Roles and competencies of the clinical psychologist in adult diabetes care : A consensus report

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REVIEW ARTICLE

Roles and competencies of the clinical psychologist in adult diabetes care—A consensus report

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Abstract

Aims: Psychological care is recognised as an integral part of quality diabetes care. We set out to describe the roles and competencies of the clinical psychologist as a member of the multidisciplinary adult diabetes care team, focused on secondary care.

Methods: The authors are clinically experienced psychologists involved in adult diabetes care, from Australia, Europe and North America, and active members of the international psychosocial aspects of diabetes study group. Consensus was reached as a group on the roles and competencies of the clinical psychologist working in adult diabetes secondary care, building both on expert opinion and a selective review and discussion of the literature on psychological care in diabetes, clinical guidelines and competency frameworks.

Results: The clinical psychologist fulfils multiple roles: (1) as a clinician (psychological assessment and therapy), (2) as advisor to the healthcare team (training, consulting), (3) as a communicator and promotor of person-centred care initiatives and (4) as a researcher. Four competencies that are key to successfully fulfilling the above-mentioned roles in a diabetes setting are as follows: (a) specialised knowledge, (b) teamwork and advice, (c) assessment, (d) psychotherapy (referred to as STAP framework).

Conclusions: The roles and competencies of clinical psychologists working in diabetes extend beyond the requirements of most university and post-graduate curricula. There is a need for a comprehensive, accredited specialist post-graduate training for clinical psychologists working in diabetes care, building on the proposed STAP framework. This calls for a collaborative effort involving diabetes organisations, clinical psychology societies and diabetes psychology interest groups.

KEYWORDS

clinical psychologist, competencies, diabetes care, roles, training

For Affiliation refer page on 8

1 | INTRODUCTION

Psychological well-being is recognised as an important element of diabetes care.[1] This is critical as an estimated one in four people with diabetes, both with type 1 and type 2, experience moderate to severe psychological distress and could benefit from professional psychological support.[2,3] Suboptimal psychological health is burdensome, negatively affecting quality of life as well as the person's motivation and capacity to self-manage diabetes.[4] Mental health problems thus constitute a risk factor for suboptimal glycaemic outcomes and diabetes-related complications.[5] Clinical guidelines recommend offering psychological support to persons with diabetes as an integral part of diabetes care, and the inclusion of a clinical psychologist as a core member of the multidisciplinary diabetes care team,[6] Diabetes care teams should work on normalising psychological difficulties related to diabetes and initiate a referral to a mental health professional when needed. In most cases, this professional will be a certified clinical psychologist, trained to work in a medical setting. Given the central role of self-regulatory behaviours in diabetes management and the complex psychophysiological interactions involved, clinical psychologists need to acquire specific knowledge and applied skills that extend beyond the requirements of most university and post-graduate curricula. Although recognised as a core member of the multidisciplinary diabetes care team, the roles and competencies of the clinical psychologist have not been clearly defined. It would appear likely that most psychologists working in diabetes care will not have received specialist training focused on diabetes that this is an area of need, particularly as the workforce expands. Here we review the key roles and competencies of the clinical psychologist supporting people living with type 1 and type 2 diabetes. These can help to lay the foundation for national and international accredited training programmes, and thereby contribute to quality psychological care for people with diabetes. We focus on adult care; the roles and competencies of paeditaric psychologists in diabetes are outside of the scope of this paper and are described elsewhere.[7] The defined roles and the competency framework presented here are based on both expert opinion and a selective review and discussion of the literature by the authors, with a focus on psychological care in diabetes, clinical guidelines and existing competency frameworks for clinical psychologists. The authors are clinically experienced psychologists involved in adult diabetes care, from Australia, Europe and North America, and active members of the international psychosocial aspects of diabetes (PSAD) study group with a special interest in further enhancing the role and competencies of the clinical psychologist in diabetes care.

What's new

- The clinical psychologist can fulfil different roles in adult diabetes care: as a clinician, advisor to the team, as communicator and promotor and researcher.
- To fulfil these roles effectively, four competencies are considered key, pertaining to (a) specialised knowledge, (b) teamwork and advice, (c) assessment and (d) psychotherapy (referred to as STAP)
- Clinical psychologists working in diabetes care should receive accredited specialist training, building on the defined roles and the proposed STAP competency framework.

2 | POSITION AND ROLES OF THE CLINICAL PSYCHOLOGIST

When considering the role of the clinical psychologist in diabetes healthcare, it is important to recognise that psychosocial care is the responsibility of all members of the diabetes care team. Indeed, in the first instance, psychological support is offered as part of routine consultations by physicians, nurses and other key health professionals of the diabetes team. They often have a longstanding relationship with the person and are well-placed to recognise and address emotional issues related to diabetes self-management.[8] However, due to time constraints and limited training in psychological care, the emotional support provided by diabetes professionals may not be sufficient, and in some cases, a referral to a clinical psychologist is warranted. The clinical psychologist has specialist knowledge and is licensed to offer psychotherapy to people experiencing behavioural and mental health problems.

It is important in the context of diabetes care that the clinical psychologist is part of, and recognised as a core member of, the diabetes multi-disciplinary care team. Access to the clinical psychologist is usually by formal referral from a medical specialist, nurse or dietician, or through team-based discussions. We should acknowledge that the clinical psychologist can be fully embedded in the team or accessed on the basis of a consultancy/liaison model from a general department of psychology or psychiatry. In any case, reliable resourcing of the diabetes psychology service should be ensured, allowing for sufficient time and means to address the psychological needs of adults with diabetes, depending on the setting and case load.

By interacting with the diabetes team, the clinical psychologist can promote psychologically informed care, and clarify indications for a referral to the psychological service.[9] A person with diabetes may be hesitant to consult a psychologist or other mental health professional. In some cases, this may be due to internalised stigma or previous negative experiences with mental health professionals where their experience of living with diabetes was not factored into the consultation. Providing (written) de-stigmatising information on the role of the clinical psychologist within the diabetes centre is therefore important.

In diabetes care, the clinical psychologist can fulfil different roles: (1) as a clinician offering psychological care to people with diabetes and their significant others, (2) as advisor to the healthcare team (training, consulting), (3) as a communicator and promotor of person-centred care initiatives and (4) as a researcher.

As a clinician, the licensed clinical psychologist is involved in direct care activities, including diagnostics and treatment. The latter comprises both general psychological support and disease-specific therapies (e.g. focused on diabetes distress, fear of hypoglycaemia, concerns about starting insulin therapy), usually on a polyclinic basis. The clinical psychologist also creates a bridge for the diabetes team to external mental health support where needed. Depending on the setting and available hospital services, the clinical psychologist collaborates with other mental health professionals, such as medical social workers and Liaison psychiatrists, especially when it concerns in-hospital care and/or complex psychosocial problems. The clinical psychologist also acts as an advisor and expert resource to other staff members. In interdisciplinary meetings, the clinical psychologist promotes the biopsychosocial approach, provides psychologically informed evaluations and formulations and promotes person-centred communication. The clinical psychologist is a communicator and promotor of person-centred initiatives, with a focus on well-being and self-management support for persons with diabetes and their families.

On an organisational level, the clinical psychologist oversees mental health screening and regular assessment of psychosocial functioning as part of ongoing diabetes care.[10] Clinical psychologists are trained to be scientist-practitioners and typically engage in clinical research projects, aiming to improve the understanding of psychosocial needs, as well as ascertaining the quality and efficacy of psychological care. In addition, clinical psychologists can also hold leadership roles at regional and national levels, where they work as part of leadership teams to improve psychologically informed care and develop national programmes and resources.[11]

3 | COMPETENCIES

Clinical psychologists are experts in mental and behavioural disorders, their underlying psychological, social and neurobiological processes, the use of corresponding assessments/diagnostic tools and evidence-based psychological treatments.[12] They are highly trained professionals who have undertaken significant post-graduate training, including assessment and treatments of psychological and neurocognitive difficulties through an enhanced understanding of the biopsychosocial model, and typically doctoral level research into the theory and application of psychological science.[13]

Therapies provided by the clinical psychologist are evidence-based, targeted at a specific problem and individualised to a person's needs and situation, recognising the unique impacts of their history, place in society and individual goals.[14] Clinical psychologists are routinely trained in mental healthcare settings, although some have completed training placements within medical care teams. In medical care settings, the clinical psychologist brings an in-depth knowledge of psychological issues and processes and how these interact to influence a person's behaviour in the wider context of their lives.

Similarly, the clinical psychologist will have been trained in enhanced assessment and engagement techniques. The clinical psychologist can share this knowledge with the healthcare team, in the form of training and consultation and by supporting the team to enhance their own skills and practice through coaching and supervision.

As clinical psychologists start to practice in diabetes, their knowledge and skills become increasingly applied and specialised. To successfully fulfil the above-mentioned roles in diabetes care, the clinical psychologist needs to have acquired key competencies in terms of (a) specialised knowledge regarding diabetes, (b) teamwork and advice, (c) assessment and (d) psychotherapy (what we refer to as the STAP competency framework) (see Table 1).

We discuss the four competencies in more detail below.

3.1 | Specialised knowledge

Clinical psychologists are trained and licensed to assess and treat a broad spectrum of mental health problems and disorders. Working in the context of diabetes care brings additional clinical challenges, such as helping the person to cope with a sense of threat, loss and unfairness and the realisation of having a lifelong condition that requires continuous self-regulation in order to minimise the risk of long-term complications. Clinical psychologists should be aware of how the experience of living with and self-managing diabetes affects cognitive, emotional,

TABLE 1 Summary of key competencies for clinical psychologists in diabetes care (STAP framework).

Specialised (diabetes) knowledge
• Aetiology and epidemiology of types of diabetes
• Symptoms, signs and risks of blood glucose fluctuations
• Comorbidities and long-term diabetes-related complications
• Diabetes treatments (including lifestyle, medication and devices)
• Glucose metrics (HbA1c, time in range, time above range, time below range, variability
• Impact of diabetes on cognitive function
• Psychosocial impact of living with diabetes (including specific challenges, e.g. sports, pregnancy, stigma)
• Facilitators and barriers to self-management and behaviour change
• Prevalence and consequences of diabetes-specific psychological problems
• Prevalence and consequences of common co-morbid mental illnesses and neurocognitive issues
• Specific medical risks in psychologically vulnerable persons (e.g. self-neglect, self-harm)
• Glycaemic effects of psychotropic medication, alcohol and drugs
• Evidence-based psychological treatments for people with diabetes
Teamwork and advice
• Inform persons with diabetes and healthcare professionals about the role and competencies of the clinical psychologist
• Participate in multidisciplinary team meetings
• Consult, advise and collaborate with healthcare professionals
• Offer teaching, training and supervision
• Co-ordinate person-centred initiatives
• Act as bridge between diabetes and external mental health professionals
• Provide leadership for development of psychologically informed care across disciplines
• Conduct research & audit
Assessment
• Use of integrative/bio-psychosocial model
• Employment of generic and diabetes-specific diagnostic tools
• Illness perceptions, self-efficacy, coping and diabetes self-management behaviours
• Impact of diabetes on psychosocial functioning
• Role of social support
• Psychological symptoms, problems and disorders and their impact on self-management
• Neurocognitive function and impact on self-management
• Psychological problem definition/diagnosis based on holistic theory
• Indication for psychotherapy and/or a referral
• Report to medical specialist and team, and suggest discussing treatment adjustment where needed
Psychotherapy
• Use evidence-based therapy models
• Shared decision on needs-based psychotherapy, focused on promoting engagement in diabetes self-care and/or improving mental health
• Adjust/integrate diabetes-related issues into psychotherapeutic approaches
• Offer individual, group, couple and/or family therapy (face-to-face and/or online)
• Monitor psychotherapy outcomes (psychological, self-management)
• Report therapy outcomes to medical specialist and team, and offer advice where needed

behavioural and social functioning, both for the person and their significant others.[15] This requires up-to-date diabetes-specific knowledge, including the different types of diabetes, their complications and comorbidities and current medical management strategies, including health behaviour and lifestyle recommendations, medications and devices. It is important that the clinical psychologist understands the different parameters of glucose regulation (HbA1c, time in range, time above range, time below range, glucose variability, hypo- and hyperglycaemia), their role in diabetes management and what they mean to the person with diabetes. With the increasing use of diabetes digital technology, such as insulin pumps, glucose sensors and hybrid closed loop systems, the clinical psychologist should be up-to-date on new developments and their psychosocial implications.[16]

Clinical psychologists need to have a good understanding of the specific sources of emotional distress associated with diabetes and the challenges associated with their management, including the experience of stigma.[17,18] It is essential that the clinical psychologist has in-depth knowledge and understanding of the epidemiology of psychological problems and neurocognitive issues in people with diabetes and their impact on the person's self-management capacity, glucose regulation and psychosocial functioning.[19] Diabetes-related distress, depression, fear, anxiety, adjustment difficulties and eating disorders are among the most common psychological problems and warrant special attention. Co-morbid mental illnesses are likely to be significant barriers to optimal self-management and achieving optimal glucose regulation.[20]

A thorough understanding of the medical risks associated with suboptimal diabetes management, including the risks of self-neglect and the use of diabetes medications

for self-harm, can facilitate early recognition and prevention and management of such risks. The clinical psychologist should be aware of the special risks of hyperglycaemia in pregnancy for both the mother and the unborn child in type 1 and type 2 diabetes and gestational diabetes.[21]

When supporting a person who is using psychotropic medication, the clinical psychologist should be aware of potential metabolic effects of such medications that may temporarily impair glucose regulation and weight management efforts.[22]

While the focus in consultations often is on emotional problems, the clinical psychologist needs to understand and appreciate the role of cognitive function in diabetes and its impact on self-management, both in younger and older individuals. This includes cognitive issues, impaired reading and/or numeracy skills, level of health literacy and specific neurodevelopmental conditions that can compromise executive function and self-regulatory behaviours, for example, attention deficit disorder. The clinical psychologist should be aware of the risks of the acute (transient) and long-term effects of hypoglycaemia and hyperglycaemia on the brain, and the increased prevalence of dementia in the older diabetes population.[23]

3.2 | Teamwork and advice

There is growing recognition of the importance of delivering psychologically informed care to effectively support diabetes self-management.[24] As such, the clinical psychologist can significantly enhance routine diabetes care as a diabetes team worker and advisor, with the ultimate goal of promoting awareness of psychological issues and building psychologically sensitive care. Clear examples of psychologically informed diabetes care can now be seen around the world, from the addition of behaviour change principles to routine diabetes education, to the training of diabetes staff to use psychological approaches within their consultations. Evidence-based diabetes self-management support programmes and structured psycho-educational (group) interventions have been developed for adults with type 1 and type 2 diabetes that are grounded in psychological theory and are usually guided by a clinical psychologist and a diabetes educator (e.g. diabetes nurse specialist).[25–27] Such teamwork helps to increase the acceptability and efficacy of these interventions and strengthens the collaboration between the clinical psychologist and the diabetes care team.

Clinical psychologists are trained to act in a senior capacity within healthcare teams, regularly providing consultation, supervision and training for colleagues across disciplines. The clinical psychologist can help healthcare professionals better understand how individual characteristics can significantly impact a person's experience with diabetes and influence their response to treatment and management strategies. Accessing this support creates positive outcomes in terms of upskilling non-psychologist staff to understand, recognise and support psychosocial issues, which in turn helps to improve standards of care.[25] Furthermore, clinical psychologists in healthcare settings are uniquely placed to act as a bridge between medical care and mental health teams, by bringing teams together, acting in a coordinating role, identifying unique risks and providing shared training and supervision opportunities. The less medicalised role of clinical psychologists also allows them to bridge the gap between services and the people with diabetes who use them; clinical psychologists are well-placed to promote and help implement person-centred initiatives, for example, around person-reported outcomes with a focus on well-being.

3.3 | Assessment

The clinical psychologist plays an important role in establishing a plan for structured monitoring of psychological well-being in regular diabetes care and in overseeing the monitoring process. It is recommended that diabetes professionals evaluate the psychological well-being of people with diabetes shortly after diagnosis and at periodic intervals thereafter, as part of ongoing care. In addition, assessment is indicated when there is a meaningful change in diabetes treatment, health status or life circumstances. For the purpose of psychological monitoring and screening in diabetes, practical and validated questionnaires are available for use in multiple languages.[28] Outcomes may flag a need for in-depth psychological assessment and intervention, warranting a referral to the clinical psychologist, particularly when significant distress may be a concern.

The involvement of the clinical psychologist in diabetes care is usually referral-based and needs to be agreed upon by the person with diabetes. Referrals can occur for different reasons. First, and most commonly, a referral can be the result of an agreed need for active support in achieving better diabetes outcomes. Second, when a person feels seriously distressed by their diabetes, with or without a need for active support to achieve better clinical outcomes. Third, because the person is struggling with broader psychological problems that need to be addressed and are not necessarily diabetes-related (e.g. depression, anxiety, psychiatric issues), and yet are likely to impact diabetes self-management and thus glycaemic outcomes. It is not always initially clear for the referrer and the individual with diabetes, what exactly the problem is. A referral

to the clinical psychologist can help to clarify the nature and severity of behavioural and psychological problems, if and how they are related to diabetes, and—if needed—make an informed decision on the best treatment.

As in mental healthcare settings, the clinical psychologist working in diabetes care uses psychological assessment to create a formulation of the person's difficulties (either explanatory or descriptive) and a treatment plan, if so indicated. The clinical psychologist is often the first professional with whom the person interacts in the diabetes clinic where the focus is on emotional health, rather than on glucose management. It is important to inform the person with diabetes about the role of the psychologist, confidentiality, the assessment process and possible next steps.

Assessment by the clinical psychologist includes a review of the medical record and at minimum a clinical interview, often supplemented with use of diagnostic tools (questionnaires, neuropsychological tasks), proxy reports (e.g. partner) and observations, depending on the case. The clinical psychologist screens for symptoms of depression, anxiety, eating problems and diabetes distress and evaluates the person's psychosocial functioning in the context of diabetes. Various psychological variables are reviewed, including: the person's views and beliefs about their diabetes, the perceived need and readiness to accept psychological support, coping styles, personal goals and values, psychological resources, personality traits (in so far as they affect coping with diabetes), the social environment (conflict, support, cohesion, functioning, stigma, socioeconomic standing); the impact of diabetes on different life domains (including sleep, fatigue, relations) and the impact of medication and glucose management devices and technologies.

Where potential neurocognitive issues have been identified as a cause for concern, the clinical psychologist may undertake a formal neuropsychological assessment or refer to a colleague clinical neuropsychologist, where indicated and available.

Both generic and diabetes-specific diagnostic instruments are usually part of the assessment. Well-established, widely used generic questionnaires, for example, the beck depression inventory[29] and hospital anxiety and depression scale[30] allow for comparison of scores across a broad range of different populations, including persons with a chronic medical condition. Although there may be some overlap in symptomatology between diabetes, depression and anxiety, the diagnostic accuracy of generic instruments has been established.[31] Diabetes-specific questionnaires, such as the problem areas in diabetes scale[32] and the diabetes distress scale,[33] both for measuring diabetes-related distress, the hypoglycaemia fear survey,[34] and the diabetes eating problem survey,[35] have the advantage of tapping into issues that are specific to people with diabetes, and are closely linked to diabetes self-management behaviours and clinical outcomes.

The clinical psychologist is able to identify psychological disorders and problematic behaviours that are specific to the context of diabetes, such as a phobic fear of hypoglycaemia, and type 1 disordered eating, where the individual reduces or stops taking their insulin to lose weight.[36]

The clinical psychologist enquires about sexual health in relation to diabetes, given the fact that diabetes and its vascular complications constitute a risk for sexual problems among both women and men with type 1 or type 2 diabetes.[37] If needed, and available, a sexual health specialist can be consulted for further investigation.

Special attention to the risk of post-traumatic stress disorder (PTSD) is needed, given the high potential for trauma in the context of diabetes (e.g. diagnosis, severe hypoglycaemic events and iatrogenic trauma from healthcare services) and a negative association with diabetes outcomes.[38] Other psychological and neurocognitive issues can also present and affect diabetes self-management, including autism and severe mental illness (e.g. psychotic disorders, bipolar disorder), that can lead to chronic emotional dysregulation. In cases of addiction or severe mental illness, the clinical psychologist will usually work closely with a psychiatrist or another external mental health specialist. Importantly, when referred to a mental health setting, the person with diabetes will remain under diabetes care, calling for an integrated care pathway. Here the clinical psychologist can help in managing complex care needs.

Based on the information gathered during the assessment, the clinical psychologist drafts a 'holistic theory', presenting the association between an individual's problems and strengths, and together with the person and broader network, where applicable, selects goals for therapy. Psychological assessment and formulation are guided by the biopsychosocial model, where the clinical psychologist incorporates medical, psychological as well as social factors. In some settings, a psychiatric classification, that is, diagnosable disorder as formulated in the DSM-5 TR or ICD-11 is required for reimbursement of psychological services.[39,40] This may limit the possibilities of psychological support, as in many cases, symptoms of diabetes-specific distress do not meet criteria for a diagnosed mental disorder. However, both diagnostic manuals acknowledge that persistent behavioural and emotional difficulties related to a medical condition, such as diabetes, may indicate a need for professional help.

The outcomes of the assessment (e.g. therapy, referral) are reported back to the diabetes team and relevant

professionals with the consent of the person and, where applicable, discussed in the diabetes team meeting. For psychological reasons, the clinical psychologist may advise the team to explore options of temporarily adjusting the diabetes treatment and/or changing the care schedule to better accommodate the persons' needs.

3.4 | Psychotherapy

Given the setting and the broad spectrum of psychological problems—ranging from coping difficulties to more severe psychological problems and mental illnesses—the clinical psychologist needs to be proficient in offering a range of time-limited psycho-educational and therapeutic approaches, tailored to the needs and capacities of the person with diabetes. Several types of psychotherapy, sometimes referred to as psychological counselling, have been shown to be applicable in people with diabetes. There is ample evidence that psychological treatment helps to reduce psychological distress, with modest effects on self-management and glycaemic outcomes.[41,42] Effect sizes with regard to reducing depressive symptoms are similar to those found in the general population.[43] The majority of treatment studies have tested cognitive behavioural therapy (CBT), including so-called third-generation CBT, such as mindfulness and acceptance and commitment therapy in people with diabetes,[44] while compassion-focused therapy has shown success in improving health-related outcomes in diabetes.[45]

Psychotherapy can be offered individually, for couples, families or in small groups. A group setting, usually between 8 and 12 clients, can be efficient and promotes sharing of experiences, exchanging information and peer support. Online psychotherapy is increasingly used and has been shown to be acceptable and effective in persons with diabetes.[46]

Given the unique challenges faced by people with diabetes, existing psychotherapy protocols for common psychological problems (e.g. depression, anxiety) may need to be adapted and/or supplemented with diabetes-specific topics, for example, related to hypoglycaemia, lifestyle issues and long-term complications. Psychological interventions that are 'diabetes friendly' are not only more attractive and engaging for persons with diabetes, but they also tend to lower diabetes-specific distress, benefiting diabetes self-management and glycaemic outcomes.[47]

4 | RECOMMENDATIONS

Addressing the psychosocial needs of people with diabetes and their significant others is pivotal, and best achieved by integrating psychological services into diabetes care. It is important to ensure that certified clinical psychologists are available and trained to become proficient 'diabetes psychologists'. We are aware that in many settings, and particularly in low-resource countries, there is a shortage of mental health services in general, and licensed clinical psychologists may not be available in diabetes care. In these circumstances, efforts should be focused on linking to mental health services outside the diabetes clinic and involving experienced clinical psychologists from other settings to assist diabetes professionals becoming more proficient in offering psychological support to people with diabetes. Training of medical staff, nurse educators and dieticians in basic psychological techniques and delivering manualised psychoeducational interventions then becomes a priority. Also, digitally based psychological self-help programmes can help provide access to psychological support for a large audience without direct involvement of psychology professionals.[48]

In settings where there is access to clinical psychologists, accredited training programmes should be made available, for which the proposed STAP competency framework can help lay the foundation. A few international examples of formal diabetes training programmes for psychologists currently exist. The German Diabetes Association offers a post-graduate training for psychologists and psychotherapists, consisting of six seminars, coupled with supervision and a substantial number of working hours in a diabetes centre to become a 'psycho-diabetologist'.[49] The American Diabetes Association in partnership with the American Psychological Association offers a Mental Health Provider Diabetes Education Program for licensed mental health professionals that consists of a 7-hour live course and an additional 5-hour online course.[50] Both courses are interesting examples to further explore and should prove helpful in developing a truly comprehensive, accredited training programme for clinical psychologists working in the field of diabetes that can be implemented across countries. Development and implementation of an accredited programme for 'diabetes psychologists', requires close collaboration between diabetes associations, diabetes psychology interest groups, such as the international PSAD study group, and clinical psychology societies. Such an accredited training programme can help to ensure the quality of psychological services, to the benefit of adults and their loved ones who are faced with the challenge of living with diabetes and its psychological sequelae.

AUTHOR CONTRIBUTIONS

All authors have contributed to the discussion and manuscript writing and approved the submitted manuscript.

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CONFLICT OF INTEREST STATEMENT

All authors are clinical psychologists, with no other interest than to promote professional training of clinical psychologists working in diabetes care and thereby contribute to quality improvement.

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