstrated no adverse outcomes – patient safety and quality of care continue to be achieved (8) (9).

Through member consultation, ADEA has anecdotal evidence from members regarding the advantages of RN CDE and midwife CDE prescribing in Australia from consumers and other health care professionals, which is in line with the research and evaluations in the UK and New Zealand:

Consumers:

- CDEs are more up to date with glucose lowering agents and diabetes related medicines and their indications than many GPs. CDEs being able to undertake semi-autonomous prescribing means the person with diabetes would access appropriate medication sooner, achieving timely glycaemic management to improve outcomes. It could take two weeks or more for the person to go back and see their GP, if they go at all.

- CDE consultation time is longer than with a GP, less expensive and allowing for more time with the person with diabetes, to explore any limitations and barriers to proposed interventions and assist through supportive self-management education.

Endocrinologists, Diabetes Specialists and GPs:

- Some GPs will ask the CDE for advice on prescription and titration of diabetes related medicines as they may lack confidence or wish to seek support from another health care professional with disease specific expertise before making changes. GPs recognise the expertise that CDEs have and value their input.
- It is seen as a waste of resources to refer a person with diabetes back to the GP for commencement of insulin and/or insulin titration, when the CDE has the skills to undertake this role.
- Allowing CDEs to prescribe and titrate diabetes related medications would free up time for endocrinologists to focus on the complex and complicated patients with diabetes rather than spending time making or overseeing straight-forward initiation or adjustments.

Prerequisites

ADEA believes that the prerequisites for semi-autonomous prescribing for an RN CDE or midwife CDE should be:

- CDE status through the ADEA credentialling program (ensures diabetes specific knowledge and skills in physiology, pathophysiology, clinical assessment, biochemistry, lifestyle interventions, diabetes complications, medication management, self-management education using person-centred care principles, and multi-disciplinary care planning)
- Minimum 3 years of practice as a CDE
- Additional post graduate attainment of skills and knowledge in pharmacology, pharmacokinetics, pharmacodynamics, diagnostics and quality use of medicines related to a specific and limited formulary.
- Practicum with a supervising autonomous prescriber demonstrating competence.
- Evidence of ongoing CPD activities related to diabetes pharmacotherapy through ADEA re-credentialling program.

ADEA already has established relationships with tertiary institutions and accredits the post graduate certificate in diabetes education. ADEA is in the best position to enhance the post graduate program in diabetes education and management to accredit appropriate pharmacology units to meet the requirements for RN CDE and midwife CDE semi-autonomous prescribing in the future, and in fact has already commenced discussions with the tertiary institutions regarding this. In preliminary discussions with ADEA accredited

universities, they have indicated they are willing to explore the implementation of the required units under the accreditation guidance of ADEA.

ADEA propose that we continue to explore semi-autonomous prescribing for CDEs and develop a more detailed and comprehensive model in consultation and collaboration with our members and NMBA and ANZCCNMO. ADEA would develop standards of practice and education in relation to the prescribing element of the CDE role.

Competencies

The NPS Competencies should be the basis of the competence framework, with the addition of specific competencies pertaining to the particular role of the RN CDE and midwife CDE. These prescribing specific competencies would be developed and reviewed by ADEA through the accreditation of the appropriate post graduate course containing specific pharmacology units and a prescribing practicum.

These could be reassessed through the ADEA re-credentialling program annually.

Regulatory policy and governance

The regulatory policy should be:

- Appropriate drugs and poisons acts in each state and territory, through a national approach.
- A protocol and defined formulary for medications able to be prescribed.
- Clearly defined role and scope of practice, considering both public and private practice.
- Clearly stated workplace policies and procedures, considering public and private practice.
- Regular audits of practice both in public and private practice.
- Evidence of education and supportive mentoring relationship with authority prescriber.

The governance arrangements to ensure quality use of medicines should be:

- AHPRA registration notation and utilisation of registration number as prescriber provider number to access PBS supported medications.
- Mechanism for monitoring competencies and audit through ADEA credentialling program with a report to AHPRA if prescribing competencies not met. ADEA already has this mechanism of monitoring and reporting of lapsed CDE status with the

National Diabetes Services Scheme (NDSS), the Department of Veterans Affairs (DVA) and Medicare.

- ADEA has a formal complaints system in place that is regulated through the ADEA Constitutional By-laws.

Other considerations

Other considerations to ensure the success of the framework:

- Regular case reviews and appropriate communication is essential among the health care team – use of technology will assist those in rural and remote areas.
- Single record keeping that can be accessed by all health professionals involved in the care of the person, for example 'my health record' to aid essential communication between providers.

Autonomous prescriber – Nurse Practitioner/Endorsed midwife

As per current education, endorsement requirements and role and scope of practice for Nurse Practitioners and endorsed midwives.

BACKGROUND

CDEs currently actively look for and identify the need to commence or review diabetes related medications, in their interactions with people who have diabetes.

It is common for people to not take their medication as prescribed. A 2004 systematic review by Cramer (10) identified diabetes medication non adherence rates of between 15-33% of people with diabetes not taking their oral medications as prescribed; only one third of insulin prescriptions were filled by younger people and 36% of insulin doses were not taken by people with type 2 diabetes. CDEs focus on developing understanding and rapport with their patients to facilitate person-centred care and enhance the self-management skills in the people with whom they work. This encompasses providing detailed education about their medication, its action, dose, potential side effects and considerations in remembering to take the medication at the right time and frequency.

This enables CDEs in designated circumstances to commence and titrate insulin and educate people with diabetes in the use of self-titration tools. These designated circumstances are outlined in the section on *Regulation and scope of practice in relation to medicines*. This strategy is used by CDEs so they can review blood glucose levels and insulin doses via phone, fax, email and face-to-face consultations.

ADEA has previously explored the area of non-medical prescribing for CDEs, with targeted review of the work in this area in New Zealand, the United Kingdom, the United States and Canada. ADEA developed a Position Statement on non-medical prescribing, *Australian Credentialled Diabetes Educators & Prescribing of Insulin & Glucose Lowering Agents* in 2015, and published two other related documents in 2012:

- *Managing Insulin Therapy in Ambulatory Care Settings: The Guiding Principles for Managing Insulin in Ambulatory Care Settings: A Quality Use of Medicines Strategy*
- *Initiating Insulin Therapy in Ambulatory Care Setting - National Standards for Developing and Assessing the Quality of Services: Initiating Insulin in Ambulatory Settings*

The Position Statement and the two guiding documents identified above, will be undergoing review, pending the outcomes from the NMBA process and are available on the ADEA website https://www.adea.com.au/about-us/our-publications/ and at https://www.adea.com.au/about-us/policy/position-statements/ .

Implications for RN and midwife CDEs

By 2025 the number of Australians with diabetes is predicted to have increased from one million to over three million people (11). The delivery of increasingly complex care across a nation the size of Australia will put pressure on the health budgets of the nation and individuals. At the same time the numbers of health practitioners delivering diabetes care are likely to decrease as an increasing proportion of the health workforce moves towards retirement. Health Workforce Australia estimated that without change there will be significant workforce deficits by 2025; 28% of nurses and 2% doctors (12).

RN and midwife diabetes educators have experience and knowledge in the care of people with diabetes and those at risk of diabetes, practice in accordance with the *National Standards of Practice for Credentialled Diabetes Educators* (1), and have diabetes education included in their position descriptions and the scope of their employment.

The ADEA is the regulatory agency for CDEs and is a self-regulating body. A CDE is a diabetes educator who has been recognised by the ADEA as having the academic qualifications, advanced knowledge, expertise and experience to integrate diabetes self-management education with clinical care as part of a therapeutic intervention.

All RN and midwife CDEs must remain authorised to practice by AHPRA in their primary discipline and commit to practising diabetes education according to standards, codes and guidelines set by ADEA.

CDEs and Quality Use of Medicine

Currently RN and midwife CDEs play an important role in the quality use of diabetes oral and injectable medications through their:

- Knowledge of medication range available to treat diabetes in Australia
- Active participation in professional development to maintain medication knowledge and clinical application
- Education of people with diabetes in the role, options, safe use, side effects and storage of diabetes medications
- Initiation of referral to medical practitioner for medication commencement, dosage review and titration
- Customisation of structured blood glucose monitoring regimens to assist people with diabetes and their health professionals to assess and evaluate lifestyle/medication effectiveness
- Education and evaluation of knowledge and skills of people with diabetes and health professionals in medication self-injecting and management
- Peer education
- Related policy development on quality use of medicines.

Content of undergraduate studies around pharmacology varies among the professional groups eligible for CDE status and the current Graduate Certificate in Diabetes Education and Management courses as they currently stand do not include competency assessed pharmacotherapy units that would meet semi-autonomous prescribing requirements as indicted in Table 1 of this discussion paper. ADEA is currently reviewing the accreditation requirements of the post graduate certificate in diabetes education and management to include pharmacotherapy competencies to meet the proposed designated prescribing model in Table 1 of this discussion paper.

Regulation and scope of practice in relation to medicines

Some RN and midwife CDEs, may through 'local credentialing' (7), delegation or referral from an authorised medical practitioner accept secondary prescribing responsibilities. This enables CDEs in designated circumstances to commence and titrate insulin and educate people with diabetes in the use of self-titration tools. This strategy is used by CDEs in some settings so they can review blood glucose levels and insulin doses via phone, fax, email and face-to-face consultations.

CDEs are also involved in the care and education of:

- Children and young adults under the age of 18 years with type 1 and type 2 diabetes
- Women with type 1 and type 2 diabetes during pregnancy
- Women with gestational diabetes requiring insulin management
- People using insulin pump therapy and continuous blood glucose monitoring systems.

If the scope of practice for RN and midwife CDEs was extended to include the semi-autonomous prescribing of insulin and other glucose lowering and diabetes related medicines, it is essential for the specific needs of these target groups to be considered.

What has been done elsewhere in diabetes education?

The United Kingdom

A number of evaluations conducted and published show improved patient care and satisfaction, increased access to medicines, reduction in waiting times and delivery of high quality care (13). Currently only nurses fulfil the role of diabetes educator in the UK and there is no credentialling process. The 2010 Diabetes Specialist Nursing Workforce Survey (14) identified 48% of the 159 participants prescribed medication.

United States (US)

In the US there is an advanced practice credential, i.e. Board Certified Advanced Diabetes Management (BC-ADM). Board certification is the process by which the American Association of Diabetes Educators (AADE) validates, based on predetermined standards, an individual's knowledge, skills and abilities in the area of advanced diabetes management. The BC-ADM is available to registered nurses with Masters or higher degree in a relevant clinical, educational, or management area such as education (med), nutrition, gerontology, advanced diabetes management, or other area relevant to the credential. Healthcare professionals who hold the BC-ADM certification adjust medications, treat & monitor acute and chronic complications, counsel patients to manage behaviours and psychosocial issues and to participate in research and mentor programs. The depth of knowledge and competence in advanced clinical practice and diabetes skills affords an increased complexity of decision making which contributes to better patient care (15). BC-ADM practitioners are able to adjust medications according to set protocols or may be able to prescribe, depending on their primary discipline scope of practice and/or the appropriate state legislation (16).

Canada

Certification as a Diabetes Educator in Canada is conducted by the Canadian Diabetes Educator Certification Board (CDECB). Before sitting the examination to become a Certified Diabetes Educator (CDE), candidates must be registered with a regulatory body in Canada as a health professional (17).

Under the Health Professions Act (HPA) RNs in British Columbia are able to perform insulin dose adjustment (IDA) within their scope of practice. IDA is defined as determining the dose, timing and / or type of insulin needed to achieve glycaemic management and occurs only in clients who are already on insulin therapy. Insulin is still initially prescribed by either a medical practitioner or nurse practitioner. IDA considers factors such as diet, exercise and blood glucose levels (18).

New Zealand

In 2011, twelve New Zealand diabetes nurse specialists from four sites successfully gained the right to prescribe diabetes related medications and devices for the treatment of people with

diabetes from the Nursing Council of New Zealand. This was achieved with the addition of a new regulation in the *Medicines Regulation ACT (1984)* for designated prescriber: Registered Nurses Practising in Diabetes Health. The program has been extended with twenty-six designated prescribers now prescribing insulin, oral agents, ACE inhibitors/ARBs, thiazide diuretics, calcium channel blockers and statins across New Zealand.

An evaluation of the roll out of the NZ program identified that it was:

- Safe and clinically appropriate
- Contributes to an effective diabetes specialist service
- Popular with patients, who say they are confident in the prescribing decisions
- Popular with nurses who appreciate the extra responsibility and efficiency gains for health teams (19).

Extending the Scope of Practice of RN and midwife CDEs in Australia

Medications are potent agents that have the power to cause negative as well as positive effects. It is for this reason that any extension to the practice of CDEs to include a level of semi-autonomous prescribing within the diabetes management field must be conducted in a thorough and structured way that focuses on the quality and safety of this area of service delivery and improve patient outcomes.

Increasing the scope of practice would increase the CDE's responsibility to comprehensively manage insulin, glucose lowering medicines and other diabetes related medicines, and fully utilise their clinical skills and education. It would prevent delays in the commencement and titration of insulin, especially in the rural and remote areas of Australia, and provide people with diabetes with a more comprehensive approach to their medication self-management by preventing conflicting messages between health professionals and gaps in consumer education. It will likely increase job satisfaction for CDEs and address the concern of many medical practitioners in relation to the time they have available to commence insulin and other glucose lowering and/or diabetes-related medicines.

Prescribing by CDE nurse practitioners (NPs) already exists and ADEA does not see a new model of prescribing for non NP CDEs will impact on the NP role as the NP role is much broader than prescribing within a limited protocol and formulary.

The ADEA's accredited education and credentialling process is currently insufficient in its ability to support this extension of practice. A revised model will need to address a safe and rigorous competency based approach to include prescribing. Consideration will need to be given to prescribing implications for CDEs providing specialist services to children less than 18 years of age, women during pregnancy and the commencement and titration of insulin pump therapy. ADEA is committed to developing appropriate educational and practice standards for CDE prescribing.

People with diabetes may present with a range of complexities requiring the need for strong multidisciplinary collaboration. When CDEs are legally able to undertake a level of semi-autonomous prescribing in the future, the expectation is for further enhancement of appropriate consultation with the person with diabetes, and with their consent, with other health professionals engaged in their care. This is already an expectation of CDEs as part of a well-functioning multidisciplinary health team that recognises the importance of person-centred care to improving health outcomes (20).

The experiences gained from the work already conducted internationally will provide a valuable additional support to the extension of the scope of practice of CDEs in Australia. A number of resources have been developed that would also be helpful e.g. Canada's Guide to Starting and Adjusting Insulin for Type 2 Diabetes (21).

References

1. **Australian Diabetes Educators Association.** *National Standards of Practice for Credentialled Diabetes Educators.* Canberra : ADEA, 2014. https://www.adea.com.au/wp-content/uploads/2009/10/ADEA-National-Standards-of-Practice-for-Credentialled-Diabetes-Educators.pdf.

2. **Australian Diabetes Educators Association**. *National Competencies for Credentialled Diabetes Educators.* Canberra : ADEA, 2017. https://www.adea.com.au/wp-content/uploads/2009/10/National-Competencies-for-Credentialled-Diabetes-Educators_Final_170824-1.pdf.

3. **Australian Diabetes Educators Association**. *ADEA Code of Conduct.* Canberra : ADEA, 2014. https://www.adea.com.au/wp-content/uploads/2009/10/ADEA-Code-of-Conduct.pdf.

4. **Australian Diabetes Educators Association**. *Role and Scope of Practice of Credentialled Diabetes Educators in Australia.* Canberra : ADEA, 2015. https://www.adea.com.au/wp-content/uploads/2009/10/Role-and-Scope-of-Practice-for-Credentialled-Diabetes-Educators-in-Australia-Final1.pdf.

5. **Australian Diabetes Educators Association**. *Being a CDE.* Canberra : ADEA, 2017. https://www.adea.com.au/credentialling/credentialled-diabetes-educators/.

6. **Furler, J. S., et al.** *Stepping up: a nurse-led model of care for insulin initiation for people with type 2 diabetes.* Melbourne : Family Practice, 2014, Vol. 31. https://doi.org/10.1093/fampra/cmt085.

7. **Queensland Health.** *Guiding principles for local credentialing of of registered nurses and accredited practising dietitians to provide advice on insulin dose: A guide for hospital and health services.* Queensland : State of Queensland, 2017.

8. **Wilkinson, J., et al.** *Evaluation of the Diabetes Nurse Specialist Prescribing project.* New Zealand : Massey University, 2011.

9. **Stenner, K. L., Courtenay, M. and Carey, N.** *Consultations between nurse prescribers and patients with diabetes in primary care: A qualitative study of patient views.* Surrey : International Journal of Nursing Studies, 2010, Vol. 48. doi:10.1016/j.ijnurstu.2010.06.006.

10. **Cramer, J. A.** *A Systematic Review of Adherence With Medications for Diabetes.* West Haven : Diabetes Care, 2004, Vol. 27. https://doi.org/10.2337/diacare.27.5.1218.

11. **Shaw, J. Tanamas, S.** *Diabetes: the silent pandemic and its impact on Australia.* Melbourne : Baker IDI, 2012. https://static.diabetesaustralia.com.au/s/fileassets/diabetes-australia/e7282521-472b-4313-b18e-be84c3d5d907.pdf.

12. **Health Workforce Australia.** *Health Workforce by Numbers - issue 2.* Adelaide : Health Workforce Australia, 2013.

13. **Bradley, E. and Nolan, P.** *Impact of nurse prescribing: a qualitative study.* Journal of Advanced Nursing, 2007, Vol. 59. doi: 10.1111/j.1365-2648.2007.04295.x.

14. **Diabetes UK and NHS Diabetes.** *2010 Diabetes Specialist Nursing Workforce Survey Report.* London : Diabetes UK, 2011.

15. **American Association of Diabetes Educators.** *Candidate Handbook for the AADE Borad Certified Advanced Diabetes Management (BC-ADM) Examination.* Chicago : AADE, 2015. http://www.castleworldwide.com/aade/AppSystem/6/Public/Resource/AADE_Candidate_Handbook.pdf.

16. **American Association of Diabetes Educators**. *Guidelines for the practice of diabetes self-management education and training (DSME/T).* Chicago : AADE, 2010.

17. **The Canadian Diabetes Educator Certification Board.** *The Canadian Diabetes Educator Certification Board Examination Handbook 2018 .* Ontario : CDECB, 2017. http://www.cdecb.ca/files/cdecb/2018%20-%20Exam/2018%20English%20Exam%20Handbook%20V1.pdf.

18. **BC Womens Hospital and health centre and BC Children's Hospital.** *Decision Support Tool (DST) for Insulin Dose Adjustment (IDA) by registered nurses.* Vancouver : Fraser Health, 2012. https://www.fraserhealth.ca/media/InsulinDoseAdjustment_CDST.pdf.

19. **Budge, C. and Snell, H.** *Registered Nurse Prescribing in Diabetes Care: 2012 Managed National Rollout Project Report.* Dunedin : New Zealand Society for the Study of Diabetes, 2013. https://www.nzssd.org.nz/healthprofs/13%2010%20Registered%20Nurse%20Prescribing%20in%20Diabetes%20Care%20final%20report.pdf.

20. **Australian Diabetes Educators Association.** *Person Centred Care for People with Diabetes.* Canberra : Diabetes Australia National Diabetes Services Scheme, 2015. https://personcentredcare.com.au/wp-content/uploads/2017/07/ADEA-_Person-Centred-Care-for-people-with-diabetes-Information-Sheet.pdf.

21. **Canadian Agency for Drugs and Technologies in Health.** *Guide to Starting and Adjusting Insulin for Type 2 Diabetes.* Ontario : CADTH, 2012. https://www.cadth.ca/smbg/tools/guide-starting-and-adjusting-insulin-type-2-diabetes.