Private practice dietetics: A scoping review of the literature

Received: 11 December 2023 | Revised: 21 February 2024 | Accepted: 15 March 2024

DOI: 10.1111/1747-0080.12877

Nutrition & Dietetics Journal of Dietitians Australia WILEY

REVIEW

Private practice dietetics: A scoping review of the literature

Jennifer Donnelly MDiet, APD[1] | **Rebecca Lane PhD**[1] | **Louisa Walsh PhD**[1,2,3] | **Roger Hughes PhD, APD**[1]

[1]Department of Nursing and Allied Health, School of Health Sciences, Swinburne University of Technology, Hawthorn, Victoria, Australia

[2]Centre for Health Communication and Participation, Department of Public Health, La Trobe University, Bundoora, Victoria, Australia

[3]Burnet Institute, Melbourne, Victoria, Australia

Correspondence
Jennifer Donnelly, Department of Nursing and Allied Health, Swinburne University of Technology, John Street, Hawthorn, VIC 3122, Australia.
Email: jtdonnelly@swin.edu.au

Funding information
Australian Government Research Training Program Scholarship

Open access publishing facilitated by Swinburne University of Technology, as part of the Wiley - Swinburne University of Technology agreement via the Council of Australian University Librarians.

Abstract

Aim: Private practice is one of the most rapidly growing, but under-researched employment sectors for graduate dietitians in Australia, limiting evidence-based workforce development. This scoping review examines existing international literature to gain an understanding of the current private practice workforce size, distribution, demography and workforce development considerations, including competencies, supply and demand, remuneration and professional development activities.

Methods: The databases MEDLINE, EMBASE, CINAHL, EMCARE, PsycInfo (Ovid) and grey literature were systematically searched in August 2023 using key search terms to identify studies for inclusion. Articles were included if they related to private practice dietetics and described an aspect of workforce. Original research, government and organisational reports, statements of practice and websites providing governmental or organisational statistics were included. A directed content analysis and qualitative constant comparison technique were used to deductively map intelligence sources against a workforce development framework. A gap analysis was also conducted to provide a focus for future workforce development research.

Results: A total of 72 peer-reviewed and grey literature sources were included, with 65% of the studies being Australian-based publications. Private practice dietetics research interest has increased in the last decade. Despite a breadth of published sources, this review found little published data on workforce size, distribution, demography, supply, demand, continued professional development and remuneration, indicating a significant gap in the evidence base. Existing literature focuses on workforce challenges and barriers, the work of private practice dietitians, with limited exploration of competency requirements for graduate private practitioners.

Conclusions: The literature on the private practice dietetics workforce is lacking worldwide, which constrains evidenced-based workforce development

initiatives. Workforce development research across all workforce aspects is warranted to address current evidence gaps.

KEYWORDS
competency, dietetics, graduates, private practice, workforce

1 | INTRODUCTION

Private practice dietetics encompasses dietitians offering consultations in one or more primary care settings, both as contractors in large multidisciplinary medical practices and as sole traders or directors of a business enterprise. Private practice dietetics is a rapidly growing area of the dietetics workforce in Australia, increasingly becoming the location of employment for graduating dietitians.[1,2] The expansion of private practice dietetics can be attributed to structural changes in reimbursement, increases in graduate supply and changes in public health policy which outsource service delivery to the private primary care sector.[1–9] Understanding the drivers of workforce expansion is important to inform workforce planning and management, including a focus on workforce preparation to ensure that new graduates are adequately prepared to practice in areas of workforce growth safely and successfully.

Key drivers of private practice dietetics workforce expansion have been changes to health policy and an increase in demand for personalised nutrition services. For example, in Australia, changes to billing arrangements for allied health services under the universal health insurance scheme in 2004 led to public patients being able to access private practitioners using public funding to cover or subsidise costs.[5] Likewise, the National Disability Services Scheme was legislated in 2013, with a full rollout of the scheme by 2020, which provides funding for nutrition and dietetics services for eligible patients.[10] Private practice dietitians also provide services to clients under Department of Veteran's Affairs, WorkSafe and to patients who may be privately billed via an out of pocket fee and claim a subsidy with private health insurance funds.[11–13] In addition to these policy drivers, evidence supporting community-based chronic condition prevention and management and personalised nutrition have been identified as two areas where demand is growing in the United Kingdom, United States and Canada.[14,15] Despite the growth in the private practice dietetics workforce, previous research has raised concerns about the adequacy of workforce preparation and practice governance in private practice dietetics.[1] The dietetics workforce in Australia is governed by a professional self-regulatory system based on core competencies, practitioner accreditation standards and mentoring systems for new graduates.[16–18] It is a requirement that programmes provide competency-based education. These standards have been modified over the past decade to become more culturally inclusive, less prescriptive and to place greater emphasis on issues.[16,19] For example, cultural, ethical and legal safety competency, as well as clinical competency and evidence-based practice in conjunction with professional, collaborative and research practice.[16] The trend in the competency standards has been to generalise competencies rather than emphasise modes of practice. This reflects an assumption that contemporary competency standards adequately reflect the competency needs for practice in private practice dietetics. Previous scholarship has challenged this assumption in the public health practice context.[20,21]

With an increasing number of private practice dietitians working in primary care, it is imperative that educators understand the work required of private practice dietitians, the competencies required to be effective in the field and the teaching and learning exposures required for students to develop these competencies.[22,23] A failure to do so can contribute to work underperformance, business failure and be detrimental to patient care and health service delivery.[24]

This study aims to examine the existing literature relevant to workforce development specific to private practice dietetics against a workforce development framework. The secondary aim is to identify gaps in the literature to inform future priority areas required to support private practice dietetics workforce development research.

2 | METHODS

A scoping review with an evidence and gap analysis was selected to map the literature on evolving topics and to identify the current gaps in the literature.[25] The scoping review protocol was not previously published; however was conducted according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) checklist,[26] and with reference to the *JBI Manual for Evidence Synthesis*.[25] Ethical approval was not required.

The search strategy was developed based on the review's aim using the PCC (population, concept and

context) structure,[27] with technical assistance from two librarians. A systematic search of five electronic databases, including MEDLINE (Ovid), CINAHL, Emcare, Embase and PsycInfo (Ovid), was conducted in August 2023. No language or date limits were set. The search strategy is outlined in Supplement S1. All records identified were exported into Covidence,[28] and duplicates were removed. Title, abstract and full-text screening was undertaken by two authors. Any conflicts were resolved via discussion. Reference lists of eligible studies were hand-searched to identify additional eligible studies. Grey literature was also searched using the terms in Supplement S1 and conducted via Google search engine in August 2023.[29] The first 100 hits were screened (i.e. 10 pages), initially via the Google search screen, followed by any relevant sites viewed in full.[30] PDF formatted data was saved from included pages and used for extraction. Two reviewers completed screening, J.D. and R.H. Duplication screening and consensus on eligibility and conflict resolution was completed during the screening process. Eligible studies were determined based on the criteria outlined in Table 1.

Data extraction of included papers was completed in a Microsoft Excel spreadsheet, which included year of publication, author, journal and country where the research was conducted or the article was published, type of study and methodology. A deductive content analysis of included intelligence sources against a pre-determined workforce framework developed by the authors from a previously documented conceptual workforce framework for public health was completed and mapped.[31,32] This analytical framework included foci on workforce size, demographics, supply (preparation), demand (employment), work, competency, continuing professional development, workforce challenges and remuneration. A narrative review was then conducted, textualizing key literature and relevant gaps.[33]

3 | RESULTS

The search returned 2648 peer-reviewed articles and 40 grey literature sources, 72 met the criteria for inclusion in the scoping review (Figure 1). Characteristics of the articles are presented in Table 2 with further details available in Supplement S2. Included sources are listed in alphabetical order by author within a year and grouped as peer-reviewed literature and reports. Of the included sources, 57 (79%) were peer-reviewed research literature and 15 (21%) were organisational or government reports. A total of 52 (72%) were published in the past decade, which includes all of the grey literature sources (Figure 2). The majority of included sources are from Australia ($n = 47$; 65%).

The studies included in this review were mapped against a pre-determined workforce analysis framework.[31] Mapping against each focus in the framework is presented in Table 3, and the definitions, as well as key findings against each focus, are outlined below.

TABLE 1 PCC criteria for inclusion of studies.

Criteria	Population	Concept	Context
Inclusion	Private practice dietitian Private practice dietetics workforce Graduate private practice dietitians GP associations with private practice dietitians	Workforce: Size Distribution Demography Supply/preparation Demand Competency Work Workforce challenges Remuneration	Original research Government reports Organisational reports Websites if providing government/organisational statistics Statements of practice
Exclusion	Nutritionists (if not also a dietitian) Dietetic technicians Other health professionals		Clinical interventions Personality or learning styles of private practice dietitians Tasks performed in areas outside private practice dietetics Protocols Abstracts if not captured elsewhere Commentaries Opinion articles Letters

Abbreviation: PPC, population, concept and context.

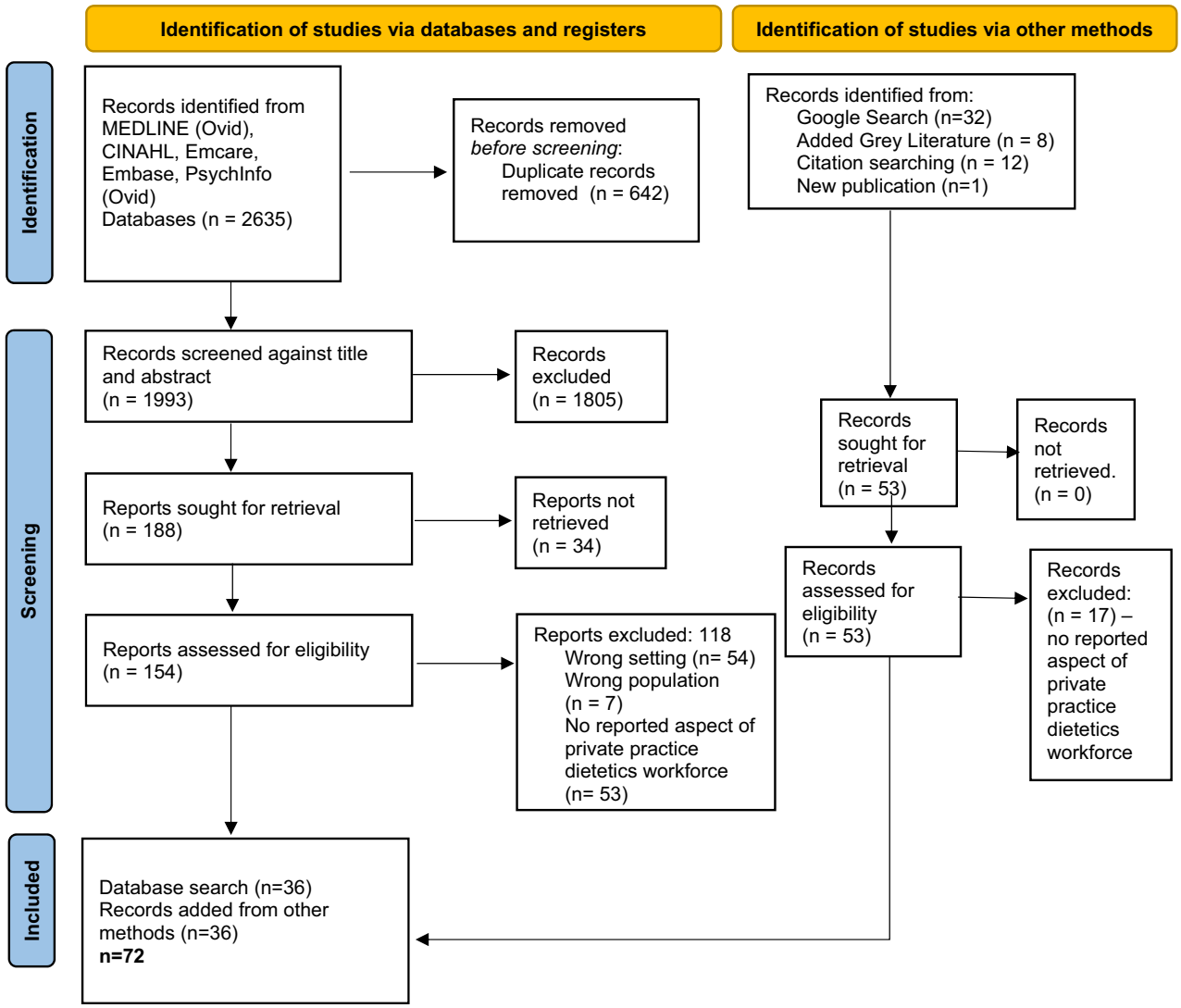

FIGURE 1 PRISMA 2020 flow diagram for new systematic reviews which included searches of databases, registers and other sources.

A total of 18 sources examined or reported estimates on the size of the private practice dietetics workforce, with most ($n = 14$) published in the last decade. The most common methods for measuring the size of the private practice dietetics workforce were cross-sectional sample surveys,[1,3,9,44,50,69,80,85,89,90,93] and census and accredited body data surveys.[6,37,51,87,97,99,100] In Australia, Dietitians Australia annual reports from 2018 to 2022 indicated that the dietetics workforce is increasing at a rate of approximately 5%–9% per year concurring with other workforce reports that recount a growth of 10% each year.[7,8,66,95,96] The total Accredited Practising Dietitians registered with the peak governing body in Australia was 7171, of which 3160 (44%) were listed as working in private practice, as of September 2023 (unpublished data).

The number of dietitians working in private practice appears to be increasing in Australia.[22,35,75,97] A doubling of the workforce between 2004 and 2015 was reported in Australia; however, statistics were not publicly reported.[22] In New Zealand, 2019 data identified that 18% of the dietetics workforce reported private practice to be their main workplace.[92] In the U.S. workforce, there were 74 700 dietitians and nutritionists in 2021, with a predicted increase of 7% between 2021 and 2031.[99] Outpatient care centres and self-employed workers made up 18%. There was also a reported shortage of healthcare professionals, with evidence that there is an inability to find employment or an attraction to increased wages in alternative fields, leading to dietitians leaving the workforce.[101]

Similarly to other Australian and international data, the number of Canadian dietitians is also steadily increasing, with 11 925 Registered Dietitians in 2017.[102] Consistent with a number of other Western countries, inadequate dietetics workforce supply to meet demand

was also recounted in Canadian data, also reporting an increase in dietitians working in primary care due to a primary healthcare reform which aimed to tackle the increasing prevalence of chronic disease.[103]

Workforce distribution refers to the geographic distribution of the workforce relative to populations in need and the environment in which the work is performed. Limited workforce data exists on the distribution of dietitians nationally and internationally; however, only a quarter ($n = 20$; 28%) of the included sources described the distribution of private practice dietitians. The majority of existing studies were smaller survey samples,[2,6,9,30,47,61,82] or studies reporting on data on the broader workforce.

The workforce demographic of private practitioners refers to the statistical characteristics of the population, such as age, gender and employment status. Although workforce demographic data exists across the broader workforce, less than a quarter ($n = 16$; 22%) described the specific demographics of private practitioners. The available literature, which is largely over 10 years old, depicted the attributes of private practice dietitians as being predominantly female,[50] running a business enterprise,[50] having prior hospital-based clinical practice,[50] working part-time[3,39,41,44,50] and no difference in hours worked between dietitians in sole private practice and those working outside of private practice.[50]

Several articles highlighted predominantly part-time work status and a common trend to work in multiple work locations and across domains of practice.[3,39,41,44,50] The majority of this data is also over a decade old. Ball et al.,[50] reporting on the working profile of private practice dietitians in Australia, noted as many as 74% of dietitians perceived themselves as business proprietors. Experience in the clinical/hospital setting prior to work in private practice was recounted in 84% of respondents. A part-time schedule of less than 20 h per week was reported in 57% of those working solely in private practice.

Workforce supply (preparation) refers to the phase of workforce development, which includes the demonstration of competencies prior to graduation (usually in university courses), with the outcome being graduate dietitian supply. An aspect of private practice dietetics workforce supply/preparation was reported in 19 (26%) of the included sources. The supply of graduate dietitians in Australia is increasing.[9] Predictions and statistics of the supply of private practice dietitians are limited; however, there is evidence that graduate dietitians are entering the private practice dietetics workforce at an

TABLE 2 Characteristics of private practice dietetics source included in the scoping review, $n = 72$.

Parameter	No. of publications	Percentage (%)
Country		
Australia	47	65
Canada	9	13
United States of America	4	6
New Zealand	3	4
The Netherlands	3	4
United Kingdom	2	3
Portugal	1	1
South Africa	1	1
Switzerland	1	1
Brazil	1	1
Type of publication		
Original published research	57	79
Government and organisational reports	12	17
Statement of practice	2	3
Webpages	1	1

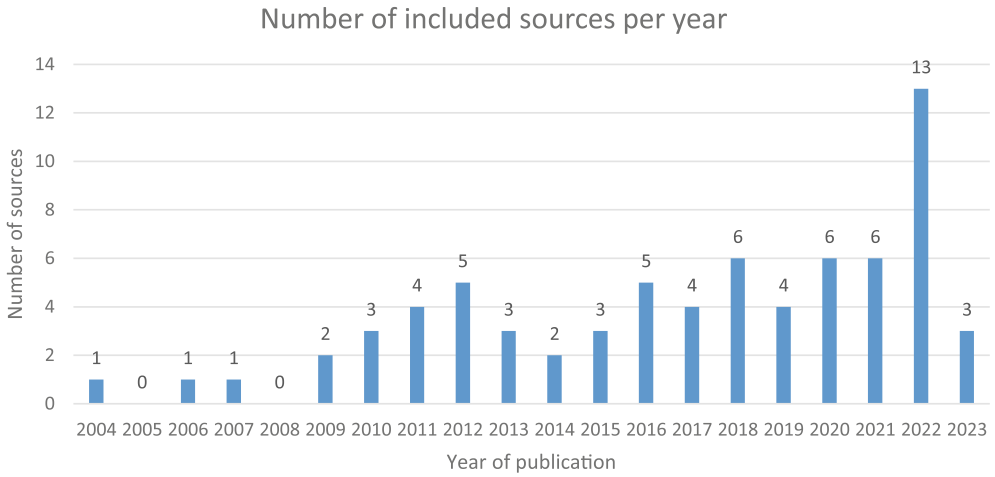

FIGURE 2 Number of included publications per year.

TABLE 3 Mapping of intelligence sources against private practice dietetics workforce analysis framework.

Intelligence source	Size	Distribution	Demography	Supply (preparation)	Demand	Competency	Work	CPD	Workforce challenges	Remuneration	Country
Peer-reviewed literature											
Davison et al.[34]										●	Canada
Brown et al.[35]	●	●									Australia
Cant et al.[36]					●		●		●	●	Australia
Mitchell et al.[37]	●	●		●	●	●	●		●		Australia
Pomeroy et al.[38]							●		●		Australia
Cant et al.[3]	●	●	●		●	●	●		●	●	Australia
Cant et al.[39]	●	●	●			●	●		●	●	Australia
Cant et al.[40]		●				●	●		●	●	Australia
Brown et al.[41]		●			●				●		Australia
Pearce-Brown et al.[42]										●	Australia
Flesher et al.[43]				●			●				Canada
Hanekom et al.[44]	●	●	●			●	●		●		South Africa
Brown et al.[45]									●		Australia
Capra[46]			●			●	●				Australia
Hooker et al.[47]		●	●		●				●	●	USA
Mitchell et al.[48]					●		●				Australia
Tol[49]					●		●				The Netherlands
Ball et al.[50]	●	●	●				●	●	●	●	Australia
Blades[51]	●						●				UK
Cant et al.[52]					●						Australia
Verbakel et al.[53]						●	●				Dutch
Brown et al.[54]							●		●	●	Australia
Cant et al.[55]					●		●		●		Australia
Jansen et al.[22]							●		●	●	Australia
Beckingsale et al.[56]	●					●	●	●			NZ
Beckingsale et al.[57]			●			●	●		●		NZ
Carvalho et al.[58]		●									Australia
Harper et al.[59]							●	●			Australia
Hill et al.[60]				●							Canada

(Continues)

TABLE 3 (Continued)

Intelligence source	Size	Distribution	Demography	Supply (preparation)	Demand	Competency	Work	CPD	Workforce challenges	Remuneration	Country
Odgers-Jewell et al.[61]		●	●		●	●	●	●	●		Australia
Segal et al.[62]				●							Australia
Teixeira et al.[63]							●		●		Portugal
Jones et al.[64]							●		●		Australia
MacDonald et al.[65]		●	●	●	●	●	●		●		Canada
Morgan et al.[66]				●							Australia
Morgan et al.[2]		●	●	●		●		●	●		Australia
Morgan et al.[67]				●		●			●		Australia
O'Connor et al.[68]						●	●		●	●	Australia
Siopis et al.[69]	●	●							●		Australia
Nagy et al.[70]						●	●		●		Australia
Sastre et al.[71]					●				●		USA
Siopis et al.[72]		●	●		●	●	●				Australia
Blair et al.[30]		●	●	●	●	●		●	●	●	Australia
Caswell et al.[73]						●					Canada
Clark et al.[74]							●		●		Australia
Heafala et al.[75]		●	●	●		●	●				Australia
Blair et al.[1]	●	●	●	●		●	●		●		Australia
Boak et al.[76]						●	●		●		Australia
Clark et al.[23]				●			●				Australia
Davidson et al.[77]					●	●	●	●	●		Australia
Golz et al.[78]				●		●					Switzerland
Harper et al.[79]							●		●	●	Australia
Joo et al.[80]	●										USA
Kirkegaard et al.[81]							●	●	●	●	Australia
Blair et al.[82]				●	●	●			●		Australia
Clark et al.[83]							●		●		Australia
Kirkegaard et al.[84]							●		●		Australia

TABLE 3 (Continued)

Intelligence source	Size	Distribution	Demography	Supply (preparation)	Demand	Competency	Work	CPD	Workforce challenges	Remuneration	Country
Total peer-reviewed literature $n = 57$											
Grey literature											
Health Workforce Australia[6]									●		Australia
Dietitians of Canada[85]	●	●	●						●		Canada
Dietitians Australia[86]						●	●				Australia
Dietitians of Canada[87]							●		●		Canada
Dietitians of Canada[88]				●	●		●		●	●	Canada
Victorian State Government[9]	●	●	●	●	●	●	●	●	●		Australia
Dietitians of Canada[89]	●			●		●					Canada
NSW Ministry of Health[90]	●			●	●				●		Australia
Boak et al.[91]						●		●			Australia
New Zealand Institute of Economic Research[92]					●		●		●		NZ
Baladia et al.[93]	●										The Netherlands
Department of Health[94]				●	●				●		UK
Dietitians Australia[7,8,95–97]	●							●			Australia
The British Dietetic Association[98]						●	●			●	UK
U.S. Bureau of Labor Statistics[99]	●					●				●	USA
Total grey literature $n = 15$											
Total included sources $n = 72$											
Total sources for each framework focus	18	20	16	19	21	30	43	10	43	17	

Abbreviations: CPD, continuing professional development; Qual, qualitative; Quant, quantitative.

increasing rate in many countries.[1,57,75,82] In a recently published study covering Australia and New Zealand,[1] 28% of graduates were reported as employed in private practice for at least one job, with no more than 16% acquiring hospital positions. Graduates in this study also revealed that they would have benefitted from additional support from their universities to assist with entry-level practice and employability in relation to private practice skills, job-seeking skills and preparation for diverse areas of practice. Clinical dietetics was the preferred field (48.4%), followed by private practice (33.2%).[1]

An Australian study of graduates from 2017 to 2019 concluded that 55% were employed as private practice dietitians compared to 31% employed in the hospital setting, with only 40% employed full-time.[75] Networking and rural relocation were also noted as key factors in the employment of new graduate dietitians with placements during university competency development recognised as a catalyst to direct employment.[75]

Limited published employment data made conclusions about graduate employability difficult; however, inadequate available positions and an apparent oversupply of new graduates have been highlighted.[2] Graduates have expressed job insecurity and precarious employment, for example, short-term, casual or contractor roles as concerns.[1] An oversupply of dietetics graduates in Australia was reported in the Australia's Health Workforce Series report published in 2014.[6] A more recent study exploring the experiences of dietetics students regarding dietetics workforce preparation and preparedness described, in parallel, increasing competition and a perceived oversupply of dietetics graduates.[66] In a report published in 2022,[94] the Northern Ireland Regional Dietetics workforce encompassed 365 dietitians, but contrary to Australian data, a challenging, overstretched, and what was perceived as an unsustainable vacancy rate of 15.6% was reported. In consequence, the report called for a further 455 graduates over the following decade to manage demand. The same report outlined the introduction of paediatric and adult dietitians within general practitioner (GP) practices as part of the GP Federation as a service development opportunity.

Workforce demand refers to the number of private practitioners required to perform the work required. Of the included sources, 21 (29%), primarily Australian, described an element of workforce demand relative to private practice dietetics. Private practice dietetics is part of the contemporary dietetic employment landscape, in part due to the move towards ambulatory care.[1,104] Chronic Disease Management is significantly driven by GPs referring via Team Care Arrangements and GP Management Plans, which is the impact of policy changes in 2004 with the aforementioned enhancement of the Medicare Services Scheme.[5] Several studies discussed drivers in GP referrals.[48,55,71] The demand for private practitioners to meet the needs of rural and remote communities to address the gaps in public dietetics services has been highlighted.[41,69]

Competency is the skill that focuses and concentrates on the learners and their actions or active participation through learning, whilst professional competence defines what a person is capable of doing well, effectively and following professional standards.[105] The included studies examined skills, knowledge and attributes broadly required for dietetic practice ($n = 30$; 42%). Although competency standards exist for dietitians, it has been acknowledged that there is a demand and current gap in some of the key entrepreneurial and management competencies for business success.[16,24,51,106] It is unclear and inadequately reported as to whether these are entry-level or post-entry-level competencies. Business start-up, business leadership, business management and marketing skills have been highlighted.[16] Further evidence that dietitians were in need of improvements in non-clinical skills, particularly management, communication and marketing skills were outlined in the Victorian State Government Dietetics Workforce Report.[9] Inclusion of business and marketing skills in degree courses for private practice dietitians was also coveted.

Furthermore, the framework focus on competency and cultivating positive intra and interprofessional relationships for private practice dietitians was explored in three studies in Australia and New Zealand.[38,48,56] Strategies included effective report writing, patient feedback, introductory letters and personal contact, all of which were considered essential for referral promotion, ultimately leading to business revenue. However, all studies were pre-COVID-19 pandemic. Perceived benefits of strong relationships included greater competence and increased confidence in private practice dietitians.[57] Collaborative care was noted as the foundation for supporting and improving patient outcomes with chronic disease.

Different aspects of client–practitioner relationships have been analysed.[59,70,107] Key aspects to positive client–practitioner relationships included being therapeutic, collaborative, evidence-applied, non-prescriptive, nurturing change, rapport building, empathetic and having a strong ability to 'read' the patient.[59] Dietitians evolved and adapted through exposure, learning enriched by practice, reflective practice and client feedback.

New graduate dietitians' feelings of under-preparedness for private practice have been briefly reported on.[14,15,56] Under-preparedness was also acknowledged in a 2019 Australian study that called for private practice placements to be aligned with contemporary practice.[67] Similarly, studies published in 2012 from

the USA, and later in 2017 in the United Kingdom, identified the existence of too many graduates with inadequate skills to match market demands hence a need to reconfigure placement experiences to improve career opportunities for graduates.[14,15]

The work of private practice dietitians refers to their day-to-day roles and functions. A focus on understanding the specific work pattern of private practice dietitians is a central knowledge requirement for workforce development and a pre-requisite for considerations of competency.[31] The work completed by private practice dietitians was outlined in 43 (60%) of the publications. Aspects included clinical workload type and management and day-to-day functions of private practitioners; for example, administration, marketing, report writing and billing tasks were also discussed.[36,48,50,55,56,59,68] Information technology (IT) was described to improve the efficiency of practice tasks, enhancing outcomes through education, monitoring and sharing information.[64] Significant barriers impeded the use of IT, in particular, impairment of communication with patients, unreliability and expense.[64]

Continuing professional development ensures that professionals enhance their skills and knowledge to meet the professional standards of the workforce and, as such, is an important determinant of workforce quality improvement.[108] There are continuing professional development opportunities available for private practice dietetics development; however, literature was especially scant in this space, with only 10 (14%) of the sources commenting on an aspect of continuing professional development for private practitioners.[2,9,30,50,56,59,61,77,81,91]

Workforce challenges were identified in 43 (60%) articles. The predominant workforce challenge documented for private practice dietitians in Australia appeared to be the tension caused by competing interests between providing quality patient-centred care and achieving equitable business practice and financial long-term business sustainability.[3,36,40,68,74] The barriers and challenges of the Medicare Chronic Disease GP Management Plan and Team Care Arrangements structure for dietetics were described as incongruous to successful business practice, inhibiting, limiting and frustrating.[70] Several key issues were outlined. The time allocated for consultations is 20 min, irrespective of whether the consultation is an initial or review consultation. Multiple studies stressed the consistent theme that the time allocation is unrealistic, especially for initial consultations requiring private practice dietitians to charge above the Medicare subsidy—thereby limiting access to those who are financially disadvantaged or reducing their consultation time, which was often perceived as a less effective service.[3,22,36,37,39,40,54,57,68,79,81] Aligning consultation times with Medicare funded remuneration in Australia was perceived as preventing optimal care.[36,68] Dietitians value effective patient care; hence, managing business efficiency and effectiveness are highly desired, but challenging to achieve.[68] Remuneration is not commensurate with effective client service under the scheme.[3,22,36,37,39,49,50,54,55,57,68,79] Dietitians are paid per consult rather than time worked and complexity of the case.[5] Restriction in the number of Medicare subsidised sessions was considered not conducive to patients with complex care needs.[49,109] Client behaviours, for example, cancellations, late arrivals, complex case referrals and level of client engagement were also described as having an impact on successful business practice.[49,68]

The perceived difficulty of establishing a private practice and maintaining a consistent income was a barrier to working in private practice, especially when compared to a full-time publicly employed dietitian who has a consistent income.[41] Comparatively, financial factors were considered to be essential drivers promoting working in private practice with a perceived possible higher remuneration compared with a public health service.[41] Job satisfaction, greater autonomy and varied caseload were affirmative factors for the private practice profession.[41]

Further workforce challenges were explored in recent Australian studies, which probed into the perceptions of private practice dietitians using IT in their workplace, as well as the collection and usage of data in their practice.[64,74] Minimum reporting standards for appraising processes and outcomes were identified.[23] Collecting private practice data was not routinely carried out due to varying practices hindering the collection of consistent data.[74] A follow-up study by the same authorship identified the minimum standards for assessing the processes and outcomes in private practice. Nearly half (45) of the standards identified were business-related, followed by 33 clinical and 19 implementation standards.[23] This study offers business-related standards that could guide training topics to support business acumen development for current and future private practitioners. Subsequent to this, a mixed-methods pragmatic study of dietitians working in primary care identified that 24% of the business standards were in use, whilst 79% of the clinical standards were rated as currently used.[83] Despite this, 86% of the business standards and 97% of the clinical practice standards were rated as feasible for implementation. The reporting of clinical outcomes and business-related data are fundamental to business practice and patient care. It was implied that there is a deficit in business acumen, which is rudimentary and inadequate for achieving business success and sustainability. Standardised integrated systems were described as essential to enable consistent collection of service data, enabling benchmarking across the workforce to not only support

dietetic business success, but to assess the broader public health impact.[23,74,83] On a similar topic, to better support GPs in advocating for dietetic input and reinforcing recommendations, a more structured and systematic approach to expediting dietitian reports to GPs was underscored.[38]

Remuneration is the compensation paid for work or services.[110] Only 17 (24%) of the included literature covered aspects of compensation paid for work or services (remuneration) in private practice dietetics. A Canadian publication nearly 20 years old, outlined fees charged by Canadian dietitians to respond to a need to develop a national fee guideline.[34] Other publications touched on included fees for service, but this data is also at least a decade old.[39] An Australian study focusing on the working profile of private practice dietitians found that 40% of private practice dietitians, regardless of employment structure, reported inadequate remuneration for their services, which concurs with this as a workforce challenge raised earlier in this review.[50]

4 | DISCUSSION

This scoping review provides the first theory-informed examination of the international peer-reviewed and grey literature regarding the private practice dietetics workforce. Although this review has identified a breadth of studies describing aspects of the private practice dietetics workforce, there is a lack of depth and comprehensive understanding of the workforce development aspects. There has been a surge in research interest over the past decade; however, significant gaps exist which constrain workforce capacity building. Understanding the private practice dietetics workforce enables further targeted workforce development strategies to close gaps.

A major limitation of private practice dietetics workforce data is the lack of consistency in data collection, planning and reporting in Australia and internationally. This is likely limiting efficient, effective and strategic approaches to workforce planning and capacity building both within the profession and, more broadly, within the Australian health system.[111] In Australia, dietitians are not registered with the Australian Health Practitioner Regulation Agency, which is currently responsible for the registration of 15 health professions.[112] Data from registration and workforce surveys forms the National Health Workforce Dataset, which is the publicly available data on this workforce.[75,113] Dietitians in Australia are required to nominate their primary work area when registering with the professional body, which means that it is possible that due to the part-time nature of the private practice landscape, private practice is not identified, if it is a secondary source of income, limiting the comprehensiveness of the data. More work needs to be done to report, collect and review dietetics workforce data pertinent to private practice dietetics to ensure a responsive and relevant workforce.[23]

Improving primary healthcare is an increasing priority for the Australian government to reduce hospital burden. An effective private practice dietetics workforce aligns with the Australian Government's Primary Health Care 10-Year Plan for 2022–2032, commissioned in 2019 as part of Australia's Long-term National Health Plan.[114,115] A key focus of the plan is on preventative health for chronic disease, in particular the continuity of Medicare Benefits Scheme funded telehealth for allied health and a greater focus on allied health as a vital part of the primary health care team. Available data suggests the supply of dietetics graduates is underprepared to address these priorities.[57,66,116] A well-developed private practice dietetics workforce is likely to contribute significant prevention strategies to improve population health outcomes.[76] Ensuring private practice dietitians are well equipped to support patients in preventative care may support better and more efficient utilisation of government funds. This is also applicable internationally, particularly in those Western countries where chronic disease prevalence is burdening acute healthcare settings.[117] With the increasing demand for rural primary healthcare, a focus on private practice dietetic competence to support work in the rural sector is also important.[41,118]

A recurring theme in the included studies was the dichotomy between providing quality care and achieving business sustainability.[3,36,40,68] This same theme was found in two recent publications around the work readiness of private practice physiotherapists in Australia and the United Kingdom, indicating that more work is required across the allied health tertiary education system.[24,119] Dietetics accreditation standards and university curricula must reflect emerging and contemporary workforce needs to ensure that dietitians are adept practitioners in these areas and to ameliorate employability.[1] A review of competency standards for entry-level dietitians specific to private practice dietetics is warranted, consistent with recognition of the importance of periodic review.[120] A lack of private practice placement opportunities and the need for these to be included in tertiary education has also been identified as a challenge for the transition to the private practice sector.[121] The governing body outlines that placements must have specifically appropriate governance structures and resources to ensure adequate supervision, support, teaching, learning and assessment for students and supervisors, which may be challenging for private business owners to offer.[122]

This data has ramifications for tertiary curricula and the governing bodies that accredit them.

It is difficult to overlook significant workforce challenges described with regard to the Australian Medicare Chronic Disease GP Management Plan and Team Care Arrangements impacting the ability of private practice dietitians to provide high-quality and effective care to support patients with complex chronic diseases. Specifically, the allocation, duration and remuneration for rebateable consultations warrants further exploration and may incentivise a review of the scheme. The current Medicare rebate for dietetics consultations is $58.30.[4] The Medicare rebate alone (i.e. bulk billing) is not congruent with dietetics training and, as such, impacts private practice dietitians providing optimal care and maintaining sustainable service. Notwithstanding, there is a lack of current national data on fees for dietetics services which could serve as a reference for novice private practice dietitians in establishing their business practice.

A strength of this review was the inclusion of an international perspective and no language restrictions in the search strategy. This review also builds upon existing work that has identified the need for a detailed exploration of the private practice dietetics workforce as a subset of dietetics practice. A limitation of this review is that a peer-reviewed protocol was not published in advance of the review being undertaken, which may have increased the risk of ad hoc decision-making during the research process, thus potentially impacting the methodological rigour of the review.[25] This limitation has been managed through transparent and detailed reporting of the research methods in this article.

This scoping review is the first comprehensive summary of the recent private practice dietetics publications and highlights future work that will benefit the profession. With increasing numbers of graduates entering the workforce and soaring demand for primary healthcare, this review has highlighted significant gaps and weaknesses in the private practice dietetics existing literature. Further research is likely to assist in advancing the entry-level graduate private practice workforce and build workforce capacity by informing accredited tertiary programmes, increasing skills, capabilities and the success of our future private practitioners whilst strengthening patient care in the primary healthcare sector and reducing the burden on our tertiary sector, as it aligns with government priorities.

AUTHOR CONTRIBUTIONS

JD and RH conceptualised the study with contributions from RL and LW. JD and RH screened the data. JD performed data extraction. JD drafted the manuscript and all authors participated and approved the final version of the manuscript and declareed that the content in the present study has not been published elsewhere. We acknowledge the Swinburne University of Technology and St.Vincent's Hospital Melbourne Library for their assistance in preparing the search strategy.

FUNDING INFORMATION

This research is supported by an Australian Government Research Training Program (RTP) Scholarship.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

The manuscript is a scoping review so all data is drawn from previously published works either publicly published or from bibliographic research databases with DOI.

ORCID

Jennifer Donnelly https://orcid.org/0000-0002-1385-2937

REFERENCES

1. Blair M, Palermo C, Gibson S, Mitchell L. The Australian and New Zealand dietetics graduate outcomes survey: a cross-sectional study. *Nutr Diet*. 2022;79(4):456-final.
2. Morgan K, Campbell KL, Sargeant S, Reidlinger DP. Preparedness for advancing future health: a national qualitative exploration of dietetics graduates' experiences. *Adv Health Sci Educ*. 2020;25(1):31-53.
3. Cant RP. Today's profession: views and practices of private practice dietitians re Medicare Chronic Disease Management program. *Nutr Diet*. 2010;67(2):77-83.
4. Australian Government Department of Health and Aged Care. *MBS Online Medicare Benefits Schedule*. 2023 Accessed April 17, 2023. http://www9.health.gov.au/mbs/fullDisplay.cfm?type=item&q=10954
5. Australian Government—Services Australia. *Chronic Disease GP Management Plans and Team Care Arrangements*. 2022 Accessed January 9, 2023. https://www.servicesaustralia.gov.au/chronic-disease-gp-management-plans-and-team-care-arrangements?context=20
6. Health Workforce Australia. *Australia's Health Workforce Series—Dietitians in Focus*. Health Workforce Australia; 2014.
7. Dietitians Australia. *Annual Report 2021–2022*. Dietitians Australia; 2022.
8. Dietitians Association of Australia. *Annual Report 2018–2019*. Dietitians Association of Australia; 2019.
9. Victoria State Government—Health and Human Services. *Victorian Allied Health Workforce Research Program—Dietetics Workforce Report*. 2018 Accessed January 11, 2023. https://www.health.vic.gov.au/sites/default/files/migrated/files/collections/research-and-reports/v/victorian-allied-health-workforce-project-2016/dietetics-workforce-report.pdf
10. NDIS. *What Types of Nutrition Support Do We Fund?* 2023 Accessed December 7, 2023. https://ourguidelines.ndis.gov.au/supports-you-can-access-menu/nutrition-supports-including-meal-preparation/what-types-nutrition-supports-do-we-fund

11. Australian Government Department of Veteran's Affairs. *Dietetic Services*. Commonwealth of Australia; 2019 Accessed April 17, 2023. https://www.dva.gov.au/health-and-treatment/injury-or-health-treatments/health-services/dietetic-services
12. Dietitians Australia. *Seeing a Dietitian in Australia—Help with Costs*. Accessed January 25, 2024. https://dietitiansaustralia.org.au/seeing-dietitian/help-costs
13. WorkSafe Victoria. *Dietetic Services Policy*. 2023 Accessed April 17, 2023. https://www.worksafe.vic.gov.au/dietetic-services-policy
14. Hickson M, Child J, Collinson A. Future dietitian 2025: informing the development of a workforce strategy for dietetics. *J Hum Nutr Diet*. 2018;31(1):23-32.
15. Rhea M, Bettles C. Future changes driving dietetics workforce supply and demand: future scan 2012-2022. *J Acad Nutr Diet*. 2012;112:S10-S24.
16. Dietitians Australia. *National Competency Standards for Dietitians in Australia*. Dietitians Australia; 2021.
17. Dietitians Australia. *Accreditation Standards for Dietetics Education Programs*. Dietitians Australia; 2022.
18. Dietitians Australia. *Apply to Become an Accredited Practising Dietitian*. Dietitians Australia; 2023 Accessed April 24, 2023. https://dietitiansaustralia.org.au/working-dietetics/credentialing-dietitians
19. Dietitians Association of Australia. *National Competency Standards for Dietitians in Australia*. Dietitians Association of Australia; 2015.
20. Hughes R. Competency development needs of the Australian public health nutrition workforce. *Public Health Nutr*. 2003;6(8):839-847.
21. Hughes R. Competencies for effective public health nutrition practice: a developing consensus. *Public Health Nutr*. 2004;7(5):683-691.
22. Jansen S, Ball L, Lowe C. Impact of the Medicare chronic disease management program on the conduct of Australian dietitians' private practices. *Aust Health Rev*. 2015;39(2):183-189.
23. Clark P, Williams L, Brickley B, Ball L. Minimum reporting standards for process and outcomes assessments for private practice dietitians working in Australian primary care: the thought leader consensus study. *Nutr Diet*. 2023;80(3):284-296.
24. Watson EE, Minns Lowe CJ. Exploring the business skills, experiences and preparedness of UK-based private physiotherapists when establishing and developing a physiotherapy business: a hermeneutic phenomenological study. *Musculoskelet Sci Pract*. 2022;63:102694.
25. Peters MDJ, Godfrey C, McInerney P, Munn Z, Tricco AC, Khalil H. Chapter 11: Scoping reviews (2020 version). In: Aromataris E, Munn Z, eds. *JBI Manual for Evidence Synthesis*. JBI; 2020.
26. Tricco AC, Lillie E, Zarin W, et al. PRISMA extension for scoping reviews (PRISMA-ScR): checklist and explanation. *Ann Intern Med*. 2018;169(7):467-473.
27. Peters MDJ, Marnie C, Tricco AC, et al. Updated methodological guidance for the conduct of scoping reviews. *JBI Evid Synth*. 2020;18(10):2119-2126.
28. Veritas Health Innovation. *Covidence Systematic Review Software*.
29. Adams J, Hillier-Brown FC, Moore HJ, et al. Searching and synthesising 'grey literature' and 'grey information' in public health: critical reflections on three case studies. *Syst Rev*. 2016;5(1):164.
30. Blair M, Mitchell L, Palermo C, Gibson S. Trends, challenges, opportunities, and future needs of the dietetic workforce: a systematic scoping review. *Nutr Rev*. 2022;80(5):1027-1040.
31. Hughes R. A conceptual framework for intelligence-based public health nutrition workforce development. *Public Health Nutr*. 2003;6(6):599-605.
32. Campbell F, Tricco AC, Munn Z, et al. Correction: mapping reviews, scoping reviews, and evidence and gap maps (EGMs): the same but different—the "big picture" review family. *Syst Rev*. 2023;12(1):61.
33. McArthur A, Klugarova J, Yan H, Florescu S. Chapter 4: systematic reviews of text and opinion. In: Aromataris EMZ, ed. *JBI Manual for Evidence Synthesis*. JBI; 2020.
34. Davison K, Mor A, Charlebois H. What are entrepreneurial dietitians charging? The Consulting Dietitians Network National Fee Survey. *Can J Diet Pract Res*. 2004;65(4):186-190.
35. Brown L, Capra S, Williams L. Profile of the Australian dietetic workforce: 1991–2005. *Nutr Diet*. 2006;63(3):166-178.
36. Cant R, Aroni R. Melbourne dietitians' experience of medicare policy on allied health services strengthening Medicare; enhanced primary care in the first 12 months. *Nutr Diet*. 2007;64(1):43-49.
37. Mitchell LJ, Capra S, MacDonald-Wicks L. Structural change in Medicare funding: impact on the dietetics workforce. *Nutr Diet*. 2009;66(3):170-175.
38. Pomeroy SE, Worsley A. Enhancing the dietary management of general practice patients through collaborative care: perspectives of general practitioners and dietitians. *Nutr Diet*. 2009;66(2):81-86.
39. Cant RP. Patterns of delivery of dietetic care in private practice for patients referred under Medicare chronic disease management: results of a national survey. *Aust Health Rev*. 2010;34(2):197-203.
40. Cant RP. Public health nutrition: the accord of dietitian providers in managing medicare chronic care outpatients in Australia. *Int J Environ Res Public Health*. 2010;7(4):1841-1854.
41. Brown LJ, Mitchell LJ, Williams LT, Macdonald-Wicks L, Capra S. Private practice in rural areas: an untapped opportunity for dietitians. *Aust J Rural Health*. 2011;19(4):191-196.
42. Pearce-Brown CL, Grealish L, McRae IS, et al. A local study of costs for private allied health in Australian primary health care: variability and policy implications. *Aust J Prim Health*. 2011;17(2):131-134.
43. Flesher M, Kinloch K, Grenon E, Coleman J. Access to dietitians in primary health care. *Can J Diet Pract Res*. 2011;72(1):32-36.
44. Hanekom LM, Gericke GJ, Becker PJ. South African private practising clinical dietitians' perceptions of the relevance of service-specific healthcare marketing principles and communication elements. *South Afr J Clin Nutr*. 2011;24(4):192-198.
45. Brown LJ, Williams LT, Capra S. Developing dietetic positions in rural areas: what are the key lessons? *Rural Remote Health*. 2012;12(1):1923.
46. Capra S. Dietitians as leaders, past, present and future. *Nutr Diet*. 2012;69(3):179-182.

47. Hooker RS, Williams JH, Papneja J, Sen N, Hogan P. Dietetics supply and demand: 2010-2020. *J Acad Nutr Diet*. 2012;112: S75-S91.
48. Mitchell LJ, MacDonald-Wicks L, Capra S. Increasing dietetic referrals: perceptions of general practitioners, practice nurses and dietitians. *Nutr Diet*. 2012;69(1):32-38.
49. Tol J, Swinkels IC, Spreeuwenberg PM, Leemrijse CJ, de Bakker DH, Veenhof C. Factors associated with the number of consultations per dietetic treatment: an observational study. *BMC Health Serv Res*. 2012;12(1):317.
50. Ball L, Larsson R, Gerathy R, Hood P, Lowe C. Working profile of Australian private practice accredited practising dietitians. *Nutr Diet*. 2013;70(3):196-205.
51. Blades M. Dietitians as entrepreneurs. *Nutr Food Sci*. 2013; 43(4):339-343.
52. Cant RP, Foster MM. Update on Medicare-funded allied health chronic disease management consultations in dietetics and the five most referred professions in 2010. *Nutr Diet*. 2013;70(1):42-48.
53. Verbakel NJ, Van Melle M, Langelaan M, Verheij TJM, Wagner C, Zwart DLM. Exploring patient safety culture in primary care. *International J Qual Health Care*. 2014;26(6): 585-591.
54. Brown JA, Lee P, Ball L. Time and financial outcomes of private practice dietitians providing care under the Australian Medicare program: a longitudinal, exploratory study. *Nutr Diet*. 2016;73(3):296-302.
55. Cant R, Ball L. Decade of Medicare: the contribution of private practice dietitians to chronic disease management and diabetes group services. *Nutr Diet*. 2015;72(3):284-290.
56. Beckingsale L, Fairbairn K, Morris C. 'Two working together is so much better than just one': professional support needs of primary healthcare dietitians. *Nutr Diet*. 2016;73(3): 220-228.
57. Beckingsale L, Fairbairn K, Morris C. Integrating dietitians into primary health care: benefits for patients, dietitians and the general practice team. *J Prim Health Care*. 2016;8(4): 372-380.
58. de Carvalho MN, Gil CRR, Costa EMOD, Sakai MH, Leite SN. Needs and dynamics of the primary healthcare workforce in Brazil. *Cien Saude Colet*. 2018;23(1):295-302.
59. Harper C, Maher J. Investigating philosophies underpinning dietetic private practice. *Behav Sci*. 2017;7(1):11.
60. Hill ME, Raftis D, Wakewich P. Strengthening the rural dietetics workforce: examining early effects of the Northern Ontario Dietetic Internship Program on recruitment and retention. *Rural Remote Health*. 2017;17(1):4035.
61. Odgers-Jewell K, Isenring EA, Thomas R, Reidlinger DP. Group-based education for patients with type 2 diabetes: a survey of Australian dietitians. *Aust J Prim Health*. 2017;23(4): 364-372.
62. Segal L, Marsh C, Heyes R. The real cost of training health professionals in Australia: it costs as much to build a dietician workforce as a dental workforce. *J Health Serv Res Policy*. 2017;22(2):91-98.
63. Teixeira FV, Pais-Ribeiro JL, Maia Â. Different settings, different approaches: a qualitative comparison of Portuguese dietitians' beliefs, attitudes and practices about obesity in public and private settings. *Public Health Nutr*. 2018;21(2):435-446.
64. Jones A, Mitchell LJ, O'Connor R, et al. Investigating the perceptions of primary care dietitians on the potential for information technology in the workplace: qualitative study. *J Med Internet Res*. 2018;20(10):e265.
65. MacDonald Werstuck M, Buccino J. Dietetic staffing and workforce capacity planning in primary health care. *Can J Diet Pract Res*. 2018;79(4):181-185.
66. Morgan K, Kelly JT, Campbell KL, Hughes R, Reidlinger DP. Dietetics workforce preparation and preparedness in Australia: a systematic mapping review to inform future dietetics education research. *Nutr Diet*. 2019;76(1):47-56.
67. Morgan K, Campbell KL, Sargeant S, Reidlinger DP. Preparing our future workforce: a qualitative exploration of dietetics practice educators' experiences. *J Hum Nutr Diet*. 2019;32(2): 247-258.
68. O'Connor R, Slater K, Ball L, et al. The tension between efficiency and effectiveness: a study of dietetic practice in primary care. *J Hum Nutr Diet*. 2019;32(2):259-266.
69. Siopis G, Jones A, Allman-Farinelli M. The dietetic workforce distribution geographic atlas provides insight into the inequitable access for dietetic services for people with type 2 diabetes in Australia. *Nutr Diet*. 2020;77(1):121-130.
70. Nagy A, McMahon A, Tapsell L, Deane F. Developing meaningful client-dietitian relationships in the chronic disease context: an exploration of dietitians' perspectives. *Nutr Diet*. 2020; 77(5):529-541.
71. Sastre LR, Van Horn LT. Family medicine physicians' report strong support, barriers and preferences for registered dietitian nutritionist care in the primary care setting. *Fam Pract*. 2020;38(1):25-31.
72. Siopis G, Colagiuri S, Allman-Farinelli M. Dietitians' experiences and perspectives regarding access to and delivery of dietetic services for people with type 2 diabetes mellitus. *Heliyon*. 2020;6(2):e03344.
73. Caswell S, Hanning R, Lieffers J, Wojcik J, Buccino J, Eisenbraun C. Employment and education experience of dietetic graduates from 2015-2020. *Can J Diet Pract Res*. 2021; 82(3):145.
74. Clark PW, Williams LT, Kirkegaard A, Brickley B, Ball L. Perceptions of private practice dietitians regarding the collection and use of outcomes data in primary healthcare practices: a qualitative study. *J Hum Nutr Diet*. 2021;35:154-164.
75. Heafala A, Mitchell LJ, Williams LT. Studying the transition from graduate to health practitioner: the Griffith dietetics graduate outcomes survey. *Nurs Health Sci*. 2021;23(3):723-732.
76. Boak R, Palermo C, Beck EJ, et al. A qualitative exploration of the future of nutrition and dietetics in Australia and New Zealand: implications for the workforce. *Nutr Diet*. 2022; 79(4):427-437.
77. Davidson AR, Reidlinger DP. A review of the growth and development of Australian practice nursing: insights for the dietetic workforce. *Nutr Diet*. 2022;79(4):497-548.
78. Golz C, Oulevey Bachmann A, Defilippis TS, et al. Preparing students to deal with the consequences of the workforce shortage among health professionals: a qualitative approach. *BMC Med Educ*. 2022;22(1):756.
79. Harper C, Seimon RV, Sainsbury A, Maher J. "Dietitians may only have one chance"—the realities of treating obesity in private practice in Australia. *Healthcare*. 2022;10(2):404.

80. Joo KA, Fialkowski MK, Esquivel M, Haumea SL. Hawai'i registered dietitian nutritionist 2019-2020 workforce assessment. *Hawaii J Health Soc Welf*. 2022;81(4 suppl 2):31-38.
81. Kirkegaard A, Ball L, Mitchell L, Williams LT. A novel perspective of Australian primary care dietetics: insights from an exploratory study using complex adaptive systems theory. *Nutr Diet*. 2022;79(4):469-480.
82. Blair M, Mitchell L, Gibson S, et al. The graduate dietitian experience of employment and employability: a longitudinal qualitative research study from one Australian university. *Nutr Diet*. 2023;80(4):377-388.
83. Clark PW, Williams LT, O'Shea MC, Ball L. Implementing evidence-based clinical and business data standards in Australian private practice clinics is feasible. *Nutr Diet*. 2023:1-23.
84. Kirkegaard A, Mitchell L, Ball L, Williams LT. Developing the quality in nutrition care model for dietitians (QUINCE-MOD) in primary care: a mixed-method survey of healthcare consumers and professionals. *J Hum Nutr Diet*. 2023;36(1):311-322.
85. Dietitians of Canada. *The Dietetic Workforce in British Columbia: Survey Report*. 2016 Accessed August 11, 2023. https://www.dietitians.ca/DietitiansOfCanada/media/Documents/Resources/2016-BC-Dietetic-Workforce-Survey-Report.pdf?ext=.pdf
86. Dietitians Australia. *Primary Care Role Statement*. 2022 Accessed August 10, 2023. https://dietitiansaustralia.org.au/working-dietetics/standards-and-scope/role-statements/primary-care-role-statement#:~:text=Preparation%20and%20review%20of%20client,of%20appropriate%20supplements%20where%20appropriate
87. Dietitians of Canada. *Dietitians in Primary Health Care: A Pan-Canadian Environmental Scan*. 2018 Accessed August 11, 2023. https://www.dietitians.ca/DietitiansOfCanada/media/Documents/Resources/2018-Executive-Summary-Dietitians-in-Primary-Health-Care-A-Pan-Canadian-Environmental-Scan.pdf
88. Dietitians of Canada. *The Dietitian Workforce in Ontario Primary Health Care Survey Report*. 2018 Accessed August 11, 2023. https://www.dietitians.ca/DietitiansOfCanada/media/Documents/Resources/2018-Dietitian-Workforce-in-Ontario-PHC-Survey-Report.pdf
89. Dietitians of Canada. *Dietetic New Graduate 2019 Pilot Survey Report*. 2020 Accessed August 11, 2023. https://www.dietitians.ca/DietitiansOfCanada/media/Documents/Resources/2019-Dietetic-New-Grad-Survey-Report-(Ontario-and-Saskatchewan).pdf?ext=.pdf
90. NSW Ministry of Health. *Final Report NSW Health Nutrition and Dietetics Workforce Horizons Scanning and Scenario Generation*. 2020 Accessed August 11, 2023. https://www.health.nsw.gov.au/workforce/alliedhealth/Documents/nutrition-dietetics-report.pdf
91. Boak R, Palermo C, Gallegos D. *Towards 2030: Reimagining the Future of Nutrition and Dietetics in Australia and New Zealand*. 2021.
92. New Zealand Institute of Economic Research. *A Critical Missing Ingredient—The Case for Increased Dietetic Input in Tier 1 Health Services*. 2021 Accessed August 10, 2023. https://www.nzier.org.nz/publications/a-critical-missing-ingredient-the-case-for-increased-dietetic-input-in-tier-1-health-services
93. Baladia E, Johnstone E, Ramos E, Joossens S, Jeanes Y, Soguel L. *Dietetic Research in Practice Report 2022*. 2022 Accessed August 10, 2023. https://www.efad.org/documents/dietetic-research-in-practice-report-2022/
94. Department of Health. *Department of Health Workforce Review Report Dietetics 2019-2029*. 2022 Accessed April 23, 2023. https://www.health-ni.gov.uk/publications/dietetics-workforce-review-2019-2029
95. Dietitians Australia. *Annual Report 2019–2020*. Dietitians Australia; 2020.
96. Dietitians Australia. *Annual Report 2020–2021*. Dietitians Australia; 2021.
97. Dietitians Association of Australia. *Dietitians Association of Australia Annual Report 2016*. Dietitians Association of Australia; 2017.
98. British Dietetic Association—The Association of UK Dietitians. *First Contact Dietitian—Dietitians in Primary Care: A Guide for General Practice*. 2022 Accessed August 25, 2023. https://www.bda.uk.com/practice-and-education/nutrition-and-dietetic-practice/dietetic-workforce/primary-care/working-in-primary-care/what-is-first-contact-practice.html
99. U.S. Bureau of Labor Statistics. *Department of Labor, Occupational Outlook Handbook, Dietitians and Nutritionists*. 2022 Accessed April 23, 2023. https://www.bls.gov/ooh/Healthcare/Dietitians-and-nutritionists.htm
100. Brown D. Business of dietetics. Becoming a media-savvy registered dietitian. *J Am Diet Assoc*. 2006;106(8):1163-1164.
101. Rogers D. Compensation and benefits survey 2017. *J Acad Nutr Diet*. 2018;118(3):499-511.
102. Bourgeault I. *Introduction to Health Occupations in Canada*. Canadian Health Workforce Network; 2021.
103. Government of Canada. *Primary Health Transition Fund: Summary of Initiatives: Final Edition*. 2007 Accessed April 23, 2023. https://www.canada.ca/en/health-canada/services/health-care-system/reports-publications/primary-health-care/summary-initiatives-final-edition-march-2007.html
104. Green LA, Fryer GE Jr, Yawn BP, Lanier D, Dovey SM. The ecology of medical care revisited. *N Engl J Med*. 2001;344(26):2021-2025.
105. European Federation of The Associations of Dietitians. *Revised Dietetic Competence and the Six Domains of Dietetic Competency in Europe*. European Federation of the Association of Dietitians; 2016.
106. Bacigalupo M, Kampylis P, Punie Y, Brande G. *EntreComp: the Entrepreneurship Competence Framework*. Publication Office of the European Union; 2017.
107. Ball L, Desbrow B, Leveritt M. An exploration of individuals' preferences for nutrition care from Australian primary care health professionals. *Aust J Prim Health*. 2014;20(1):113-120.
108. Dietitians Association of Australia. *Continued Professional Development*. 2022 Accessed November 2, 2023. https://member.dietitiansaustralia.org.au/Portal/Portal/Content/Professional-Development/learning.aspx
109. Siopis G, Colagiuri S, Allman-Farinelli M. Doctors identify regulatory barriers for their patients with type 2 diabetes to access the nutritional expertise of dietitians. *Aust J Prim Health*. 2021;27(4):312-318.
110. Cambridge Dictionary. *Remuneration*. Cambridge University of Press and Assessment; 2023 Accessed November 2, 2023. https://dictionary.cambridge.org/dictionary/english/remuneration
111. Australian Government—Department of Health. *Allied Heath Workforce Data Gap Analysis*. 2022 Accessed August 10, 2023.

https://www.health.gov.au/resources/publications/allied-health-workforce-data-gap-analysis-issues-paper?language=en
112. Australian Government—Department of Health and Aged Care. *National Health Workforce Dataset*. Commonwealth of Australia. 2022 Accessed April 25, 2023. https://hwd.health.gov.au/resources/information/nhwds.html
113. Baillie E, Bjarnholt C, Gruber M, Hughes R. A capacity-building conceptual framework for public health nutrition practice. *Public Health Nutr*. 2009;12(8):1031-1038.
114. Australian Government—Department of Health and Aged Care. *Future Focused Primary Health Care: Australia's Primary Health Care 10 Year Plan 2022–2032*. 2022 Accessed February 6, 2022. https://www.health.gov.au/resources/publications/australias-primary-health-care-10-year-plan-2022-2032
115. Australian Government—Department of Health and Aged Care. *Australia's Long Term National Health Plan*. 2019 Accessed February 6, 2024. https://www.health.gov.au/resources/publications/australias-long-term-national-health-plan?language=en
116. Commonwealth Scientific and Industrial Research Organisation (CSIRO) Futures. *Future of Health: Shifting Australia's Focus From Illness Treatment to Health and Wellbeing Management*. CSIRO; 2018.
117. Hajat C, Stein E. The global burden of multiple chronic conditions: a narrative review. *Prev Med Rep*. 2018;12:284-293.
118. Brown L, Williams L, Capra S. Going rural but not staying long: recruitment and retention issues for the rural dietetic workforce in Australia. *Nutr Diet*. 2010;67(4):294-302.
119. Wells C, Olson R, Bialocerkowski A, et al. Work readiness of new graduate physical therapists for private practice in Australia: academic faculty, employer, and graduate perspectives. *Phys Ther*. 2021;101(6):pzab078.
120. Palermo C, Conway J, Beck EJ, Dart J, Capra S, Ash S. Methodology for developing competency standards for dietitians in Australia. *Nurs Health Sci*. 2016;18(1):130-137.
121. Palermo C, Dart J, Begley A, et al. Dietetics students' construction of competence through assessment and placement experiences. *Nutr Diet*. 2018;75(3):307-315.
122. Dietitians Australia and Australian Dietetics Council. *Evidence Guide for Accreditation of Dietetics Education Programs Examples of Evidence*. Dietitians Australia and Australian Dietetics Council; 2022.

SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

How to cite this article: Donnelly J, Lane R, Walsh L, Hughes R. Private practice dietetics: A scoping review of the literature. *Nutrition & Dietetics*. 2024;81(5):536-551. doi:10.1111/1747-0080.12877