Future dietitian 2025: Informing the development of a workforce strategy for dietetics

ABSTRACT

Background

Healthcare is changing and the professions that deliver it need to adapt and change too. The aim of this research was to inform the development of a workforce strategy for Dietetics for 2020-2030. This included an understanding of the drivers for change, the views of stakeholders, and recommendations to prepare the profession for the future.

Methodology

The research included three phases: establishing the context which included a literature and document review (environmental scan); discovering the profession and professional issues using crowd-sourcing technology; and articulating the vision for the future using appreciative inquiry.

Results

The environment scan described the current status of the dietetic profession, the changing healthcare environment, the context in which dietitians work, and what future opportunities exist for the profession. The on-line conversation facilitated by crowd-sourcing technology asked the question: ‘How can dietitians strengthen their future role, influence and impact?’ Dietitians and interested stakeholders (726 and 109 respectively) made 6,130 contributions. Seven priorities were identified and fed into the appreciative inquiry event. The event brought together 54 dietitians and analysis of the discussions generated five themes: professional identity; strong foundations-creating structure and direction for the profession; amplifying visibility and influence; embracing advances in science and technology; career advancement and emerging opportunities.

Conclusions

A series of recommendations were made for the next steps in moving the workforce to a new future. The future for dietetics looks bright, embracing technology, exploring different ways of working and new opportunities as this dynamic profession continues to evolve.
INTRODUCTION

Healthcare is changing and the professions that deliver it need to adapt and change too. The British Dietetic Association (BDA) commissioned research to inform the development of a workforce strategy for Dietetics for 2020-2030.

Dietetics in the United Kingdom (UK) has moved from a profession that required a medical referral before acting, where the curriculum and standards for entry to the profession were poorly described, and where the impact of the profession was poorly understood, to a fully autonomous profession with rights to prescribe prescription only drugs and a growing evidence base. The current profession is well respected and enjoys a high profile within the health community. There is growing recognition of the impact of nutrition interventions on health outcomes, and for the need to influence what people eat to ensure optimal health. The profession has built new roles for registered dietitians, support workers and nutritionists; dietitians work in multi-professional teams, in advanced and extended roles, and in new areas of practice.

The whole system of healthcare is in a process of significant change. The UK systems set up in 1948 are facing major challenges due to the huge changes in population demographics, with the rising age of the population and the increase of long-term chronic conditions. New medical advances and other technologies offer better ways to treat diseases and the expectations of service users are increasing. The practice of dietetics has changed in parallel with these system changes, with the profession itself leading developments or the BDA Boards and Council driving change in response to changing health policy and regulation.

The BDA is undertaking a programme of work, Future Dietitian 2025, to ensure the profession remains relevant in a rapidly changing world and that dietitians and the wider dietetic and nutrition workforce are fit for the future. The work described in this paper is the starting point. Many dietitians have already contributed to the programme and there will be many more opportunities in the future. This is an important programme that will set the direction for career development for the dietetic workforce for at least the next decade, so it is crucial that dietitians and others have the opportunity to contribute a wide variety of views.

The aim of this research was to collect information to inform the development of a workforce strategy for Dietetics for 2020-2030. The objectives were to understand the drivers for future national, international and cultural influences on the development of the profession; to identify and interview relevant stakeholders and elicit their view on the future direction of the
dietetic profession; and to identify and prioritise the most important skills, knowledge and behaviours required by dietitians to prepare them for registration and future professional practice.

METHODS

The research study was organised into three phases; environmental scan, on-line conversation and appreciative inquiry event. Ethical approval for the study was given by the Faculty of Health and Human Science Ethics Committee, Plymouth University. All participants took part only if and when they wished to; their consent is implied through their participation. All comments and discussions at the event were anonymised at the data analysis stage. Participants’ identity remained confidential.

The environmental scan

This gathered information which was synthesised to provide a clear context for the basis of the whole work. It helped formulate the questions asked in the second two phases and provided a thorough overview of the current and future landscape for the profession.

The information collection included:

- Examination of the current professional capabilities and scope of practice
- Overview of the future business strategy of the BDA
- Exploration of other health professionals’ roles to establish where dietitians fit within the future workforce policy
- Gaining an overview of future business strategy to explore key performance indicators for industry and the impact dietitians can make
- Reviewing recent policy documents outlining the UK national strategy for the health service and health workforce, including the national vision for Allied Health Professions (AHP) from the Chief AHP Officer for England
- A comparison with other national dietetic professional organisations’ work (e.g. USA, Australia, Canada, Europe)
- Published scientific literature
- European and other legislative policy which may influence dietetic work opportunities (e.g. food labelling and health claims)
- Other relevant documents that came to light
The documents were found through internet searches, searching on relevant bibliographic databases and through correspondence and discussion with relevant stakeholders (e.g. officers of the BDA, Canadian and Australian dietetic associations).

**Appreciative Inquiry**

For the latter two phases of the research, it was crucial to use an inclusive model that used the voice of experts to inform the findings. The research approach needed to be consultative, interactive and progressive, ensuring that the dietetic workforce inform and shape the research process. This led to appreciative inquiry, a qualitative methodology that embraces a whole system approach\(^1\). Appreciative inquiry is the co-evolutionary, co-operative search for the best in people, their organisations, and the relevant world around them. It involves identifying what is working well, analysing why it is working well and then doing more of it. The focus on the positive encourages creativity and innovation, as opposed to problem solving which leads to negative, critical, and spiralling diagnoses\(^1\). Cooperrider believed that through the act of exploring positive aspects of practice, it is possible to gain a better understanding of their effectiveness and thus, how they can be developed into new models of practice. Exploration allows appreciation of the affirmative workings, and inquiry drives the process. This focus and underpinning philosophy has allowed appreciative inquiry to evolve into a valued research approach\(^2; 3; 4\).

**The on-line conversation**

The on-line conversation used a systematic crowd-sourcing process to enable *en masse* engagement with the whole dietetic community, allowing the group to anonymously suggest, and develop ideas to contribute to the workforce strategy. In this project the crowd-sourcing capability was provided through a collaboration with “Clever Together” (http://clevertogether.com). This method enabled the views of the largest proportion of the dietetic community possible to be gathered, in order to successfully formulate the future strategy in a way that individuals would then feel able to buy into. The system enabled interaction from a wide audience, including not only dietitians, but also service users, industry, health, social care and commissioner stakeholders, both nationally and internationally.

The crowd-sourcing process involves four steps. Generating a mandate for change to clearly define the purpose of the on-line conversation was the first step (see supplementary
information). It was informed by the environmental scan and agreed by the project steering group, consisting of members from Clever Together, Plymouth University and the BDA.

The next step was generating interest within the ‘crowd’. Participants were invited via email and other electronic methods from the following groups:

- UK dietitians via the BDA membership database and other personal networks
- Other healthcare professions via specialist interest groups e.g. Nutrition nursing group, British Association for Parenteral & Enteral Nutrition members
- International dietetic colleagues via International Congress of Dietetics and other personal networks.
- Service users via relevant patient groups such as Diabetes UK, Coeliac UK etc.
- Other relevant stakeholders through personal networks

The third step, generating insight, was the on-line conversation. This ran from the 2nd until the 25th of September 2016. The system allowed on-line access using an automatically generated password, so participants could come back, view and take part in the discussion as many times as they wished. At the first access they also provided basic demographic information: country, sector of work, profession, years since qualification (if relevant).

Participants were then invited to respond to the question “How can dietitians strengthen their future role, influence and impact?” and they could add their own ideas, ‘like’ and ‘dislike’ others’ ideas, as well as add further comments to develop ideas in more detail. Thematic analysis of the submitted ideas and comments produced a range of priorities. The participating group was described using the demographic information to assess how representative it was. Although on-line all comments were anonymous, the system linked the comments to the participants demographic data, so information could be segregated from different stakeholders.

The final stage, generating action, requires the insights reported here to be used to design the next strategy for the dietetic profession, setting clear objectives for the BDA in coming years.

**Appreciative Inquiry Event**

The event was based on an appreciative inquiry methodology; an affirmative action research and organisational development approach that explores new ways to engage practitioners in considering solutions to enhance current practice and processes. The methodology was
managed using a 5-D cycle\(^5\): Define; Discover; Dream; Design and Destiny (or deliver – although the latter D was not incorporated into the event), see figure 1.

Participants from the crowd-sourcing process were asked if they would like to be involved in a future discussion event, and members of BDA boards and the steering group for the project were also invited.

Overall 93 people were invited and 54 participated in the event, ensuring a range of dietetic roles, experience and regional representation. Participants were sent a pre-event worksheet which had three questions to focus thinking and to prepare for the discovery stage. These questions came from the analysis of the on-line conversation and focussed attention to how the dietetic profession is changing and developing; examples of successful practice; and the future direction of the profession and the skills needed.

Interactive activities during the appreciative inquiry event allowed workforce themes to be challenged and developed. Participants worked together initially in pairs and then in small groups to ‘discover’ what works well within the profession currently, exploring how and why they work well.

From this the participants moved into the ‘dream’ stage of the model (for an example see supplementary information), where they worked together to develop their visions for the future, incorporating their discoveries into their ambitions for the future dietetic profession. The ‘dream’ stage encouraged participants to think big, moving their profession forward by seven years in order to consider what they would like it to look like, using their discoveries to inform their vision. Each group shared their future vision, identifying the fundamental themes which framed their chosen professional structure. The themes from each group were recorded, allowing groups to make choices and recommendations for what should be taken forward to the next stage, developing what works well and identifying feasible aspirations which would be taken into the Design stage.

This final stage of the appreciative event, gave participants time to begin shaping their vision, designing its reality, establishing how it could fit into a future framework for the profession. Mapping exercises and project plans were devised focusing the intensity of the debate into a realistic action plan which could inform a new dietetic profession.

The event was videoed and audio taped, complimentary field notes were taken, and flip charts and table notes from the participants were collected and the data was managed through thematic analysis.\(^6; 7; 8\) The inquiry processes was also carefully observed by the research
team during the event in order to capture the connective ideas which informed the detail of the thinking. The data from the event was transcribed where relevant, which included listening to all the recordings and transcribing those most suitable and relevant, and transcribing all notes, flip chart summaries and diagrams. The thematic analysis was led by JC, to maintain a view unbiased by personal experiences of being a dietitian (JC is a nurse). The analysis was completed by reading and re-reading the transcripts, categorising each statement and tabulating categories, which could then be combined. The final themes emerged through this process and were then discussed and quality checked with the whole research team. The approach allowed the researcher to pinpoint, examine, and record themes within data and enabled the researchers to understand the participant activity and novel ideas. The collective themes provided a picture of the participant vision for the future dietetic workforce and enabled the researchers to formulate recommendations for the progress towards this vision.

RESULTS

Environmental scan

The environmental scan has been published by the BDA but is made available here in the supplementary information. It describes where the profession is now; finding dietitians work mainly in the NHS but approximately a third work in other sectors, they are predominately female and over 50% working in the NHS are under the age of 40 years. Reasons for the changing healthcare system are discussed; these being demographic shifts such as the ageing, the increase of long term conditions, increase of dementia, changes in the diversity of society, health inequalities and limited funding. The work of overseas colleagues and other professions to explore future workforce issues are reported. Finally, opportunities for the future such as global nutrition, food policy and media, technology, public health, and research are considered.

On-line conversation

In total, 835 people joined the on-line conversation, 726 people came from the invited group of 8,653 members of the BDA (engagement rate 8.4%). 109 other interested stakeholders also joined the conversation (service users, members of government departments or clinical commissioning groups, dietetic support workers, other AHPs, doctors, nurses and nutritionists). 521 (active participant rate 62%) people participated by submitting their ideas
or voting and commenting on ideas of others and 314 (38%) spectated; reading the contributions but not contributing. At least 5,000 opened and read one or more of the e-mails that were sent during the campaign (e-mail open rate approx. 37%). For a conversation of this type these figures are within the expected range; engagement rate 5-10%, active participant rate 50-70%, email open rates 30%.

Participants appeared to be broadly representative of the UK dietetic profession as far as available figures allow this to be estimated. Scotland and N. Ireland appeared to be slightly under represented and England slightly over represented. Dietitians employed by the NHS represented the majority, but were still potentially under-represented. Higher education and private practice members were over represented according to BDA membership figures, but it is well accepted that these figures may not represent the true proportion of dietitians working in these sectors. Despite being under-represented, NHS employed people did still make up more than 50% of participants, so it is unlikely that this will have altered the identified priorities in any substantial way.

Whilst the conversation was open to anyone who was interested in taking part, and it was actively promoted beyond the membership, the membership of the BDA remain the group that was targeted most effectively and they predictably made up the bulk of participants. Such conversations are often limited by the fact that a homogeneous crowd tends to have collective blind-spots, however having had a small number of service users, people from overseas, other professions and sectors contributed to making the conversation more comprehensive than if it was just dietitians from the UK.

The data analysis produced seven key priorities as shown in table 1. These were used to inform the initial content and discussion triggers of the appreciative inquiry event, ensuring the findings of both phases were incorporated into the final analysis and recommendations.

**Appreciative Inquiry Event**

The research process generated five prominent themes: Professional identity; Strong foundations - creating structure and direction for the profession; Amplifying visibility and influence; Embracing advances in science and technology; Career advancement and emerging opportunities. The full description of the analysis and supporting quotes is available in the supplementary information, but briefly the themes can be described as follows. Quotes are from a variety of participants.
Professional identity was central to every activity. The focus was the need for a clear identity, where credibility and visibility were established and able to flourish. Participants wanted an identity which shaped a dynamic profession, one which made their role transparent within the profession and to the public:

‘... everyone needs food and health, you want a dietitian... A dietitian is for life... Like we would sign up for the dentist the dietitian is a go to expert’.

There was evidence of a tension between the dietetic and nutritionist identity. The debate demonstrated the difficulties in defining the two roles, as there was some overlap and yet distinct differences in the essence of each professional group. It was apparent that this confused the identity of the dietitian, complicating their credibility and their ability to find their place within the health arena.

Participants wanted a profession that is proactive within the health and social care agenda, where they are able to:

‘lead not follow, but make sure effective, be bold, brave and innovative’

Thus, the profession will require bold leadership, accommodating professionals who are competent in bringing greater drive and ambition to the speciality. This approach would facilitate the visibility that the participants were so keenly seeking, enabling them to be confident in their professional identity, able to perform in and influence the future direction that their profession should take.

Participants wanted a Strong Foundation that prepared future practitioners through a creative and dynamic curriculum. This framework would prepare the apprentice, assistant and graduate, providing each role with a clear identity and career structure. The vision created for education was that it rigorously underpinned the potential routes that would shape the future professional pathways, educating and preparing professionals for the wealth of opportunities available to them. This resulted in a design that provided education for all layers of the workforce, providing foundation learning for the assistant and apprentice, as well as the graduate route.

This Strong Foundation was viewed as fundamental to preparing the professional to work beyond the traditional roles, opening up the diverse opportunities where they could enter a number of different pathways. These pathways would incorporate industry, private practice, primary and secondary care, higher education and working abroad etc. This would acknowledge the extended roles available to the profession and also encourage individuals to
work beyond the traditional paths, using their expertise and creativity to inform health and social care in a variety of different ways.

‘...so you’d see a dietitian in schools, politics, social media and much more. Antenatal clinics we came up with all sorts of areas. Clinical dietetics is one aspect of the broad profession’ ‘leading on the preventative agenda’

**Amplifying visibility and influence** was crucial to the participants. It was evident that participants did not feel that they had a voice which could be heard, yet they felt that they held a crucial role which could influence health and social care. They wanted to be a:

‘Visible force with an audible voice’

This theme also brought together discussions around the use of technology and media for advantage, gaining the visibility, while finding air time to share their message with the public. This opens opportunities to work with individuals and/or professional groups. Here participants were appreciating the scope that media and technology bring for professionals, enabling a creative approach in keeping with the need.

‘We are likely to be operating in a variety of different ways through media, individual consultations, on-line, and making sure that we use the right sort of method for the right person and the right problem, so it's being clear what we should use and when’

**Embracing advances in science and technology** offered a solution to the increasing demand on professionals to manage both the ill and the well. Professionals are expected to implement creative preventative approaches, and keep up-to-date with futuristic health and social care advances. The influence of many other new technological developments can now be seen, from outside the world of food science, which are impacting, or could positively impact, on dietetic roles. Such technologies over the next few years are going to radically change and re-shape the way professionals develop and deliver safe practice to the public.

Although this brings great opportunity to the dietetic role, it also brings additional difficulty to the professional who is already working in a complex and pressurised service. Keeping up-to-date with advances in technology and science is an important consideration for all professional groups, but for dietitians, this is an industry which has grown considerably and continues to do so. Participants recognised this growth in communication strands and the technological advancements and the need for this to be incorporated into their daily activity. Computers are now processing data in new and exciting ways; there is also transformative technology which can be used to influence a change in human behaviour.
‘You have true Artificial Intelligence that will learn off you and say, oh right well, I know you've got diabetes but I know you don’t like this. It's okay, I'll cook something else’

This encourages a new approaches to managing a complex health and social care system, reviewing the conventional practice of home visits or clinics, to instead using the technology to enhance the patient experience and to manage time and resources. Through the use of systems, telecare and telehealth consultations can be achieved in a timely and person centred way. This change obviously requires a cultural shift for those involved and resources to accommodate the service, but it does have the capacity to accommodate a quality service.

‘better utilisation of IT making geographically different areas more reachable and better networks’

Technology could also provide dietitians with the forum that they seek to reach the wider community and to establish their identity within it.

**Career advancement and emerging opportunities** theme identified the diverse opportunities available to the profession, wanting to both celebrate and amplify this through a structured and progressive post-graduate pathway and development opportunities. The opportunities for the professional to influence go beyond the traditional parameters leading participants to explore how this could be embedded in the future dietitian’s role.

‘... kind of like dietetics are a passport to a world of opportunity. I think we need to see the - clearly see, that there is a different path in dietetics to such a wide range of personality, of different levels of qualification, and that it's not all about just becoming an NHS Band 5. It is this passport to a world of opportunity’

Here participants were keen that the profession should not be confined to the NHS but instead, able (embedded in the culture) to work between a variety of different organisations and specialities. The passport would build a profile of evidence which validates the learning achieved and which integrates the pathway opportunities. However, although this was considered as good practice, sharing knowledge while learning new skills, and generating stronger understanding about each area:

‘we really want to make sure that the profession is integrated with health and social care and that we’re able to confidently work across both and that we’re an advocate for people’

Leadership and specialist roles were important factors that came from this study, with practitioners keen to have specialist consultant roles and extended roles as part of their career
pathways. Research activity was identified as integral to this, wanting to embed a professional culture where findings were recorded and published, enabling practitioners to be more visible in sharing their qualitative and quantitative outcomes. This would provide dietitians with greater opportunity to have national and local influence, involved and active in the process of informing policy and practice. Potentially joining parliamentary groups such as obesity or diabetes, where expertise could inform future practice.

‘I’d love in 7 years’ time that dietitians are knocking on chief officers doors and they are actually influencing policy and not just responding to it’

DISCUSSION

The research findings reflect the energy and drive that came from the research event, showing the professional desire for visibility, role clarity and future growth. Figure 2 illustrates the five themes and their interconnectivity that emerged from the analysis. This demonstrates the importance of getting the professional identity firmly positioned and clarified in order to move the dietetic workforce forward. Central to our identity are the professional standards, which uphold our credibility and can be understood by the community that we are serving. Issues surrounding the professional identity included our visibility, our purpose, our relationship with nutritionists, and potentially using royal patronage to provide kudos to the profession.

Participants designed a career structure which acknowledged the need for a sound evidence-based foundation to the pre and post registration curriculum, inclusive of progressive developmental activity. This structure allows for alternative entry and exit points and helps establish the relationship between dietitians and nutritionists. Continuous professional development needs to equip professionals with the skills they require for their chosen career pathway, which may be one or several of many options. This is summarised through the idea of the dietetic passport (see supplementary info for further detail) and ultimately a career framework fit for purpose in the evolving health and social care arena.

Underpinning training, education and practice is the use of relevant communication, media and new technologies. These will enable dietitians to take on evolving roles, work in new sectors and to measure and evaluate their work effectively; research again proving to be fundamental to the professions growth. The participants constantly emphasised the need for
strong career marketing to promote the profession and increase its diversity, and of course intelligent use of the media will play a role in achieving this.

Running throughout all discussions was a strong desire for greater influence, and a recognition that we need to be more proactive, leading not responding, particularly at strategic levels. Ultimately, the profession wishes to see widening career opportunities, a culture of strategic leadership, greater influence and visibility, whilst retaining its strong foundations.

**Study strengths and limitations**

The project was well represented by dietitians who had an active professional voice throughout the phases. However, the inter-professional perspective was limited and the data would have been strengthened with a service user or public perspective. One of the recommendations is to explore how to understand better the public’s view of the dietetic profession. Nevertheless, the active engagement of over 720 dietitians did provide exciting data.

During the appreciative inquiry event a safe environment was created for the participants, with experienced facilitation and provision of different types of opportunities for input during the process. The facilitators remained aware of the group dynamics, responded to any potential issues within the groups, and worked with groups to refocus the activity.

The appreciative inquiry event was carefully designed to enable participants to contribute to the discovery, dreaming and design stages of the methodology, but to maximise participant engagement the event had to be limited to one day. The richness of the data could have been enhanced with the luxury of additional time and resources.

Potential study bias in the way the study was planned and how the data was collected and interpreted was considered carefully. The on-line conversation was analysed by independent researchers (Clever Together), while the appreciative inquiry analysis was led by the nurse within the research team, which provided objectivity to the process. Nevertheless, all researchers were involved in challenging the findings, using their expertise to bring richness into the data analysis, which was then cross checked.

**RECOMMENDATIONS**
The data analysis supports the recommendations shown in Table 2. These are not placed in any specific order, since the five themes bore equal weight. In addition, the recommendations were also built upon the gaps identified in the environmental scan and the priorities identified in the on-line conversation.

Since the recommendations were not discussed with the BDA prior to their formulation, the current activities of the BDA may already address some of them. The recommendations should be viewed in this context.

It is envisaged that the BDA Future Dietitian 2025 Steering Group will be able to use these to formulate priorities for action that the membership desire.

**TRANSPARENCY DECLARATION**

The lead author affirms that this manuscript is an honest, accurate, and transparent account of the study being reported. The lead author affirms that no important aspects of the study have been omitted and that any discrepancies from the study as planned have been explained.
REFERENCES


