

**Final Report**

**COMPREHENSIVE REVIEW  
OF THE  
DIETETIC WORKFORCE**

**REPORT OF THE  
PROJECT GROUP**

*16 December 2002*

# Contents

	<b>Page No</b>
<b>EXECUTIVE SUMMARY</b>	<b>1</b>
<b>1. INTRODUCTION</b>	<b>11</b>
1.1 Terms of Reference	
1.2 Methodology	
<b>2. CONTEXT</b>	<b>13</b>
<b>3. FINDINGS – DATA ANALYSIS</b>	<b>31</b>
3.1 Workforce Demographic Profile	
3.2 Current Regional Profile of Dietetic Workforce	
3.3 Age Profile	
3.4 Full time/Part time Profile	
3.5 Headcount to WTE Equivalent Breakdown	
3.6 Workforce Profile by Grade	
3.7 Workforce Profile by Board	
3.8 Vacancy Analysis	
3.9 Recruitment and retention of Staff	
3.10 Pre-registration Education	
<b>4. KEY FINDINGS IN INTERVIEWS AND FOCUS GROUPS</b>	<b>40</b>
4.1 Supply Issues	
4.2 Demand Issues	
<b>5. WORKFORCE SUPPLY AND DEMAND PROJECTIONS</b>	<b>51</b>
5.1 Supply Projections	
5.2 Demand Projections	
<b>6. CONCLUSIONS</b>	<b>56</b>
6.1 Projected Supply of Dietetic Workforce	
6.2 Projected Demand for the Dietetic Workforce	
6.3 Supply v Demand for the Dietetic Workforce	
6.4 Conclusions on Supply v Demand	
6.5 Sensitivity Analysis	
<b>7. RECOMMENDATIONS</b>	<b>61</b>

## **EXECUTIVE SUMMARY**

In September 2001, the DHSSPS commenced a series of uni-professional workforce reviews, which, over the period of one year, would cover the main clinical professions within the HPSS. There were a number of drivers behind the initiative and these included, the publication of the Hayes Report on the future of Acute Hospital Services and the DHSSPS consultation document 'The Employer of Choice'. Both documents highlighted the urgent need to put in place structures that will support workforce planning within and across all of the HPSS Professions. While it was determined that the initiatives, at this stage, would be taken forward on a uni-professional basis, the information and recommendations from this work would provide an important baseline in terms of developing workforce planning within HPSS across service sectors and professions.

### **Introduction**

The document presented sets out a comprehensive review of the HPSS Dietetic profession. The review was undertaken during the period May-September 2002 and was co-ordinated by a Project Group, which was comprised of representatives of the DHSSPS, providers, education, commissioners and staff side. The content of the report includes background details (including terms of reference), the project methodology, and a detailed profile of the current Dietetic workforce, a projection of the supply and demand for Dietitians within the HPSS workforce over the 5-year period 2003-2007 and recommendations to address issues arising from the review.

### **Background**

The principal focus of the review was to provide the DHSSPS and service providers and commissioners with information concerning recruitment and retention issues and projection of supply and demand within the Dietetic profession. This information is vital to assist the Department in developing strategies that will ensure that the correct numbers of professionals are trained, in place and working effectively to offer the maximum benefit to patients and clients.

In considering the above, it is also important to review the current health policy context for the delivery of health and social care services in the future. A number of strategic documents have been reviewed and highlight the focus now being given to the delivery of high quality accessible care, with the development of the HPSS workforce being key to achieving this.

## **Terms of Reference**

1. Provide a profile of the current Dietetic workforce in Northern Ireland, including:
  - Numbers employed, specialism in which employed, grading distribution age and gender balance.
  - Working conditions and patterns, grading and distribution.
  - Continuing professional development opportunities.
  
2. Provide an analysis of current and future recruitment and retention issues, including:
  - Remuneration
  - Career development and specialisation
  - Career breaks / leaving the profession
  - Working arrangements
  
3. Provide a prediction of the future supply of Dietitians over the next 5- years within the workforce and demand, including:
  - Number of Dietitians required meeting service demands
  - Specialism distribution

This review will focus on providing a qualitative report and was not required to examine economic issues or carry out detailed feasibility studies.

## **Methodology**

The following methodology was employed:

- Audit of current workforce identifying the staffing profile and characteristics. This baseline information was primarily gathered from existing information held within the Department and at Trust level on the Human Resource Management Information Systems, and supplemented as possible by the respective professional bodies.
  
- Background research conducted to identify future and current trends impacting upon the staff and involved a keyword and heading search of relevant professional databases; policy document review; a review of Trust and commissioner strategies to identify proposed service developments or changes and a review of benchmark data sources.

- Consultation with stakeholders involving extensive consultation, through 14 key informant interviews and 7 focus groups.
- Analysis of data gathered to develop a workforce model to aid the prediction of supply and demand of the workforce over the period of 2002 - 2006.

## **Key findings of the review – supply and demand issues**

### ***Supply Issues***

#### ***Current Staffing Profile***

- The Dietetic workforce represents a total headcount of 139 in Northern Ireland (April 2002).
- The ratio of headcount to whole time equivalent for this work force is 1.16:1
- The workforce is entirely female.
- The age profile of the Dietetic workforce shows that only 1% fall within the 55 + category and that 60 is the ‘eligible’ age for retirement within the general Dietetic profession.
- The data indicates that 95% of the workforce is under 50 years of age and 80% are below 40 years of age.
- The grade breakdown of Dietitians within Northern Ireland identifies a 52% of the workforce are at Senior I grade and 10% at the basic grade level.
- The total number of current vacancies within this profession was identified as 8, which equates to 5.4% of the workforce.

#### ***Recruitment and Retention***

- There are currently no issues with regard to recruiting to training places at the University of Ulster with the application to places ratio 6.2:1
- The attrition rate for Dietetic students is minimal (below 4%) based on the three-year period 1998-2001.
- On average 69% of new graduates do not enter the HPSS sector in Northern Ireland, due to a lack of job opportunities. Data indicates that

12 out of 25 graduates in the last 2 years took up employment within the N.I HPSS.

- Final year students expressed a strong desire to take up employment in the NIHPSS but indicated there were poor job opportunities.
- Staff requests are increasing for work-life balance practices and it is estimated that currently this accounts for a loss of 1.75% of the Dietetic workforce per annum and the trend is likely to increase.

### ***Career Progression***

- Lack of career opportunities and progression is a significant factor in demotivating the work force. There is a limited career path at senior level with often the only available promotional route into management, which has very limited opportunities.
- There are very few basic grade posts within the Dietetic workforce (a total of 14 at April 2002) but the numbers have increased by 10 since 1998.
- The majority of Dietetic posts are at a Senior I level (approximately 52%).

### ***Lifelong Learning***

- Difficulties are encountered in ensuring continual Professional Development for post-graduate staff both from a time and funding prospective.
- Funds frequently are raised for training by sponsorship and income generation.
- There are current issues around the need for a change in clinical placement system and a requirement for Northern Ireland Trusts to become more widely involved in accepting clinical placements.

### ***Under representation***

- There is a lack of leadership representation at all levels for the profession, which correspondingly means a lack of inclusion in the decision and communication process.

## **Demand Issues**

### ***Service Developments***

- The delivery of a Dietetic service within the context of the Regional Brain Injury Unit
- Sensory Disability (United Hospitals Trust)
- Additional clinical service for ICU/HDU beds (Royal Group of Hospitals Trust).
- Additional dietetic input to Oncology services.
- The initiation of a Renal Unit (Ulster Community Hospitals Trust)

### ***Skill Mix/Workforce Review***

- A significant amount of Dietitians time can be spent on administrative and clerical tasks.
- Some tasks undertaken by Dietitians do not require professional skills and there are opportunities to further allocate tasks to assistant grades.
- Dietetic assistance could be employed to meet some of the requirements identified as current demand in the clinical service.
- There is at present only 1 Dietetic assistant post within the NIHPSS and this post is being piloted by Craigavon Area Hospital Group HSS Trust. Regionally Managers await the outcome and assessment of this assistant post success.

### ***Operational difficulties***

- Pressures experienced within the Dietetic Service results in a reduction in a number of review appointments possible for clients.
- An increase in patient awareness of Patients Charter, rights access to services, increasing expectations complaints systems and causes pressure on the operational service delivery.
- An ageing growing population with compounding clinical complications in old age, increased dependency of patients, increased referral activity patterns are causing of pressure on the clinical service.

## Projected Supply and Demand Conclusions

Conclusions were drawn and assumptions made concerning the future profile of the workforce and supply and demand projections have been detailed in Section 5 of this report. They have been developed into a workforce model to predict the requirement of the Dietetic workforce over the period 2003 - 2007.

All data presented has been gathered from discussions with the project group, key informant interviews, HPSS Project Support Analysis statistics and current business cases.

### Supply Conclusions

Supply conclusions are based on assumptions made during the consultation process and the project supply of Dietitians has been calculated between 2003-2007. These are profiled in the table below:

**Table: Projected Supply of overall Dietetic Workforce in NI (2003-2007)**

Supply	2003	2004	2005	2006	2007
Total available to NI HPSS	25	24	25	24	25
Total leavers of NI HPSS	3	3	4	4	4
Total current/potential numbers in NI HPSS	139	161	182	203	223
Projected potential numbers in NI HPSS	161	182	203	223	244
Potential net increase (decrease)%	16	13	11	10	10

### Demand Conclusions

The demand for Dietetic professionals has been presented at three Category levels:

**Category One:** Capital and service developments with identified staffing requirements for the next 5 years for which funding has already been agreed.

**Category Two:** Policy improvements that may be met in the next 5 years if funding is made available. This includes educational requirements at both under and postgraduate level including continual professional development, time allocated to students on clinical placements, role developments and meeting clinical governance.

**Category Three:** Current demand and unmet clinical need which has been identified via the key informant interviews and the Project Group. There is no specific policy context or resource identified at present to meet this demand.

For the initial purposes of this workforce plan a combination of category 1 + 2 has been adopted. These categories include agreed and resourced capital and service plans with identified workforce requirements and those that are likely to be resourced within the 5-year plan. The following table illustrates the impact of these demands within the projected workforce:

**Summary table of categories 1 & 2**

<b>Workforce requirements in WTE</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>Total</b>
<i>Category One (capital and service requirements that have a funding allocation)</i>	7	5	-	-	-	12
<i>Category Two (Policy improvements that may be met in the next 5-years of they receive funding approval)</i>	6	10	4	4	6	30
<b>Categories 1+2</b>	<b>13</b>	<b>15</b>	<b>4</b>	<b>4</b>	<b>6</b>	<b>42</b>

Demand Category 3 has been explored in depth in Chapter 5 of the report.

**Supply v Demand Conclusions**

The following table illustrates the overall increase (decrease) in the numbers within the workforce over the 5-year plan.

**Table: A profile of projected supply against demand by headcount over the 5-year plan**

<b>Key factors supply v demand</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
Net supply NI HPSS	11	11	10	10	10
Total potential numbers in NI HPSS	161	182	203	223	244
Vacancies	8	-	-	-	-
Demand Categories 1+2	13	15	4	4	6
Total over (under) numbers in the workforce	(10)	(4)	6	6	4

It can be seen from the figures presented that there is range in the projected numbers within the Categories 1+2 for each year over the 5-year workforce plan. These categories include agreed and resourced capital and service plans with identified workforce requirements and those that are likely to be resourced

within the 5-year period. The figure presented suggests that there is a higher supply of Dietitians than posts available within the NIHPSS when taking into account the requirements of Categories 1+2.

## **RECOMMENDATIONS**

The timescale for the implementation of the key recommendations outlined below is twelve months to coincide with the follow up review:

### ***Workforce Planning***

- Now that the workforce planning process is established it is recommended that the Project Board should be retained to steer and implement the recommendations emanating from the Dietetic Workforce Review.
- Now that the workforce planning process is established it is recommended that there is a regular review of supply and demand throughout the 5-year period. The information gathered in the base-line review should be built upon and expanded on it taking into account such factors as the impact on the workforce of the role extension, sub-specialisation, capital plans and service development business cases.
- The Project Board should ensure that there is a consistent and targeted approach to gathering relevant supply and demand data and manpower recording processes.
- The Department should review the activity data collected from the Allied Health Professions at Trust level. Professional managers should review management data collection from the current information systems and ensure the systems are maximised to their full potential the aim of these reviews will be to provide a more comprehensive management information collection, which will aid the workforce planning process.

### ***Recruitment & Retention***

- All employers should put in place policies to incorporate planned induction, consolidation and mentorship programmes for all new staff and review the effectiveness of these in a quantitative and qualitative manner.
- Employers and the profession should put in place a consistent approach to the implementation of work-life balance policies and procedures and this should be factored into workforce planning.

### ***Utilisation of the available Workforce***

- Trusts should carry out further work into the possibility of reallocating non-clinical responsibilities from Dietitians to other health care workers including Dietetic Assistants.
- A co-ordinated approach should take place with regard to workforce planning of Dietetics, particularly in relation to role extension and development issues.

### ***Education & Development***

- Further discussions should take place between the DHSSPS, Trusts and the University to establish a more effective way of providing and increasing the numbers of clinical placements for students throughout the degree programme. It is considered that these increases are vital in enabling Trusts to retain graduates within the NIHPSS. Contributing to the loss of these graduates to outside the NI workforce is the placement of students in the final year to mainland UK. The aim should be for Dietetic student clinical placements to be self sufficient within the NI context. All Trusts with Dietetic services should provide some element of the student clinical placements over the training period. Results of the Clinical Placement Survey (DHSSPS May 2002) should be used in conjunction with this exercise to progress the position of Trusts to better accommodate the clinical placements required.
- There should be an increased focus placed on Continuing Professional Development (including leadership development) and all employers should ensure that the recommended hours provision is accounted for through the workforce planning process.
- Dietetics should become actively involved in the Centre for Continuing Professional Development for the Allied Health Professions (established by the DHSSPS, 2002) The Northern Ireland Dietetic Profession should identify its training requirements and contribute to planning for these needs.
- Employers should provide training to all staff that will be required to provide mentorship or coaching support as part of their role.
- The Department should take forward the development of the AHP consultant role to acknowledge the high levels of clinical expertise within the profession.

## **Further Review of the Workforce**

- The Project Group should be convened initially on an annual basis to review and update the workforce plan.
- Trusts should review the skill-mix of their Dietetic workforce to ensure it has the most appropriate combination of staffing grades to meet the needs of the clinical service this review should also ensure that entry-level posts are maintained so there is a continued flow into the workforce of new graduates.
- The Project Group should be mobilised to take forward where appropriate any recommendations emanating from the workforce review.
- Trusts should review with its Dietetic service the demands of Category 3, as identified in this report, and ensure that any agreed increase in service is included in any future service development plans.

## **CONCLUSION**

This Dietetic workforce review can only be viewed as the starting point, or a baseline for further work to be carried forward. This includes the development of an action plan to take forward the recommendations outlined above. The models presented in the report will need updated and refined on a regular basis to continue to inform decision-making and priorities concerning the investment in the NIHPSS Dietetic workforce over the 5-year plan.

## **1. INTRODUCTION**

An in-depth review of the Dietetic workforce in Northern Ireland took place between May and September 2002 and was co-ordinated by a Project Group, which comprised of representatives of the DHSSPS, HPSS commissioners and providers, education and staff side. The report includes:

- A background to the project
- The project methodology
- A summary of the recruitment and retention issues arising from the review and a projection of the supply and demand for Dietitians over the next five years within HPSS.

The report concludes with a list of recommendations, which seek to contribute to the addressing current and future workforce issues within the NI HPSS Dietetic workforce.

The Department of Health, Social Services and Public Safety Northern Ireland's aim of the review is to develop strategies that can assure the correct numbers of Dietitians are in place and working in the most effective way to offer optimal benefit to the overall healthcare team and the patient.

### **1.1 Terms of Reference**

The following specific terms of reference were applied when carrying out this review:

Provide a profile of the current Dietetic workforce in Northern Ireland, including:

- Numbers employed, grading, distribution, age and gender balance.
- Working conditions and patterns.
- Continuing professional development commitments.

Provide an analysis of current and future recruitment and retention issues, including:

- Remuneration.
- Career development and specialisation.

- Career breaks/leaving the profession.
- Working arrangements.

Provide a prediction of future supply over the next 5 years and demand for Dietitians, including:

- The number required meeting service demands.
- Specialism distribution.

The requirement for this piece of work was to review issues at a generic, strategic level and provide sound conclusions and recommendations relevant to the workforce as a whole. This review was not required to examine economic issues or carry out detailed feasibility studies.

The aim of the report is to provide a starting point and baseline for workforce planning which could then be built on and expanded through future analysis and focus using identified workforce representatives at all levels throughout the sector.

## **1.2 Methodology**

The methodology for the review focused on consulting with those within the current workforce, across the geographical regions of Northern Ireland. The views of under graduate students were also sought as they represent a substantial part of the future supply of the workforce.

All representatives were identified by the Project Board, Appendix 1, set up to manage this review.

The methodology adopted for this review contained the following:

- **Key Informant Interviews:** Semi-structured in-depth interviews were carried out with 14 key representatives, Appendix 2.
- **Focus Groups:** 7 focus groups were held made up of a representative mix of disciplines, grades and primary and secondary sector employees, Appendix 3.
- **Literature Review and Desk Research:** A comprehensive literature review was undertaken and it was key that these references were utilised to inform the project, Appendix 4.

## 2. CONTEXT

It was important to set this review within an appropriate context before carrying out any data gathering to inform the design of pertinent survey tools and ensure relevancy of conclusions and recommendations. This necessitated looking at the current situation with regard to the wider Health Policy context and the roles that Dietitians could play within this.

### *Health Policy Context*

The overall aim of the Department of Health, Social Services and Public Safety is to improve the health and well being of the people of Northern Ireland within the resources available. It seeks to achieve this in ways which

- Are fair and equitable, targeting resources towards those in greatest need
- Listen to the views of users, carers and the public.
- Continuously improve the quality and clinical excellence of services
- Stimulate and support the formation of partnerships across all sectors to promote and improve health and well-being.

It must also seek to increase the effectiveness of clinical intervention. That is to maintain or improve health and to secure the greatest possible health gain from available resources. Those HPSS employees, which fall within the Allied Health Professions, specifically Dietetic, are key to achieving this overall clinical effectiveness.

In order to develop strategies that can ensure the correct numbers of these skilled employees are in place, working on an integrated basis and in the most effective way, offering maximum benefit to the health care team and optimal patient outcomes. Sir Maurice Hayes has further reinforced this in the Acute Services Review consultation document (May 2001) (1) where he states that the DHSSPS, in consultation with the service, should as a matter of urgency undertake an assessment of service needs and the skills and staff required to deliver these services efficiently and effectively. The report also stressed that there is the need to build up adequate contingency or even over supply of adequately prepared professionals so as to ensure that there is no repeat of difficulties of the past.

England has a 4% vacancy rate within the Dietetic workforce (March 2001) and competition between mainland UK and ROI has caused a drain of dietitians from the Northern Ireland HPSS. It is within this context that the workforce review for Dietetics is set.

### ***Great Britain and Northern Ireland Context***

The strategic focus outlined above was first detailed in ‘The New NHS – Modern and Dependable’ (2) which set out the Government’s vision for the National Health Service (NHS) in England. The Government plans for NHS modernisation are intended to ensure a high quality, national service that is clinically sound, cost-effective and equitable. This was emphasised by Alan Milburn, speaking at Farnborough Hospital on 13 October 1999, saying, “By the time we finish our 10-year programme of modernisation, the NHS of 1948 will be unrecognisable. It will remain true to its values but they will be delivered in new and modern ways”. The NHS white paper (3) and subsequent quality consultation document (4) identified requirements for consistent, high quality care throughout the health service and all health organisations, including primary care. This will mean that all areas of healthcare, including Dietetic deliver care to the patient in the most timely and most cost effective ways possible.

In line with the above, the Northern Ireland Executive in its Programme for Government 2001-2004 (5) identified “Working for a Healthier people” as one of its priorities and has stated that “we will work to reduce waiting lists, implementing new management arrangements, and recruiting additional front line staff”.

The Programme focuses specifically on the following:

- Reducing preventable diseases, ill health and health inequalities
- Ensuring that the environment supports healthy living and that recreational facilities are improved
- Modernising and improving hospital and primary care services to ensure more timely and effective care and treatment for patients
- Enabling those who suffer from disability, chronic mental or terminal illness to live normal lives.

The Programme commits the Executive to the following actions, which affect Dietitians directly:

- Providing 40-50 extra specialist medical, nursing and other staff to improve treatment of people with breast, lung and colorectal cancers.
- Addressing workforce shortages in the health service.

The document ‘Priorities for Action’ (6) details the DHSSPS planning priorities for 2002-2003, in the context of the Programme for Government as

outlined above. It states the objectives, and targets that will ensure their achievement. In meeting its responsibility for setting strategic direction, overseeing the delivery of the health and social services, the DHSSPS has set nine key planning goals for the HPSS in the next financial year. These include:

- To issue, and put in place the supporting structures for, the Investing for Health Strategy;
- To implement new arrangements in primary care, including the development of Local Health and Social Care Groups;
- To improve access to Hospital and Community services;
- To further develop the linkage and coordination between the primary, secondary and community care sectors to improve overall system capacity to manage peak periods of demand;
- To improve the community infrastructure to support long-term care of vulnerable groups in the most appropriate community setting.

### *Secondary Care*

In the provision of secondary services, the Acute Hospital Review Group Report 2001(1) is the most recent document to address the structure of the HPSS as a whole in Northern Ireland. The Report highlights key recommendations, which include:

- To significantly shift the balance of care from secondary care to primary care.
- To provide acute hospital services that are consultant delivered rather than consultant led.
- Primary care organisations should be given the responsibility for the commissioning of community services and non-regional hospital services in the context of the strategic plan.

Developing Better Services (7) outlines a proposed model for future hospital services. The proposals will require £1.2 billion capital investment over a 9-year development period, and entail the following structures:

- Acute services to be more strongly patient-focused and organised around population groupings rather than facilities at 9 acute Hospitals;

- A number of new Local Hospitals, which will network with acute hospitals and local primary and community care to deliver services that do not need to be delivered in a large acute Hospital;
- Provision of Enhanced Local Hospitals at Downe and possibly Tyrone County Hospital;
- Provision of Consultant maternity in-patient services on 9 sites, and pilot of 2 stand-alone midwife led units.

### ***Quality and Primary Care***

The principles outlined above have been reinforced in the context of Northern Ireland in the recent Consultation Paper, “Best Practice – Best Care” (8). This paper, published in April 2001, focuses on the three interlocking strands of setting standards (improving services and practice), delivering services (ensuring local accountability) and improving monitoring and regulation of the services. In addition, identifying new ways for health professionals to be involved in the delivery of NHS services has been a key principle identified in the Consultation Paper “Building the way forward in Primary Care” (9), which clearly sets out a number of priority areas for development in primary care relevant to this review.

In Northern Ireland these proposals have been supported by the ‘Allied Health Professions’, which includes Dietitians. The position paper ‘Primary Care – Professions Allied to Medicine’ (10), endorses the priority given to breaking down traditional boundaries so that all care professionals use their skills in the most appropriate way to treat and care for people, the development of new and innovative models of service delivery and the support of emerging new professional roles. However in order for this to happen it is argued that there must be greater representation of the Allied Health Professions to influence the decision making process in strategic planning, policy formulation, commissioning and in the general management of the HPSS (11).

### ***Public Health***

In the UK, public health strategies have recently been produced for Scotland (Working together for a Healthier Scotland 1998) (12), Wales (Better Health – Better Wales 1998) (13) and England (Saving Lives: Our Healthier Nation 1999) (14).

In Northern Ireland “Investing for Health” (15), and “Well into 2000: A positive agenda for Health and Social Well-being” (16) underpin the government’s vision for the Health Service. The proposals outlined in these documents encourage professions to work with the community to promote health and well-being rather than focus on the treatment of ill health.

“Investing for Health” (2002) highlights the important role that food and nutrition have on health and well-being, in:

“what we eat plays a vital role in determining our state of health. A good diet is essential for maintenance of good physical and oral health, and during pregnancy is important for the healthy development of the growing baby. Poor nutrition and high cholesterol can contribute to coronary heart disease, some cancers, diabetes, raised blood pressure, obesity, asthma, osteoporosis and dental decay.”

(Investing for Health, 2002:53)

It is recognised that Dietitians play a significant role in health promotion and prevention of ill-health and disease processes through nutrition guidance.

### ***The Dietetic Profession***

The United Kingdom Parliament formally acknowledged the professional status of Dietitians by setting up the Dietitians Board under the Professions Supplementary to Medicine Act 1960. This gives a considerable degree of professional autonomy to Dietitians, enabling them to maintain their own professional discipline, set standards of conduct and to set standards of education and training for entry to the profession.

At March 2002 there were 5,469 Dietitians registered with the Health Professions Council. (17) Almost all of these (5,094) were registered with the professional body to dietitians, the British Dietetic Association. (18)

### **SUPPLY ISSUES**

England experienced an increase in qualified allied health professional staff, including Dietitians during September 1999 and 2001, of approximately 7 per cent (19). Despite the increase in staff, the Department of Health has recognised that there are still areas of the country and professions where there are shortages. The shortfall in meeting the demand on the NHS was recognised beyond doubt in the NHS Plan (20). The Plan highlighted a commitment to increasing AHP numbers, suggesting that by 2004 there would be:

- Over 6,500 more therapists;
- 4,450 more therapists being trained and
- new therapist Consultant posts.

Evidence from the British Dietetic Association Annual Report 2001-2002 would indicate an increase in the dietetic membership from 4945 in February 2001 to 5094 in February 2002, an increase of 3.01% (18). The Dietetics Workforce in Northern Ireland has increased in recent years. Northern Ireland

had 108.5 whole-time equivalent Dietitians in post in 2001, a total of 6.5 more than in 2000.

The issues associated with the supply of Dietitians are detailed in subsequent paragraphs.

### ***Remuneration***

The pay structure for Dietitians provides three main clinical grades (Basic Grade/Senior II and Senior I) followed by Chief Grade (I-IV) and District Grade (I-II). Management posts are identified at the Chief and Unit Senior Manager II Grades. Agreement was reached however during 2001/2 on the introduction of Allied Health Professions Consultant Posts.

The salary structure is the same as that applied to the other PAMs professions of Occupational Therapy, Physiotherapy, Podiatrists, Orthoptists and Radiographers with pay awards determined by the National Pay Review Body for Nursing Staff, Midwives, Health Visitors and Professions Allied to Medicine. The Pay Review Body recommended a 3.7 per cent increase to basic salaries and an increase in on-call and standby allowances in 2001/2. One Discretionary Point was consolidated into the pay scales, introduced as a mechanism for staff to achieve recognition for having developed their role and skills. Staff are eligible for discretionary points after serving one year at the top of the scale. (21)

Like other NHS professions, the remuneration of Dietitians will come under new arrangements proposed under *Agenda for Change*. The timeframe for introduction of these arrangements within NI HPSS has not yet been determined.

### ***Recruitment***

Statistics from the DoH vacancy survey indicated that at 31 March 2001 England had 100 vacancies for dietitians, which equates to 4% of the workforce. (22) During January\February 2001, a survey of NHS Dietetic Services in the United Kingdom was undertaken by Pay and Workforce Research (PWR) on behalf of the Departments for England, the Scottish Executive Health Department, Welsh Assembly and Department of Health and Social Services in Northern Ireland. Information collected in relation to the number of 'live' vacancies for dietetic staff calculated as 195.95 wte as at December 2000, at 99 of 165 organisations (60%). (23)

There is evidence to suggest that the dietetics professions is experiencing recruitment difficulties. The British Dietetic Association Annual Report 2001-2002, highlighted the fact that one of the two main 'threats' to the profession was the dearth of clinical placements, affecting the ability to increase the

number of dietetic students and in turn affecting job recruitment. (18) The survey of National Dietetic Services indicated that over 72% of organisations reported that they had experienced recruitment difficulties in the previous 12 months. The most difficult posts to fill were reported as part-time posts, posts to cover for maternity leave, specialist posts, with particular reference to renal, paediatric, oncology and mental health services and Dietitians working in the community. (23)

### ***Retention***

The Dietetic Services survey also indicated that just over 33% of organisations reported that they had experienced retention difficulties in the previous 12 months. The main retention difficulties were noted as:

- Junior posts moving to more senior ones very quickly;
- Leaving for career development;
- Attracting back staff following a period of maternity leave;
- Lack of child care provision;
- Stress and workload;
- Relocation for personal reasons. (23)

Evidence from the BDA would also suggest that the percentage of Dietitians registered with the BDA and working in the NHS is decreasing- Thus 65% of Dietitians were registered with the BDA and working in the NHS in 2000. This figure dropped to 60% of the workforce in 2002. (21)

### ***Return to Practice***

Queen Margaret University College at Edinburgh has recently commenced a re-entrants to the profession course for Dietitians, and is expecting to run 2 such courses during 2002-2003. This is some reflection of the demand for such a course. (18)

### ***Education and Training***

A number of strategic documents review education, training and development for health professionals in England and Wales. *Educating and Training the Future Health Professional Workforce for England* (24) concluded that achieving the planned expansion set out in the July 2000 NHS Plan depends on increased investment in teaching staff and accommodation at higher education institutions; achieving value for money in the provision of training courses; a reduction in student drop out rates and a larger number of good quality practice placements.

England has experienced problems with recruitment and retention for AHP undergraduate places, with an average 20% under recruitment against available

places, and student attrition rates ranging from 6 to 10%. (24) The Department of Health's *Human Resource Performance Framework* (25) includes targets to reduce attrition rates, with the 2000/1 intake non-completion rate of pre-registration training not to exceed 10% for allied health professionals nationally. The Dietetic Workforce Baseline Study (2000) found that the number of applicants per undergraduate place available for Dietetics courses averaged between 5 to 10, with the highest number being at the University of Ulster averaging around 25 in most years. (26) The report indicates that under recruitment to undergraduate courses is variable commenting "the number of places left unfilled varies considerably between Universities and years." (26)

In Northern Ireland the overall number of university places for B.Sc (Hons) Human Nutrition course is 38-49 with 19 places in 2<sup>nd</sup> year for the B.Sc (Hons) Human Nutrition & Dietetics Course. In addition, the attrition rate is low in Northern Ireland with an average rate of 4% based on 3-year period (1999-2001).

*Educating and Training the Future Health Professional Workforce for England* (24) noted the availability of suitable practice placements as a critical limiting factor on the number of training places that can be commissioned and that given current staffing levels, most hospital departments are close to or have already reached their capacity for supervising students. As highlighted in previous paragraphs, the BDA indicated that one of the two main 'threats' to the profession was the dearth of clinical placements consequently affecting the recruitment of staff into the NHS workforce. (18, 23, 27)

### ***Family Friendly Policies***

The Dietetics Workforce in Northern Ireland is 100% female, and this has significant implications therefore for both part-time working and the need for family friendly working policies. The importance of having regard for the needs of a predominately female workforce is well documented in the Hayes Report (1).

In England and Wales, this is documented in the *Third Report of the House of Commons Select Committee on Health* (28). In considering NHS workforce issues the report details the government's commitment to introduce a range of family friendly policies including childcare facilities, flexible hours and job share opportunities and the fact that the NHS operates a comprehensive 24-hour service provides opportunities. There is therefore a need for an employer to allow staff to 'marry their work and out of work responsibilities'.

The Review Body for Nursing staff, Midwives, Health Visitors and Professions Allied to Medicine *Nineteenth Report* (2002) highlighted that three quarters of Trusts had implemented family-friendly policies such as flexible working,

annualised hours, term-time working and job-share. Almost two-thirds of those who had implemented these policies said that they were 'effective.'(21)

The survey of NHS Dietetic Services (2001) found that in 72% of organisations flexi-time/flexible working is available. The most common form of flexible working arrangement used was career breaks (74%). (23)

## **DEMAND ISSUES**

Understanding the current and future demand issues within HPSS as they relate to Dietitians is essential in projecting future requirements for staff. The issues associated with the demand of Dietitians are detailed in subsequent paragraphs.

### ***Societal Changes***

The Department for Education and Employment, *Employers Skills Survey Report* (29) highlighted that there has been steady growth in demand that is expected to continue in the medium term, for the services of Professions Allied to Medicine. Factors contributing to this demand include ageing population, rising expectations of patients and government reforms including a move towards care in the community, more integrated multi-disciplinary services and the introduction of clinical governance. The report identifies that the picture within HPSS is one of changes in technology and ways of working requiring staff to have a greater range of skills and a higher level of skills.

The average life span is increasing by about two years every decade (30). OPCS data suggest that 16% of the population are aged 65 or more. The number of people in this age category has also increased by 6.15% during the last 10 years. Older people have a higher usage of all health services, consequently Dietitians will have an important role to play in the treatment of multiple pathology associated with ageing and the increased need for active rehabilitation in the older patient group.

Advances in medicine and technology have also impacted upon the demand for dietetic services. People with certain conditions such as life-limiting and terminal illnesses are now surviving, where previously they would not have done.

### ***Service Demands***

The importance of the nutritional care of patients was detailed in the Royal College of Physicians Report 'Nutrition and Patients' (2002) which recommended that nutritional screening of all patients should be an integral part of clinical practice. (31) Understanding the current and future demand issues within HPSS as they relate to Dietitians is essential in projecting future requirements for staff.

- **Diabetes**

The World Health Organization's report 'The World Health Report 1997' indicates that by 2005, cases of diabetes will double globally. (32)

At least 80% of newly diagnosed Type 2 diabetes are overweight (33). The relationship between obesity and blood glucose control, and other co-existing clinical conditions including dyslipidaemia and hypertension is well documented.

The results of the UK Prospective Diabetes Study (UKPDS) identified that 50% of newly diagnosed Type 2 patients had existing complications of retinopathy, hypertension and cardiovascular disease at diagnosis. (34)

Both the Diabetes Control and Complications Trial (DCCT) (35) and the UKPDS have provided evidence that dietitians are an integral component of diabetes management from patient diagnosis.

A recent survey by the Association of British Clinical Diabetologists has indicated that dietetic services were consistently understaffed with 97% of responses being below the recommended minimum level. (36) The recommendation is 22 hours WTE of dietitian with a special interest in diabetes per 100,000 population. (36)

The development of the National Service Framework for Diabetes indicates that a core of highly skilled NHS dietitians will be required. (37)

The 'Clinical Standards Advisory Group (CSAG): Standards of Clinical Care for People with Diabetes, HMSO, 1994' outlines the core aspects of the provision of care for people with diabetes. (38)

Dietitians in Northern Ireland have audited several of the standards. Only 42% of newly diagnosed Type 2 diabetics in the EHSSB, referred to the dietetic service were seen within 4 weeks of diagnosis. (39) This is re-enforced nationally by the Association of British Clinical Diabetologists.

19-26% of diabetic patients attending outpatient clinics received one dietetic contact over a 12 month period. This was not necessarily a non-crisis annual review as outlined in the CSAG Standards. These results are again similar to national surveys.

The dietitian is an integral member of the diabetes team in delivering comprehensive education to all newly diagnosed patients, annual review to all patients and minimum review to those requiring intensive education.

CSAG (1994) specified 'That each locality should have an identified senior dietitian to ensure the dietetic service to diabetes is clearly defined, well managed and relevant to the local population'. (38)

- **Heart Disease**

Coronary heart disease causes many deaths, much disability and consumes considerable NHS time and money to prevent and treat. It is estimated to cost the UK £10,000 million per year.

Coronary heart disease remains the most common cause of death in Northern Ireland. In 1999, approximately 20% of deaths in women and over 25% in men were accounted for by coronary heart disease. (40)

It is estimated that up to 30% of deaths from coronary heart disease are due to unhealthy diets.

The National Service Framework sets standards for the prevention, diagnosis and treatment of coronary heart disease using specialist, multidisciplinary teams that will lead to major improvements in quality and access. (41)

- **Cardiac Rehab/Post MI/Revascularization**

Research has shown cardiac rehab following a heart attack, helps recovery and reduces mortality. Diet is a key factor. Evidence based guidelines on diet in the secondary prevention of myocardial infarction (MI) have been produced and endorsed by the British Dietetic Association Dietetic Guidelines: (42)

Unfortunately, due to lack of resourcing, recent estimates suggest that only 45% of UK-wide dietetic departments are providing dietary advice consistent with best practice in this area. (43)

- **Heart Failure**

The prevalence and population burden of heart failure due to coronary heart disease is increasing despite the declining overall mortality from coronary heart disease. This is thought to be due to both an aging population and to more people surviving acute heart attacks but left with residual left ventricular dysfunction.

The incidence is about one new case per 1,000 population per year and is rising at about 10% per year. This increases with age to more than 10 cases per 1,000 population in those 85 years and over. (41)

Heart failure often has a poor prognosis with survival rates worse than for breast or prostate cancer. (44)

Heart failure accounts for about 5% of all medical admissions to hospital. People are frequently re-admitted with a re-admission rate of up to 50% over 3 months. About half of these admissions may be preventable (45, 46) One of the main reasons for re-admission is “non-concordance with diet”. The annual cost for hospital treatment to the NHS is £400 million – 2% of the budget.

Dietitians have an active role to play in giving practical nutritional and dietary advice to patients in the various stages of heart failure:

- In acute event management through dietary modification to help minimize the damage to the heart
- By continued dietary support to help people stay out of hospital
- By more complex dietary modification and nutritional support to prepare people for transplantation
- To support people and their nutritional needs in the palliative phases.

The mortality rate for heart failure is higher than many forms of cancer (47), yet little attention has been given to the palliative care needs.

The prognosis of severe NYHA Class IV is similar to that of colonic cancer (25%) mortality per year.

DOH (1998) Report has suggested that advances in palliative care for cancer patients should be integrated into the care of those with clinically similar conditions. (48)

- **Renal**

The projected WTE need outlined above is based upon Mallick (1991) (49) and recommendations by the Nutritional Renal Workforce Planning Group of the British Renal Society (Summer 2002). The figure given will need to be re-evaluated following publication of the Regional Review of Renal Services (DHSS&PS) 2002.

- **Cancer**

The NHS Cancer Plan (50) and the Calman-Hine Report (51) in the UK were published with the aim to develop a network of care, which would enable the patient, wherever he or she lives, to receive a uniformly high standard of treatment and care.

To ensure that all people with the disease have rapid access to cancer services, the Campbell Report ‘Cancer Services: Investing for the Future’ (1996) (52) outlined the need for current services to be re-organized. The implementation

of the report would prioritise one regional cancer centre, based at Belfast City Hospital, and 4 additional cancer units, one for each Board area.

All patients with cancer should be managed by multi-disciplinary, multi-professional specialist cancer teams, as such care is associated with a better quality of life and an improved prospect of survival for the patient.

The Government's strategic document 'Investing for Health' (15) states that cancer is the second most frequent cause of death with a chance of 1 in 6 men and 1 in 8 women dying before the age of 75 years.

Dietitians, as highlighted in the PAM Strategy for Cancer Services (53), play an integral part in the nutritional support of people, across all cancer and in palliative care. Malnutrition is recognized as the single most common secondary diagnosis in cancer patients.

Both the Acute Services Review (1) and Priorities for Action (6) identify the progression and development of the Campbell Report recommendations as key objectives.

- **Critical Care**

Malnutrition is widespread in both hospitals and the community. The main dietetic goal in critical illness is to prevent the deterioration in nutritional status associated with the stress response. Nutritional intervention alone is unlikely to dramatically alter the overall patient outcome but starvation will add to mortality and morbidity in both health and disease. Nutritional assessment by a state registered dietitian will identify those patients most at risk and those most likely to benefit from nutritional support. Research increasingly supports the benefits obtained in the provision of optimum nutrition in critical illness, with decreased length of stay in ICU/HDU beds and earlier rehabilitation.

The enteral route is the preferred method of nutrient administration in the critically ill patient. Dietitians have unique skills to provide a comprehensive assessment of nutritional intake, nutritional status and individual patient requirements, thus enabling the specific prescription of appropriate dietary management and use of artificial nutritional support.

The NHS Modernisation Agency in the critical care programme recommend that nutritional therapy should be an integral part of patient care and systems must be in place to ensure dietetic time is funded in line with service developments. To provide a dedicated service to critical care, a level of 0.05-0.1 WTE dietitian per bed is suggested (level 2 and level 3 beds). (54) This programme also identifies the need for a planned approach to human resources not only recognising the need for a better career structure and ongoing post-graduate training in order to recruit and retain experienced dietitians (at least

senior 1 grade) in critical care, but also the financial and professional support to facilitate this. The advent of dietetic consultants may promote this.

- **Health Promotion**

Healthy nutrition is identified as a key priority topic integral to lifestyle and lifeskills programmes promoted for priority groups and settings. Community based dietitians have a central role in facilitating accurate, consistent nutrition messages through nutrition training awareness and update sessions for key workers and the general public. This includes active participation in nutrition related programmes in communities, workplaces and schools. Community Dietitians are a scarce resource on the ground and nutrition promotion activities tend to be on an ad hoc basis. Investment in this service, dedicated to nutrition promotion activities is required to successfully implement the nutrition components of “Investing for Health”(15).

The major issues i.e. heart disease, strokes, cancers, accidents/falls, mental ill health, long-standing sickness and disabilities all have a significant nutrition component.

There are a number of community based nutrition programmes currently available which would be extremely valuable tools in targeting social inequalities, tackling social inclusion, addressing individuals in their social context, encouraging community activity and self help, especially in disadvantaged neighbourhoods.

These include:

- “Cook it” – a community based practical “hands on” cooking programme for people with minimal cooking skills which aims to promote healthy meals, and takes account of costs.
- “Activate” – a healthy lifestyle community based programme.
- Food and Nutrition Community Initiatives such as Saffron, which is led by a Community Dietitian and involves link workers to improve knowledge and awareness of nutrition.

Whilst there is much scope for increasing and expanding the use of these programmes in the community, the major restricting factor is the lack of available resources to enhance the health of our population.

- **Home Enteral Tube Feeding**

Recent trends in medical care have resulted in increasing number of patients being cared for in the community. Of particular relevance to Dietitians is the

substantial increase in the number of patients who are discharged from hospital to home with home enteral tube feeding. Percutaneous endoscopic gastrostomy (PEG) as a method of replacing feeding tubes into the stomach has had a particular impact on increasing the number of community-care patients (55). The increasing numbers of patients referred for home enteral tube feeding within Northern Ireland is highlighted by L'Estrange (1997) (56). During the 1990/1 there were 3 new patients on HETF referred to the EHSSB Community Nutrition and Dietetic Service; in 1995/6 this had increased to 43, and in 2000\01 to approximately 600.

A more recent study (2001) by Matthewson et al to a PEG advice team in an acute Hospital in Newcastle found that during a 2 year period, the rate of new PEG insertions increased by 53%, the rate of PEG replacements by 315%, and the number of patients under the team from 16 to 70, an increase of 337% (57).

Madigan (2002) investigated the needs of different patient groups receiving home enteral tube feeding. The primary underlying disease had an effect on the frequency of contacts with Dietitians, with those suffering from cancer requiring more follow-ups than others (58).

### ***Service Developments\Role Extensions***

A number of service developments are likely to impact upon the demand for dietetic services. They can be outlined as follows:

- **Prescribing Rights:**

The Health and Social Care Act 2001 contained enabling legislation to extent prescribing rights to other statutorily registered groups of healthcare professionals, including Dietitians. The BDA has established a Steering Group to look at prescribing across the profession (59).

- **Parenteral Nutrition:**

The Dietitian's role in the prescription and monitoring of parenteral nutrition has extended over recent years. In 1993 only 5% of Dietitians taking part in BDA membership surveys indicated that they assumed total responsibility for the formulation of parenteral nutrition regimes. However by 1995 14% of Dietitians indicated that this was the case. In addition 20% of Dietitians in 1995 had extended their role to include ordering of PN from pharmacy. 87% of those currently involved also wanted to have greater input in parenteral nutrition (60).

- **Developing the Clinical Specialist Role:**

In line with the Pay Review Body agreement during 2001/2, of utmost importance to the dietetic profession is the development of Dietetic Clinical Specialists.

### ***Continuous Professional Development***

In the UK, although there has been no statutory requirement, the Dietitian's code of professional conduct makes it clear that all Dietitians must continue to maintain and advance their knowledge and skills throughout their careers. In May 1998 the BDA published a policy paper on 'Continuing Professional Development for Dietitians' (61). This indicated that in order to demonstrate that a state registered Dietitian is keeping up-to-date, the minimum level of CPD activity per year was 5 hours attendance activity, plus another developmental activity from a designated list, or pursuing an approved post-registration activity. The Scottish Executive publication 'Building on Success' (2001) makes continuous professional development a requirement of all dietitians, stipulating that each professional should undertake 0.5 days of continuous professional development activity per month. (62)

An article published in the *Journal of Human Nutrition and Dietetics* in 2002 indicated that the dietetic profession anticipates that the Health Professions Council (HPC) established on 17 April 2002, will implement a system of providing continued competence to practice (63) in the future which will determine the level and nature of CPD required to have continued competence to practice.

The BDA's commitment to continuing professional development was highlighted in 1995 when they introduced the Diploma in Advanced Dietetic Practice. In 2001-2002, 11 Universities responded to the BDAs invitation to form a consortium to run a work-based MSc in Advanced Dietetic Practice. The BDA have set a target date of 2003 to start offering the MSc Programme (18).

The 2001 Survey of Dietetic Managers (23) indicated that the most common barrier to training and development indicated by 72% of all UK Trusts was affordability. The next most common barrier was staffing levels, which restrict time off for training, identified by 65% of Managers surveyed.

### ***Research***

Evidence-based practice through good quality audit and research, is vital if Dietetics is to develop as a profession. A recent postal questionnaire of 40 Dietetic departments selected from the BDA membership database found few respondents were currently involved in research (15%), although 65% were

involved in audit (64). The report concluded that, “the present level of Dietitians in research and audit activities falls below that recommended in the BDAs (1997a) *National Professional Standards for Dietitians Practicing in Healthcare*.” The report also identified that more time, greater access to funding, further training in research skills, more opportunities to get involved in research and better networking and dissemination of research findings within the profession being requested. A recent report completed by the Research and Development Office in Northern Ireland (65) found that the ratio of Dietetics staff involved in research was 1:10, and only 10% of Dietitians surveyed had a masters degree, with one Dietitian with a PhD. The report concluded that much more needs to be done to support PAMS in this area.

The BDA launched a five-year Research Strategy in 2002. The Strategy outlines 5 aims accompanied by suggested objectives and action plans, the aim of which is to reinforce the importance of an integrated approach to research in Dietetics (66).

### ***Skill Mix***

The BDA AGM Resolution in 1998 recognised the issue raised in the BAPEN Hospital Food as Treatment Report (1999) (67), in relation to the role of Dietetic assistants in monitoring patient food intake in Hospitals, and thus increasing the quality of patient care. The profession agreed to develop the concept of the Dietetic Assistant and a working party was set up during 1999 to explore the tasks which Dietitians currently undertake which they feel could be delegated to a dietetic assistant and to explore the number of Dietetic Managers employing assistants.

Since 1999 the role of the dietetic assistant has been further developed, and during 2001-2002 the first dietetic assistants were welcomed as associate members of the BDA. The Survey of NHS Dietetic Services (23) (2001) found that 75% of organisations were introducing or planning to introduce the Assistant grade within their dietetic workforce.

The Northern Ireland Managers group explained as part of building a strategic plan, the issue of dietetic assistants and the use of nutrition graduates was being debated. There is currently a pilot scheme of a Dietetic Assistant post in Newry and Mourne HSS Trust.

### ***Patient Expectations***

There is an increasing awareness of the importance of nutrition among health professionals and the public. This has led to a growing demand for dietetic and nutritional advice. However, a random sample of 165 individuals in a supermarket in Aberdeen found that the general public had a good perception of the role of physiotherapists, but a poorer perception of the Dietitians' role

(68.) It was found that 26% of the sample thought that Dietitians distributed and collected hospital menus and 21% thought Dietitians prepared meals in Hospital. Access to Dietitians was mentioned as a problem, and for this reason the preferred choice for nutritional information was the doctor, followed by the practice nurse and health food shop.

### **3. FINDINGS – DATA ANALYSIS**

This section details the findings of the analysis of the workforce profile information.

#### **3.1 Workforce Demographic Profile**

Available information was compiled of the current demographic profile of the Dietetic workforce of Northern Ireland to use as baseline information. The key sources utilised are highlighted below:

- The DHSSPS Project Support Analysis Branch (April 2002) sourced from-
  - HRMS – current HR system in use by the Trusts across Northern Ireland.
  - PMIS – current HR system in use by the Department at a regional level.
- DHSSPS – Workforce Questionnaire, April 2002.
- University of Ulster – Students statistics.

#### **3.2 Current Regional Profile of Dietetic Workforce**

In Northern Ireland there are currently 139 state registered Dietitians working in the HPSS (15 Trusts) in N.I. The total number of posts is 147 when the 8 vacancies are included.

The workforce is 100% female.

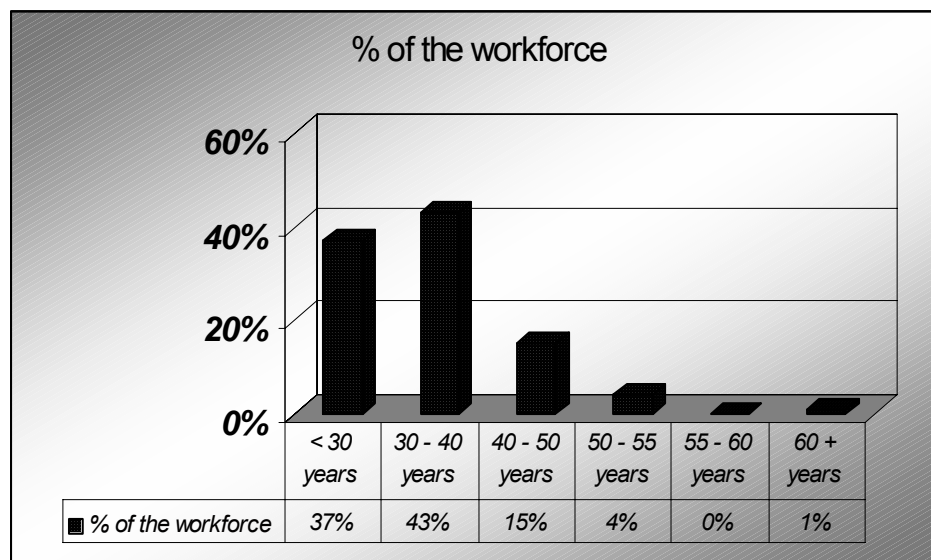
In addition, two Trusts are recorded as employing 2 Dietetic Bank staff (one of the two works permanently in another Trust).

The source of this information is the DHSSPS Data Base (April 2002).

### 3.3 Age Profile

The age profile of the workforce is detailed in the graph below:

#### 3.3.1: Graph: Age Profile : Dietitians – April 2002



Source HRMS

The data indicates that 95% of the workforce is under 50 years of age with 80% of the totally female workforce less than 40 years of age.

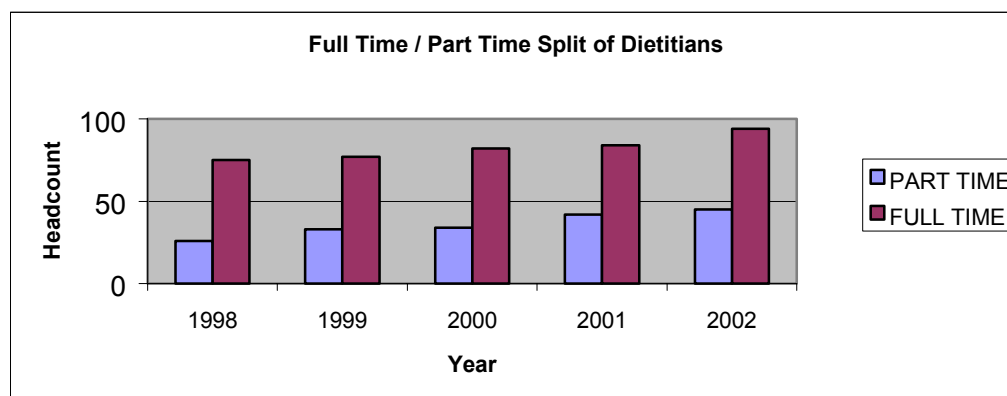
### 3.4 Full Time / Part Time Profile

The number of dietitians working part time has increased over the past 5 years, from 26 in 1998 (26% of the total workforce) to 45 in 2002 (32% of the workforce) Overall the workforce has grown quite significantly by 33% (90.24 WTE to 120.14 WTE) over the period 1998 – 2002.

#### 3.4.1 Table: Full time/Part time Split by Year

FULL TIME			PART TIME		
1998	75	74.3%	1998	26	25.7%
1999	77	70.0%	1999	33	30.0%
2000	82	70.7%	2000	34	29.3%
2001	84	66.7%	2001	42	33.3%
2002	94	67.6%	2002	45	32.4%

### 3.4.2: Graph: Full time/Part time Split by Year



Source HRMS

### 3.5 Headcount to Whole Time Equivalent Breakdown

Based on the available data, information can be presented on the ratio of current numbers of full time to part time dietetic staff, shown as actual headcount to whole time equivalent.

#### 3.5.1 Table : Headcount to WTE Ratio

Total Headcount	139
Total WTE	120.14
Headcount/WTE	Headcount = 1.16 WTE

The figure indicates that for every WTE dietetic post, the equivalent of 1.16 staff must be employed within the service.

### 3.6 Workforce Profile By Grade

An analysis across all HSS Trusts of grade profile of the dietetics workforce is detailed in the table below.

#### 3.6.1 Table : Grade Profile - (Source HRMS)

Grade	F/T	P/T	Total	% of total
Basic / Graduate	11	3	14	10%
Senior II	27	6	33	24%
Senior I	41	30	71	52%
Chief IV	3	3	6	4%
Chief 111	10	3	13	9%
Senior Manager	2	0	2	1%
<b>TOTAL</b>	<b>94</b>	<b>45</b>	<b>139</b>	<b>100%</b>

The table indicates that the highest proportion (52%) of staff are graded at the senior clinical grade (ie Senior 1) only 10% of staff are employed at basic/grade level.

### 3.7 Workforce Profile by Board

The Dietetic statistics were analysed by each Health and Social Services Board.

#### 3.7.1 Table: Full time/Part time Split by Board

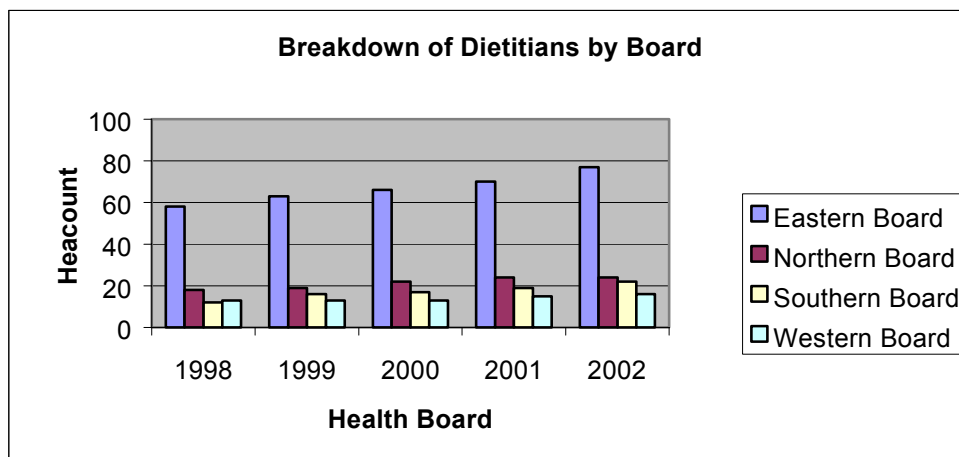
AREA BOARD	Part time		Full time		Group Total	
	Count	WTE	Count	WTE	Count	WTE
EASTERN	23	12.93	54	54	77	66.93
NORTHERN	11	6.13	13	13	24	19.13
SOUTHERN	9	5.88	13	13	22	18.88
WESTERN	2	1.2	14	14	16	15.2
<b>Group Total</b>	<b>45</b>	<b>26.14</b>	<b>94</b>	<b>94</b>	<b>139</b>	<b>120.14</b>

*Source HRMS*

#### 3.7.2 Table: Analysis of Dietitian numbers (headcount) per Board

Board	1998	1999	2000	2001	2002
Eastern	57.4% (58)	56.8% (63)	55.9% (66)	54.7% (70)	55.4% (77)
Northern	17.8% (18)	17.1% (19)	18.7% (22)	18.8% (24)	17.3% (24)
Southern	11.9% (12)	14.4% (16)	14.4% (17)	14.8% (19)	15.8% (22)
Western	12.9% (13)	11.7% (13)	11.0% (13)	11.7% (15)	11.5% (16)

### 3.7.3 Graph: Analysis of Dietitian numbers (headcount) by Board



Source HRMS

### 3.8 Vacancy Analysis

The workforce questionnaire completed by the service managers provided details of the vacancy profile at April 2002. The analysis of the vacancies is detailed below.

#### 3.8.1 Table: Workforce Profile of Vacancies by staff grade – April 2002

GRADE	F/T	P/T	TOTAL	% TOTAL
BASIC	1	1	2	25
SENIOR II	2	0	2	25
SENIOR I	1	3	4	50
<b>TOTAL</b>	<b>4</b>	<b>4</b>	<b>8</b>	<b>100</b>

Source: questionnaire

#### Vacancy Analysis / Total Workforce

The information from the workforce questionnaire at April 2002 indicates current vacancy rate of 5.4% within the HPSS Dietetic workforce. This is calculated as follows:

- Staff in post 139
- Vacancies 8
- Total workforce 147
- Vacancy % rate 5.4%

It can be noted that between 1998 and 2002 Dietetic posts increased by 33% (1998 – 90.24 WTE; 2002 – 120.14 WTE)

### **3.9 Recruitment and retention of Staff**

Managers were asked within the questionnaire to identify the number of staff they had been able to recruit from universities or employers outside of N.I. The figures provided indicated that on average (across the last 3 years):

- An average of 1 new graduate from universities outside of N.I. returned each year to find their first job within N.I.
- On average 5 qualified staff returned each year to the N.I HPSS workforce after working as therapists elsewhere.

In relation to retention of staff, managers returned the following information:

- 6 staff per annum left the HPSS workforce during 1999 – 2002 (which equates to approximately 4% of the workforce).

Three staff commenced a career break in the last 3 years (an average of 1 per year)

The figures provided have informed the development of the supply projections detailed in future sections of the report.

### **3.10 Pre-registration Education**

There are two courses leading to State Registration in Dietetics located at the Coleraine campus of the University of Ulster.

- There are 35-50 students who enter the BSc (Hons) Human Nutrition degree course. At the end of year 1 there is an option to progress to either the BSc (Hons) Human Nutrition and Dietetics (with eligibility for State Registration in Dietetics) or the BSc (Hons) Human Nutrition with DIS/DAS. Entry to the dietetics option is by application and competition as places are limited to 15-19 per annum. Currently students receive a bursary from year 2 of the honours course. From 2003 there will be direct entry in year 1 to the BSc (Hons) Human Nutrition and Dietetics course.
- Post-graduate (Master of Science) Human Nutrition and Dietetics course, which is of a 2-year duration. Entry requires a science degree. There are 5 student intake places for the course annually which is limited by the number of available clinical dietetic placements. Students on the PgD/M.Sc course are self funding except for some Republic of Ireland students who may be funded by their County Councils.

**3.10.1 Table: Dietetic Clinical Placements (undergraduate and postgraduate courses)**

PLACEMENTS	2000	2001
Northern Ireland	6	7
Scotland	6	2
England	12	10
TOTAL	24	19

**3.10.2 UU course Attrition Rates and Graduate Statistics**

Applications to initial student intake places is on a ratio of 6.2:1. There is a minimal attrition rate of 4% during the two courses based on an average of the 3-year period (1999-2002).

**3.10.3 Table: UU entry places and graduation statistics for BSc (Hons) Human Nutrition and Dietetics; and PgD/(MSc) Human Nutrition and Dietetics courses**

B.Sc (Hons) Human Nutrition and Dietetics			PgD(MSc) Human Nutrition & Dietetics		
Entry Year 1 (Human Nutrition)	Entry Year 2 (Dietetics)	Graduate Year 4 (Dietetics)	Entry	Graduate Year 2 Dietetics	Attrition Rates
1994 - 28	1995 - 12	1998 - 13	-	-	0%
1995 - 46	1996 - 20	1999 - 20	-	-	0%
1996 - 33	1997 - 13	2000 - 12	-	-	7.7%
1997 - 28	1998 - 18	2001 - 17	1997 - 5	1999 - 5	5.5%
1998 - 36	1999 - 15	2002 - 14*	1998 - 5+6=11	2000 - 11	0%
1999 - 33	2000 - 15	2003 -	1999 - 5+3=8	2001 - 8	-
2000 - 36	2001 - 19	2004 -	2000 - 5	2002 - 5	-
2001 - 49	2002 - 19	2005 -	2001 - 5	2003	-

*Source: UU*

\* 1 student on leave of absence, expected graduation in January, 2003

Based on this information the anticipated number of graduates can be estimated over the 5-year workforce plan.

### 3.10.4 Table: Number of Graduates over 5-year workforce plan

Entry Year		Combined Student Places		Attrition rate	Graduation Year	Graduate Numbers
Hons	PgD	Hons	Pgd			
1999	2001	15	5	4%	2003	20
2000	2002	18	5	4%	2004	23
2001	2003	19	5	4%	2005	24
2002	2004	19	5	4%	2006	23
2003	2005	19	5	4%	2007	24

### 3.10.5 First Destination for UU Graduates

First destination figures for graduates have been provided by the UU.

### 3.10.6 Table: First Destination Statistics for UU Dietetic Graduates

Year	B.Sc (Hons) Human Nutrition & Dietetics				PgD/M.Sc Human Nutrition & Dietetics				Total Graduates	
	NI	UK	RoI	Other	NI	UK	RoI	Other	Nos	% Entering NIHPSS
1998	7	5	1	0	-	-	-	-	13	53%
1999	4	11	3	2	2	3	0	0	25	24%
2000	2	7	2	1	0	4	6	1	23	8.6%
2001	8	6	3	0	2	3	3	0	25	40%
2002	6	4	4	0	3	0	2	0	19	47%

Entering NI = Northern Ireland HPSS; UK = UK NHS, RoI = Republic of Ireland, Other = non-dietetics

*Source UU*

The proportion of graduates remaining in Northern Ireland to work in the NIHPSS has increased significantly over the last two years.

The figures indicate that an average overall total of only 31% (based on the 3-year period 2000-2002) of graduates took up employment in the NIHPSS workforce. It is noted that there has been a considerable improvement in retention of graduates over the last two years and if this trait continues an improvement on this statistic may well be achieved.

### 3.10.7 Pre-registration Clinical Placements

Dietetics student clinical placements have consisted of 6-weeks catering placement and 28 weeks clinical dietetics placement (including 4 weeks at a complementary hospital). From 2002 the placements are being changed to three blocks of 4, 12 and 12 weeks respectively with associated changes in

assessment and documentation. The new placement system will be introduced for University of Ulster students entering the course in 2003.

Dietetic Managers and Senior Staff have traditionally supervised and supported the students whilst on clinical placement as there is no existing framework consisting of clinical tutors and or supervisors. To support the new clinical placement system the Dietetic profession in Northern Ireland have identified the requirement of a Dietetic Clinical Placement Facilitator (1WTE). This post could provide support, co-ordination and training for clinical placements on a regional basis.

It has been identified that staff participating in student placements should have an allocated time requirement to teach and mentor students. It is suggested this requirement equates to 3-hours per week over the course of the student placement.

The figures provided in this section will inform the future supply projections for the workforce over the 5-year period 2002-2006.

## **4. KEY FINDINGS IN INTERVIEWS AND FOCUS GROUPS**

### **4.1 Supply Issues**

This section provides details of the views expressed throughout the 12 key informant interviews and 7 focus groups involving 40 Dietitians and 17 University of Ulster nutrition and dietetic final-year students. Many of the issues raised by different individuals were consistent and provided valuable information, which has informed the development of the recommendations and conclusions contained in the report.

#### **4.1.1 University of Ulster Students and Graduates**

The focus groups mentioned that the Post Graduation Master Science (PGMSc) course was self-funding and this was an issue for students. However they indicated that some ROI students were granted funding by local councils.

Participants within the University of Ulster focus groups highlighted that their frustration upon graduating was the lack of full-time permanent posts in Northern Ireland, as one student implied, “5 places have been advertised this year, all temporary to cover maternity leaves.” This coupled with the fact that there are increasing employment options and incentives now offered to graduates outside of N.I., meant that a large number of graduates were attracted to taking up first posts outside of HPSSNI. The employment incentives noted were as follows:

- Employed at Senior II level, as opposed to Basic Grade
- Locum posts offering experience in different hospitals
- Guarantee of better continuing professional development opportunities

Participants in the focus group also indicated that because of the large number of clinical placements currently undertaken outside of Northern Ireland, there was an increased possibility of students being attracted to England\Scotland, and\or receiving job offers from hospitals where they undertook their placement.

The low retention of UU graduates within the HPSS workforce is a particular issue impacting upon the supply of dietitians.

#### 4.1.2 HPSS Recruitment

Nearly all Managers interviewed indicated that they had experienced recruitment difficulties. The recruitment difficulties experienced were four-fold, and can be detailed as follows:

- ***Temporary posts*** – a quarter of those who indicated that they had experienced recruitment difficulties, highlighted that their difficulties experienced were recruiting to temporary posts.
- ***Recruitment post graduation*** – a third of Managers highlighted the issue of recruiting graduates after the summer period as they by that time have taken up posts elsewhere.
- ***Recruitment to part-time posts*** – a quarter of Managers also highlighted the difficulties of recruiting to part-time posts. The number of part-time posts advertised had increased because of Managers having to facilitate requests for reduced hours, or Managers receiving funding for less than a whole-time equivalent post, because of the issues associated with business case preparation spread across programmes of care.
- ***Recruitment to specialists posts*** – a small number of Managers reported difficulty recruiting to specialist posts in the clinical fields such as oral health, paediatrics, diabetes and critical care.

The majority of Managers indicated that recruitment difficulties started 18 months to 2 years ago, and that difficulties were increasing as the pool of applicants for posts was effectively decreasing. Staff involved in the key informant interviews indicated that Senior I and Senior II posts attract on average 1-3 applicants, whereas 5 years ago, they would have attracted approximately 6-8 applicants depending on the type of post and location.

When asked to identify any grades and/or areas of work where it is harder to recruit staff, difficulties were being experienced at all levels. The largest number of Managers, 5, reported difficulties being experienced when recruiting to Senior II level. However, a quarter of Managers highlighted difficulties experienced when recruiting to Basic Grade and Senior I posts.

The key informants indicated that in the main staff were being recruited from within Northern Ireland HPSS. Managers reported that the situation was one of “robbing Peter to pay Paul” in recruiting to posts, as one Manager suggested, “we fill posts at other Trusts expense within Northern Ireland- there is no new blood.” However over a third of Managers also reported recruiting returners who had been to England/Scotland to work, but were from Northern Ireland and wanted to return to the region.

Key informants highlighted that the recruitment difficulties experienced had resorted in creative ways in which to recruit staff, but this had also led to them lowering criteria for posts. One such example was for posts at Senior II level which Managers had reduced the criteria from normally 1 year to 9 months experience, to attract applicants.

#### **4.1.3 Temporary Staff**

Five Managers interviewed reported employing temporary staff. This was largely to cover maternity leave.

#### **4.1.4 Bank Staff**

One Manager reported using Bank staff. However, a small number of Managers indicated the need to consider establishing a Regional Bank of staff.

#### **4.1.5 HPSS Retention**

Almost all Trusts, 10, reported no difficulty retaining staff, and reported that they had a stable workforce. The majority of staff left for promotion reasons, although other reasons noted were to reduce travelling time, for the location of the Trust, because of nature of the role, which involved working independently at Senior II grade, and because of incentives offered by the ROI. Indeed, one Trust had lost 3 members of staff recently to the ROI.

Of the 2 Trusts who reported difficulties in retaining staff, the difficulties were described as being due to the high caseload, and lack of a career path.

#### **4.1.6 Family Friendly Policies/Career Breaks**

With an exclusively female workforce, all respondents in the key informant interviews, with the exception of one Trust, reported increasing requests for flexible working. The requests for flexible working were indicated as: 7 requests for reduced hours, 1 for unpaid leave, 1 for job share, 2 for changing the profile of working hours and 4 for a change to an 11-month contract.

Two Trusts interviewed indicated that they had experienced requests for a career break. One of the staff on a career break had returned to work and one was still on leave so no comment could be made about their likely return to the HPSS workforce.

The number of requests for flexible working, per Trust, was approximately 1-2 per annum. All of the key informants interviewed reported taking a positive approach to requests, providing the requirements of the service were met.

#### 4.1.7 Private/Voluntary Sector

The impact of the private sector on the recruitment and retention of Dietitians was reported as minimal. However, three Trusts reported knowing of staff working in private Hospitals, however it was unclear whether this had caused staff to leave particular Trusts. Three key informants also highlighted that they were aware of staff working in Sports Nutrition. However, it was unclear as whether these Dietitians were working in a dual role context between NHS and private practice. A small number of Trusts also reported that staff had left to join nutrition companies, such as British Sugar and Cow and Gate, as a sales representative or research capacity. All Trusts indicated that the number of staff working in private practice solely was minimal.

Two Trusts reported that they had been approached by voluntary groups to undertake nutrition talks.

#### 4.1.8 Working hours, terms and conditions

Key informants indicated that contract for staff working hours was 36.5 hours per week. A quarter of Managers interviewed however, reported that staff were working longer than 36.5 hours and this was an issue.

Almost all Managers interviewed indicated that staff worked between 9 am to 5 pm. Participants in the majority of focus groups reported that their Managers were flexible in their approach to working hours. As one focus group participant suggested, *“Managers are very good at facilitating the terms and conditions of the working week.”*

Half of all Trusts interviewed were providing evening or weekend clinics, or twilight sessions to the Trusts’ Renal Units. In 4 out of 5 professional focus groups, staff also reported providing workshops/talks in the evening. Managers facilitated this by allowing staff to take time off in lieu. Overtime was only paid in a small number of cases on an adhoc basis, for example, winter pressure initiatives.

A number of issues were raised within the focus groups with regards to the terms and conditions on offer. The remuneration of staff was raised as an issue in all of the focus groups, for a variety of reasons, which can be noted as follows:

- staff covering jobs above their grade
- the lack of comparison to the remuneration of speech and language therapists
- the salary does not reflect the level of responsibility when working in a multi-disciplinary team
- ill-feeling caused by the use of discretionary points

#### 4.1.9 Career Progression

Career progression was a common area of concern and the lack of career progression at every level was documented in both the key informant interviews and focus groups.

The largest area of concern highlighted during the key informant interviews was the lack of specialist posts at Chief III level. Two thirds of interview respondents highlighted this as an area of concern. The second key area of concern expressed by the Managers was the limited opportunities for progression of staff above Chief III level within Trusts. Other issues highlighted by individual Trusts specifically were the lack of Basic Grade posts, lack of career progression to Senior I, and the lack of pay increase between Senior I and Chief IV which did not entice staff to take on managerial positions.

For focus group participants, areas of concern were highlighted at each stage of career progression. At Basic Grade level a number of issues were raised. The most highlighted issue was that of the provision of temporary posts in Northern Ireland. Focus group participants also highlighted the fact there were offers of jobs at Basic Grade level in England which were permanent and therefore more attractive to career development. In addition, participants in the WHSSB area focus group also indicated that the ROI was now offering recruitment incentives.

Focus group participations highlighted in addition to the problems of recruitment at Basic Grade level there was concern that Basic Grades were undertaking Senior II level duties. This was indicated by participants:

*“We should find time for Basic Grades to be Basic Grades.”*

*“There is so much expected of a Basic Grade. They are expected to be a Senior II when they are just out the door.”*

Alongside this focus group participants both queried the need for a Basic Grade post, and proposed that if the Basic Grade post was retained, whether there should be automatic upgrading after a period of time to Senior II.

In 3 out of 5 professional focus groups the lack of career progression from Senior II level to Senior I, was also highlighted as an issue. Participants suggested that *“the only way to get a Senior I post is if it is part of a service development.”*

The limited opportunity for career progression once at Senior I level was also highlighted in all 5 professional focus groups. It was reported that an active decision was currently made at Senior I level as to whether staff wanted to

leave the clinical route and become a Manager, because of the lack of opportunities for clinical specialist posts. It was highlighted that becoming a Manager was becoming less appealing because of the additional responsibility and the limited pay differential between Managerial and clinical grades.

*“Chief IV is a pat on the back. You don’t have a real remit.”*

*“You are in a dead end at Senior I. Chief IV do come up, but there is no incentive, with no extra money.”*

*“If you like clinical work, you don’t want to go into management, so you spend the next 30 years sitting with the same pay cheque.”*

Despite all of the issues raised, both the key informants and focus group participants highlighted the fact that opportunities for career progression have improved in the last 2 years, if you are prepared to work anywhere in Northern Ireland.

#### **4.1.10 Continuing Professional Development (CPD) and Research**

All staff acknowledged the importance of CPD in terms of ensuring their ability to perform and meet the demands of the service. The issues raised in relation to CPD opportunities can be highlighted as follows:

- **Funding** – Almost two-thirds of interview respondents and in all 5 focus groups the issue of limited funding for continual professional development opportunities was raised. Both key informant interviews and focus group participants identified the need to secure funding from other sources to undertake CPD. As one focus group participant suggested, *“You have to beg the pharmaceutical providers.”*
- **Time Factor** – This issue was raised by a quarter of interview informants and in all 5 professional focus groups. Staff participating in the focus groups indicated that the issue around time was two-fold. The first issue highlighted was the fact that large caseloads prevented you from taking time off to undertake CPD. The second factor presented highlighted the fact that the lack of protected time for CPD meant that on returning to work you were presented with the caseload that you had left behind.

*“You don’t want to go on a course because of the workload that you confront when you come back.”*

*“If you do get time out, no-one is doing your work for you, so you come back to 5 days work.”*

- **Provision** – Half of all key informants and almost all focus group participants raised the issue of the availability of course\conferences in Northern Ireland. Staff reported that specialist courses were provided in England, and this incurred additional expenses and time for staff.
- **Research** - This issue was raised in a small number of key informant interviews and focus groups. The key informants and focus group participants indicated that there is a lack of much needed dedicated research posts within the profession.

## 4.2 DEMAND ISSUES

All of the key interview respondents expressed concern about the inability of HPSS to meet the demand for dietetics services both currently and into the future.

### 4.2.1 Current Services

A number of the key informants indicated that there has been increasing demand for dietetic services year on year. The evidence from the key informant interviews suggested that there were a large number of areas of current unmet need/demand for dietetic services, which were documented as follows:

- Diabetes
- Nutritional support
- Health promotion
- Coeliac disease/gastroenterology
- Oncology
- Stroke
- Mental health
- Learning disability
- Obesity
- Eating disorders
- Brain Injury
- Waiting lists for first assessment
- Renal

### 4.2.2 Administration

The majority of focus group participants indicated that as the number of patient contacts in Dietetics in recent years had increased, so too had the paperwork associated with them. This, they perceived had not been reflected in adequate resourcing of clerical staff, and thus was impacting upon the Dietitians time ability to provide a service. One Trust Manager indicated that the Senior I Dietitian spent 50% of her time in clerical and administration duties. Focus

group participants indicated that the amount of time spent on clerical tasks had also increased out of a need to maintain good records because of increasing legislation, increasing litigation, increasing Parliamentary questions, and increasing audit and performance review. As one participant suggested:

*“We didn’t use to have half of the administrative work, that we do now. It reflects the development of clinical care, that for ethical and legal reasons you have to document everything.”*

#### **4.2.3 Increased Focus on CPD**

Both the key informants and participants in the focus group sessions highlighted the increasing role of continual professional development, given the likely introduction by the new Health Professions Council of a requirement for a minimum number of CPD days to be undertaken by qualified staff, and the growing emphasis on clinical governance within HPSS organisations.

#### **4.2.4 Provision of Clinical Placements**

A new system of clinical placements was introduced in Northern Ireland in 2001/02. The new system provides a 4-week clinical placement in Year 1 and 12 weeks in Years 2 and 3. All Trusts interviewed currently provide clinical placements to some extent.

Managers participating in the key informant interviews levied a number of barriers to clinical placements. They can be detailed as follows:

- ***Time pressures on staff*** – Almost two-thirds of interview respondents raised this as an issue, particularly given the amount of paperwork associated with supervision.
- ***Allowances*** – This was raised by a third of key informants as being an issue. The Department currently provides £60 per student per week, which Managers suggest does not cover the cost of the student. University of Ulster undergraduates participating in the focus groups also raised an issue regarding funding for placements outside Northern Ireland.
- ***Accommodation*** - This was raised by a third of key informants interviewed. Managers expressed concerns at physically having difficulty accommodating students within their Departments and in residential accommodation.

Issues were raised by a number of key informants:-

- The impact on delivering the dietetic service of providing student clinical placements.

- Training was required for supervisors and students need to be better prepared for clinical placements in terms of their practical knowledge.
- Managers highlighted the fact that the national brokerage system and clinical facilitator currently provided through the BDA would cease to operate in the long-term. This would have implications on the organisation of the system for placing students, and was therefore causing concern amongst service Managers.
- A number of Managers proposed that a Clinical Facilitator was required for dietetic education within Northern Ireland.

#### **4.2.5 Increasing Patient Expectations**

Focus group participants raised a number of issues about the demands placed upon them by increasing patient expectations. The main issue raised was that patients' and relatives expectations in general are higher. Focus group participants also indicated that patients are more knowledgeable about their rights through increased availability and access to information. As one focus group participant suggested:

*“The elderly patients might not be as keen to make complaints. But, the relatives come through with, ‘I’ve read this.’”*

Dietitians participating in the focus groups also indicated that patients often had a misunderstanding of the Dietitians role, perhaps caused by their title. *“There’s an expectation that Dietitians will put you on a diet.”*

#### **4.2.6 Role Extensions**

Examples of where the role of dietetics has had an impact or could in the future are detailed below:

- Diabetes- the role of Dietitians in changing insulin regimes ie prescribing;
- Nutritional support – the passage of NG/PEG tubes by Dietitians.
- Dietitian led coeliac clinics.
- Extended role in eating disorders.
- Parenteral nutrition – insertion of peripheral medlines.
- Sports nutrition.
- Clinical specialist role development.

#### **4.2.7 Skill Mix**

Only one of the 11 Managers interviewed employs a Dietetic Assistant as a pilot scheme. All of the respondents in the key informant interviews and focus groups welcomed the role of the Assistant, with some restrictions. Staff within the focus group sessions indicated that the Dietetic Assistant role must not be

employed instead of a qualified Dietitian, and that there must be clarity around the role and function of the Assistant. Possible roles for the Dietetic Assistant highlighted in both the key informant interview and focus groups were ensuring ultimate efficiency during the day by organising patients prior to the Dietitians visit, liaising with catering to get dietary supplements for patients, facilitating group work sessions on good eating, monitoring nutritional support, patient documentation, stock control and clerical and administrative tasks.

The issue of inappropriate skill mix for professional staff was also highlighted in both key interviews and focus groups. The issue most commonly expressed was the requirement for the development of clinical specialist roles and grades. In addition, a number of key informants also expressed concern at the current system whereby they felt that Basic Grade staff were undertaking Senior II tasks, and Senior II staff undertaking Senior I tasks.

Key informants also highlighted the fact that there was a flat managerial structure, therefore limiting the ability for deputisation, delegation of tasks and succession planning.

#### **4.2.8 Changing Service Provision**

Participants in both the key informant interview and focus group sessions highlighted a number of different ways in which they envisaged the provision of dietetics services changing and/or developing in the future. These can be outlined as follows:

- **Multi-disciplinary working-** Half of key informants, and 3 of the focus groups envisaged that multi-disciplinary working is a key initiative for taking forward different ways of working within the profession. Examples in elderly care services, diabetes and oncology were cited.
- **LHSCGs** – A quarter of key informants indicated that LHSCGs would provide opportunities for establishing different ways of providing a service within the profession.
- **Seamless Service-** A small number of interviewees and 2 focus groups indicated that their aim should be to provide a ‘seamless service.’ Focus group participants suggested that a proposal might be the establishment of acute\community liaison posts.

Other areas highlighted in the key informant interviews and focus groups were the provision of health promotion in school and community settings, the role of Dietitians in Sure Start projects and in educating other professionals such as District Nurses in health promotion, hospital to home schemes and weight management strategies such as that developed in Scotland which allows patients to refer themselves voluntary to weight management groups. An additional initiative concerning different ways of working within the profession, which was highlighted by some participants

was the development of teams of Community Dietetic Services across Trusts within one Board area, such as the model adopted in the EHSSB area.

#### **4.2.9 Societal Factors**

The majority of respondents highlighted the following societal factors as necessitating an increase in demand:

- ***Ageing Population*** - advances in medicine and technology have resulted in people living longer and this has resulted in an increase in referrals.
- ***Increased Dependency*** – again in relation to the above, it is now recognised that those who receive care are generally more dependant than before and this brings about a more resource intensive service.
- ***Medical Technology*** - advances in medicine and technology have resulted in people with certain conditions surviving, where previously they would not have done eg there are more people with terminal illnesses or life-limiting illnesses surviving longer.

## **5. WORKFORCE SUPPLY AND DEMAND PROJECTIONS**

The Project Board agreed a set of assumptions around key supply and demand factors that are and will affect the Dietetic workforce in the next 5-years. These assumptions were then used to formulate a “ model” from which certain predictions around projected supply and demand could be calculated. The key assumptions utilised have been outlined.

### **5.1 SUPPLY PROJECTIONS**

The supply figures have been gathered by reviewing trends over the past 3-4 year period, presented in the data supplied by the DHSSPS, University of Ulster and Dietetic Managers from within the service.

The supply of Dietetics within the NI workforce is in the main determined by:

- The existing employees currently available in the workforce;
- Students graduating from the University of Ulster;
- Students returning to work in NI after graduating from a university outside of NI;
- Professionals leaving the workforce (through retirement, leaving for personal reasons, career breaks etc).

#### **5.1.1 Supply assumptions for those entering the workforce**

There is a total of 139 Dietitians within the current HPSS workforce.

In Northern Ireland, pre-registration training in Dietetics is offered at the University of Ulster Coleraine. There are currently 19 and 5 places respectively on the B.Sc (Hons) Human Nutrition and Dietetics and PgD Human Nutrition and Dietetics courses. A minimal attrition rate exists of 4% for students on the University of Ulster Dietetics course.

The supply of graduates entering the workforce in N.Ireland HPSS has been averaged at 33%. This is based on destination figures supplied by the University of Ulster over the 3-year period 1999-2001.

The view from Dietetic Managers in the Project Group and evidence gathered from the key respondents interviews indicated that there would be the equivalent of 6 qualified Dietitians p.a. entering the overall Northern Ireland HPSS sector from outside of Northern Ireland. This has been projected to remain static over the 5-year workforce projections included in the report.

### 5.1.2 Supply assumptions for those leaving the workforce

In regards to retirees has been assumed by calculating the numbers retiring based on earliest eligible retirement age (ie 60 years). Therefore all Dietitians over 55 years at present have been assumed as leaving the workforce over the next 5-years which equates to 2 staff over the period. Evidence from the DHSSPS Project Support and Analysis Branch would support this assumption.

There have been no Dietetic retirements over the last 4-years due to incapacity therefore no staff will be identified from this category within the 5-year plan as leavers.

Based on anecdotal evidence from the key informant interviews and feedback from the project group, it has been suggested that, at present, 1.75% of the total workforce capacity is lost due to an increase in the uptake of part-time working and work-life balance policies over the 5-year plan. This would equate to 0.5 WTE (1 headcount) each year of the plan. It should be recognised that a high percentage of staff (80%) fall into the under 40 years of age category in a majority female profession and the effect this may have on the number of number of future requests for life-work balance.

Also based on evidence from the key informant interviews and feedback from the project group, it has been estimated that the number of Dietitians leaving the HPSS sector will be 2 each year [for reasons other than retirement/medical].

## 5.2 DEMAND PROJECTIONS

### 5.2.1 Demand Assumptions Utilised

The demand projections for additional Dietitians required within the HPSS over the next 5 years have been based on the following categories:

- **Category 1:** Capital and service developments with identified staffing requirements for the next five years for which funding has already been agreed.
- **Category 2:** Policy improvements that may be met in the next five years if funding is made available. This includes educational requirements at both under and post-graduate level including continually professional development, time allocated to students on clinical placements, role development and meeting clinical governance.
- **Category 3:** Current demand and unmet clinical need which has been identified via the key informant interviews and the project group. There is no specific policy context or resource identified at present to meet this demand.

### 5.2.2 Category 1

Key Informants and the Project Group identified the areas of service development over the next five years with the associated workforce requirements that have a funding allocation.

**Table 5.2.3: Identified workforce requirement within Category 1**

Category 1	Workforce Requirements
	WTE
Regional Brain Injury Unit	2
Sensory Disability (United Hospitals Trust)	1
ICU/HDU Beds (Royal Group of Hospitals Trust)	1.5
Oncology	4.5
Renal Unit (UCHT)	1.5
<b>TOTAL WTE</b>	<b>10.5</b>

The overall requirement for Category 1 over the 5-year plan is 10.5 WTE.

### 5.2.4 Category 2

The Project Group identified policy improvements that may be met in the next five years if funding is made available and projected the workforce requirements using the following rationale:-

- It is suggested the time spent on Continuing Professional Development should equate to 36.5 hours per Dietitian per annum. This translates into an additional 3 WTE Dietitians.
- There is a requirement for protected time allocated to students by Dietitians during their clinical training in respect of adequate mentoring and support. It is suggested this should equate to 3 hours per week per student over the course of their clinical placements. This allocation will require an additional 1 WTE Dietitians.
- To meet the delivery expectations associated with role extension will require an additional 13 WTE Dietitians over the five year plan. This includes 1 WTE consultant post, the role of the prescriber, the extended role in Health Promotion, gastroenterology and parenteral nutrition.
- Local Health and Social Care Groups will demand time of both Dietitians engaged as group members and those who will be involved in



**Table 5.2.7: Prioritised unmet need within Category 3**

SERVICE AREAS	WTE
Diabetes	29
<b>Priorities for Action:</b>	
- Heart Disease	12.15
- Renal	2.25
- Cancer	19.8
- Critical Care	8.1
- Health Promotion & Community Development e.g. Sure Start, Targeting Social Needs, Health Action Zones	30.85
<b>TOTAL WTE</b>	<b>102.15</b>

In order to estimate the demand numbers of the professionals required to meet the workforce over the next five years Categories 1 and 2 will be utilised within the context of this review. Categories 1 and 2 have either an identified funding allocation or likely to be funded within the 5-year plan.

**Table 5.2.8: Workforce requirements identified by the Project Group for Categories 1 and 2 in WTE by year**

CATEGORY	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	TOTALS
<b>Category 1</b>	5.5	5	-	-	-	10.5
<b>Category 2:</b>						
Student Training	1	-	-	-	-	1
CPD/clinical gov	3	-	-	-	-	3
H&SC Groups	1	2	-	-	-	3
Work-life balance	0.5	0.5	0.5	0.5	0.5	2.5
Role Extensions	-	2	3	3	5	13
Community Palliative Care	-	3.5	-	-	-	3.5
<b>TOTALS (WTE) Category 1&amp;2</b>	<b>11</b>	<b>13</b>	<b>3.5</b>	<b>3.5</b>	<b>5.5</b>	<b>36.5</b>

The total workforce requirements over the 5-year plan for Categories 1&2 equate to 36.5 WTE Dietitians.

## 6. CONCLUSIONS

### 6.1 Projected Supply of Dietetic Workforce

In using the previous assumptions based on the information gathered during the consultation process the projected supply of Dietitians has been calculated between the years of 2003-2007. Highlighted are relevant Dietetic supply issues table (6.1), which utilises elements of supply figures based on feedback from respondents and literature review. For the purpose of identifying actual numbers required in the workforce the figures have been converted from whole time equivalent to headcount based on the headcount to WTE ratio for the profession, which is 1.16:1.

**Table 6.1.1 Projected Supply of Overall Dietetic workforce in NI (2003 - 2007) in headcount. NB [ ] denotes a decrease.**

Supply	2003	2004	2005	2006	2007
Return to Practice	0	0	0	0	0
University of Ulster Graduates entering HPSS	8	8	8	8	8
Entering N.I. from elsewhere	6	6	6	6	6
<b>Total supply available to enter NI workforce</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>
<b>Those leaving the Workforce:-</b>					
Retirees [inc. incapacity]	-	-	1	1	-
Family friendly lost capacity	1	1	1	1	1
Leaving Dietetics	2	2	2	2	2
<b>Leaving Total</b>	<b>3</b>	<b>3</b>	<b>4</b>	<b>4</b>	<b>3</b>
Current/potential workforce	139	150	161	171	181
Projected potential workforce	150	161	171	181	192
Potential Net Increase (Decrease)	8%	7%	6%	6%	6%

The number of University of Ulster graduates stated in this table entering NIHPSS has been estimated as 31% of those qualifying. The graduate numbers have also been subjected to a decrease of 4% to account for the university course attrition rate.

The projected numbers of Dietitians joining the NI workforce from outside of NI is based on evidence from the Trust questionnaires and comments by the Project Group. While this number is projected as constant over the 5-year plan it is acknowledged that the inflow of qualified staff could be reduced due to

increased opportunities in both GB and the RoI. This figure will therefore require review over the period of the workforce projection.

Areas that could have an effect on the supply equation have been noted:

- Euro/Pound Equilibrium - could have the effect of decreasing the supply of the Dietetic workforce in the Northern Ireland marketplace. Consideration should be given to the effect of the recently announced strategy for the health service in the Republic of Ireland.
- More effective utilisation of the available workforce - as the evidence in this report and historical data shows there is some potential for a more effective utilisation of the available workforce either by a re-allocation of certain duties to non-qualified staff, an increase in the WTE equivalent ratio, an increase in the amount of qualified Dietitians returning to the workforce.
- A consolidation of the service provision, which may free up resources from current posts.

## 6.2 Projected demand for the Dietetic Workforce

Demand figures are based on identified Dietetic requirements over the 5-year workforce plan (2003-2007) as provided by the key informants, the Project Board, relevant policy and capital and service development business cases. In order to estimate the demand numbers of the professionals the summary figures have been profiled in table 6.2.1.

**Table 6.2.1: Projected Demand Figures – Overall Dietetic Workforce by headcount**

<b>CATEGORY</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>H/C Total</b>
<b>CATEGORY ONE</b> – Capital and service requirements that have a funding allocation	7	5	-	-	-	12
<b>CATEGORY TWO-</b> Policy improvements that may be met in the next 5 years if they receiving funding approval	6	10	4	4	6	30
<b>TOTAL CATEGORY 1+2</b>	13	15	4	4	6	42

The total demand for additional Dietitians at categories 1 and 2 over the 5-year period is as follows:

*Category One:* Capital and service developments with identified staffing requirements for the next five years for which funding has already been agreed.

Total Dietitians = 12 headcount

*Category Two:* Policy improvements that may be met in the next five years if funding is made available. This includes educational requirements at both under and post-graduate level including continual professional development, time allocated to students on clinical placements, role developments and meeting clinical governance.

Total Dietitians = 30 headcount

A total headcount demand of 42 Dietitians in Categories 1+2 is required over the 5-year plan.

### 6.3 Supply v Demand for the Dietetic Workforce

In order to consider the numbers of professionals required over the course of the next 5 years the supply and demand figures have been profiled using Categories 1+2.

**Table 6.3.1: Profile of projected supply against projected demand over a 5-year period in headcount**

Key Factors	2003	2004	2005	2006	2007
Total Supply available to NI Workforce	14	14	14	14	14
Total leavers NIHPSS	3	3	4	4	3
<b>Net Supply</b>	<b>11</b>	<b>11</b>	<b>10</b>	<b>10</b>	<b>11</b>
Vacancies	8	-	-	-	-
Demand Category 1	7	5	-	-	-
Over [Under] Supply	(4)	2	10	10	11
Demand Categories 1&2	13	15	4	4	6
Over [Under] Supply	(10)	(4)	6	6	5

When Category 1 is presented demand outweighs supply in years 1+2 but by year 2003-2007 supply outweighs the forecasted demand. It can be seen that when Categories 1+2 are presented demand outweighs supply until year 2005. At this point in time there then should be sufficient numbers available to meet the forecasted need. These figures are based on the assumption that demand and supply remain constant and as forecasted.

## 6.4 Conclusions on Supply v Demand

It can be seen from the figures presented that there is range in the projected numbers within the Categories 1+2 for each year over the 5-year workforce plan. These categories include agreed and resourced capital and service plans with identified workforce requirements and those that are likely to be resourced within the 5-year period. The figure suggests that if the supply and demand of Dietitians within the NIHPSS remains constant the workforce should find a balance by the Year 2005.

**Table 6.4.1: Projected remaining numbers of Dietitians in the workforce after Categories 1 + 2 and vacancies have been accounted for. NB [ ] indicates shortfall**

YEAR	2003	2004	2005	2006	2007
Projected numbers after demand Categories 1&2 have been met	(10)	(4)	6	6	5

## 6.5 Sensitivity Analysis

In an attempt to explore the percentage growth and investment that would be required in the Dietetic Workforce to meet the prioritised clinical services identified in Category 3, a sensitivity analysis exercise was undertaken. The analysis consists of three scenarios, 15%, 25% and 30% growth levels of the Dietetic workforce. The table below indicates the number of Dietitians.

**Table 6.5.1: Scenario 1, 2 and 3 and percentage increase indicated in each of these growth levels**

Scenario	Current Headcount	Increase Headcount	Total H/C Increase
1. Increase 15%	147	31	178
2. Increase 25%	147	37	184
3. Increase 30%	147	45	192

These percentage growths were applied to Category 3 (current demand and unmet need with no identified funding within the Dietetic Clinical Service).

### Scenario 1

An overall increase of 15% to the existing Dietetic Workforce would equate to a total of 178 staff, an increase of 31 Dietitians. At this growth level it may be possible for the service to meet the following unmet need/current demand areas identified within Category 3:

- The Dietetic Managers suggest a 15% increase would provide the clinical requirements to meet the identified dietetic needs of cancer and renal patients.

### **Scenario 2**

An overall increase of 25% to the existing Dietetic Workforce would equate to an increase of 37 Dietitians giving an overall total of 184.

- At this level of growth the Dietetic Managers suggest clinical service could be provided that would allow the Dietetic service to provisionally meet the clinical needs of diabetes and critical care.

### **Scenario 3**

An overall increase of 30% to the existing Dietetic Workforce would equate to an increase of 45 Dietitians giving an overall total of 192.

- At this level of growth the Dietetic Managers suggest a Dietetic clinical service could be provided to meet most of the requirements identified in Health Promotion and Coronary Disease.

In conclusions to meet all the prioritised needs the Project Group identified within Category 3 (unmet need and current clinical demands) a growth of 70% would be required. This growth would be subject to securing funding within a competitive bidding environment.

The figures identified by the Project Group should be taken as a first attempt and a baseline, which will require further in-depth discussion and challenge to refine and produce the most accurate statistics.

## 7. RECOMMENDATIONS

The timescale for the implementation of the key recommendations outlined below is twelve months to coincide with the follow up review:

### *Workforce Planning*

- Now that the workforce planning process is established it is recommended that the Project Board should be retained to steer and implement the recommendations emanating from the Dietetic Workforce Review.
- Now that the workforce planning process is established it is recommended that there is a regular review of supply and demand throughout the 5-year period. The information gathered in the base-line review should be built upon and expanded on it taking into account such factors as the impact on the workforce of the role extension, sub-specialisation, capital plans and service development business cases.
- The Project Board should ensure that there is a consistent and targeted approach to gathering relevant supply and demand data and manpower recording processes.
- The Department should review the activity data collected from the Allied Health Professions at Trust level. Professional managers should review management data collection from the current information systems and ensure the systems are maximised to their full potential the aim of these reviews will be to provide a more comprehensive management information collection, which will aid the workforce planning process.

### *Recruitment & Retention*

- All employers should put in place policies to incorporate planned induction, consolidation and mentorship programmes for all new staff and review the effectiveness of these in a quantitative and qualitative manner.
- Employers and the profession should put in place a consistent approach to the implementation of work-life balance policies and procedures and this should be factored into workforce planning.

### *Utilisation of the available Workforce*

- Trusts should carry out further work into the possibility of reallocating non-professional responsibilities from Dietitians to other health care workers including dietetic assistants and administration and clerical staff.
- A co-ordinated approach should take place with regard to workforce planning of Dietetics, particularly in relation to role extension and development issues.

### *Education & Development*

- Further discussions should take place between the DHSSPS, Trusts and the University to establish a more effective way of providing and increasing the numbers of clinical placements for students throughout the degree programme. It is considered that these increases are vital in enabling Trusts to retain graduates within the NIHPSS. Contributing to the loss of these graduates to outside the NI workforce is the placement of students in the final year to mainland UK. The aim should be for Dietetic student clinical placements to be self sufficient within the NI context. All Trusts with Dietetic services should provide some element of the student clinical placements over the training period. Results of the Clinical Placement Survey (DHSSPS May 2002) should be used in conjunction with this exercise to progress the position of Trusts to better accommodate the clinical placements required.
- There should be an increased focus placed on Continuing Professional Development (including leadership development) and all employers should ensure that the recommended hours provision is accounted for through the workforce planning process.
- Dietetics should become actively involved in the Centre for Continuing Professional Development for the Allied Health Professions (established by the DHSSPS, 2002) The Northern Ireland Dietetic Profession should identify its training requirements and contribute to planning for these needs.
- Employers should provide training to all staff that will be required to provide mentorship or coaching support as part of their role.
- The Department should take forward the development of the AHP consultant role to acknowledge the high levels of clinical expertise within the profession.

### **Further Review of the Workforce**

- The Project Group should be convened initially on an annual basis to review and update the workforce plan.
- Trusts should review the skill-mix of their Dietetic workforce to ensure it has the most appropriate combination of staffing grades to meet the needs of the clinical service this review should also ensure that entry-level posts are maintained so there is a continued flow into the workforce of new graduates.
- The Project Group should be mobilised to take forward where appropriate any recommendations emanating from the workforce review.
- Trusts should review with its Dietetic service the demands of Category 3, as identified in this report, and ensure that any agreed increase in service is included in any future service development plans.

### **CONCLUSION**

This Dietetic workforce review can only be viewed as the starting point, or a baseline for further work to be carried forward. This includes the development of an action plan to take forward the recommendations outlined above. The models presented in the report will need updated and refined on a regular basis to continue to inform decision-making and priorities concerning the investment in the NIHPSS Dietetic workforce over the 5-year plan.

## Appendix 1 - Project Board Members

### Workforce Planning Group – Members

NAME	TRUST/HOSPITAL
DAVID BINGHAM, DIRECTOR OF HUMAN RESOURCES, DHSSPS	Department of Health Social Services & Public Safety
DOROTHY JEFFREY, PROJECT DIRECTOR, DHSSPS	Department of Health Social Services & Public Safety
JOYCE CAIRNS, DEPUTY DIRECTOR OF HUMAN RESOURCES, DHSSPS,	Department of Health Social Services & Public Safety
ELEANOR DUFF, DIETETIC MANAGER, DIETETIC DEPARTMENT, DALRAIDA HOSPITAL, BALLYCASTLE, BT54 6EY	Homefirst Community Trust
JENNIFER HOLMES, DIETETIC DEPARTMENT, ROYAL HOSPITALS HSS TRUST, 274 GROSVENOR RD, BELFAST, BT12 6BP	Royal Group of Hospitals Trust
JILL EATON-EVANS, SENIOR LECTURER IN HUMAN NUTRITION/DIETETICS, UNIVERSITY OF ULSTER, COELRAINE	University of Ulster Jordanstown
MANDY GILMORE, DIETETIC MANAGER, DIETETIC DEPT, DAISY HILL HOSPITAL, NEWRY, BT35 8DR	Newry & Mourne HSS Trust
MAY THOMPSON, DIETETIC MANAGER, CRAIGAVON AREA HOSPITAL, 68 LURGAN ROAD, PORTADOWN, BT63 5QQ	Craigavon Area Hospital HSS Trust
PAULINE MULHOLLAND, DIETETIC MANAGER, ULSTER HOSPITAL, DUNDONALD, BT16 1RH	Ulster Community Hospitals Trust
SHARON PATTON, DIETETIC MANAGER, ALTNAGELVIN HOSPITAL, LONDONDERRY, BT47 1SB	Altnagelvin Hospital HSS Trust
PAULINE DOUGLAS, BELFAST CITY HOSPITAL, LISBURN ROAD, BT9 7AB	Belfast City Hospital Trust
STAFF SIDE REP – PAULA CAHALAN	Royal Group of Hospitals HSS Trust
JENA MUSTON, BEECHES MANAGEMENT CENTRE GROUP	The Beeches Management Centre
MARY WARD, COURSE DIRECTOR, BSC HONS HUMAN NUT & DIET, UNIVERSITY OF ULSTER, BT52 1SA	University of Ulster Jordanstown

## Appendix 2 – Key Informant Interviews

<b>Representative</b>	<b>Organisation</b>
Mrs Anne Gormley	Sperrin Lakeland Trust
Mrs Ashleigh Nelson	Armagh & Dungannon HSS Trust
Mrs Pauline Mulholland	Ulster Communities Hospital Trust
Miss Liz Ferguson	United Hospitals Trust
Mrs Ruth Wood-Martin	Greenpark HSS Trust
Mrs Lucy Hull	Mater Hospital HSS Trust
Mrs Eleanor Duff	Causeway HSS Trust
Mrs Mandy Gilmore	Newry & Mourne HSS Trust
Mrs Alison Armstrong	North & West Belfast Trust
Mrs Pauline Douglas	Belfast City Hospital Trust
Mrs Jennifer Holmes	Royal Group of Hospitals Trust
Mrs Sharon Patton	Altnagelvin Hospitals Trust
Mrs May Thompson	Craigavon Area Hospital Group Trusts
Miss Paula Cahalan	Regional Staff-side Representative

### Appendix 3 – Focus Groups

<b>Group</b>	<b>Location</b>
<b>1&amp;2</b>	University of Coleraine
<b>3</b>	NHSSB
<b>4&amp;5</b>	EHSSB
<b>6</b>	WHSSB
<b>7</b>	SHSSB

## APPENDIX 4 – References

1. The Acute Hospitals Review Group Report, May 2001
2. Department of Health, (1997) The New NHS: Modern-Dependable, London.
3. Department of Health, (1998) A First Class Service: Quality of the new NHS, London.
4. Scally G. Donaldson LJ (1988). Clinical Governance and the drive for quality improvement in the new NHS in England. *BMJ* 1988;317:61-5
5. Northern Ireland Executive (2001), Programme for Government 2001-2004.
6. DHSSPS, (2001) Priorities for Action 2001/2002.
7. DHSSPS (2002) Developing Better Services: Modernising Hospitals and Reforming Structures
8. DHSSPS, (2002) Best Practice Best Care: A Framework for Setting standards, delivering services and improving the monitoring and regulation in the HPSS, A consultation paper.
9. DHSSPS, (2000) Building the way forward in Primary Care. A consultation paper.
10. DHSSPS Primary Care: A position paper for the Professions Allied to Medicine.
11. PAM Strategy (1997) – A Regional Strategic Framework for the Professions Allied to Medicine in Northern Ireland.
12. Department of Health, (1998) Working for a Healthier Scotland.
13. Department of Health, (1998) Better Health – Better Wales.
14. Department of Health, (1999) Saving Lives Our Healthier Nation.
15. Department of Health, (2000) Investing for Health.
16. DHSSPS, (1997) ‘Well into 2000: A positive agenda for Health and Social Well-being’.
17. [www.cpsm.org.uk/info.htm](http://www.cpsm.org.uk/info.htm)

18. The British Dietetic Association (2002) Annual Report 2001-2002, Birmingham: British Dietetic Association
19. Buchan, J (2002) '*Rallying the Troops*' in Health Service Journal, 30 May 2002, pp 24-25
20. Department of Health (2000) NHS Plan, London: HMSO
21. Review Body for Nursing Staff, Midwifery, Health Visitors and Professions Allied to Medicine (2002) 19th Report of the Professions Allied to Medicine, London: HMSO
22. Department of Health (2001) Vacancy Survey @ [www.doh.gov.uk/public/kt230001](http://www.doh.gov.uk/public/kt230001)
23. Pay and Workforce Research (2001) Survey of NHS Dietetic Services, London: Department of Health
24. NAO (2001) Educating and Training the Future Health Professional Workforce for England, HC 277 Session 2000-2001
25. NHS Executive (2000) Human Resources Performance Framework, October 2000
26. Pay and Workforce Research (2000) The Dietetic Workforce Baseline Study, London: Department of Health
27. Filao Wilson (Date unknown) Dietetic Education and Training Report
28. Select Committee for Health (1999) Third Report- Future NHS Staffing Requirements, London: House of Commons
29. Department for Education and Employment (2001) Employers Skill Survey: Case Study Health and Social Care
30. Church et al (Eds) (1995) Social Trends, 25 London: HMSO
31. Royal College of Physicians (2002) Nutrition and Patients: A Doctor's Responsibility, London: RCP
32. MacDonald, E and Capewell, S (2001) '*Podiatry: Cinderella Specialty in Search of a Glass Slipper?*' Podiatry Now, November 2001, pp 518-520

33. Lean, M et al (1990) 'Obesity, weight loss and prognosis in Type 2 Diabetes, Diabetic Medicine (7) pp 129-133
34. UK Prospective Diabetes Study Group (1990) Response of fasting plasma glucose to diet therapy in newly presenting type 2 diabetic patients (UK PDS 7), Metabolism (39) pp 905-912
35. Diabetes Control and Complication Trial in McGough, N (2001) 'Diabetic Shortfalls that the National Service Framework for Diabetes will Need to Address' Journal of Human Nutrition and Dietetics, 14, pp485-6
36. Diabetes UK (1999) Survey of British Clinical Diabetologists 1999-2000
37. Department of Health (2001) National Service Framework for Diabetes, London: HMSO
38. Clinical Standards Advisory Group (1994) Standards of Clinical Care for People with Diabetes, London: HMSO
39. EHSSB Dietetic Managers (2000) EHSSB Diabetes Audit – New Diagnosis, Out-patients
40. Chief Medical Officer (2000)
41. Department of Health (2001) National Service Framework for Coronary Heart Disease, London: HMSO
42. Hooper, L (2001a) 'Dietetic Guidelines: Diet in Secondary Prevention of Cardiovascular Disease, Journal of Human Nutrition and Dietetics, 14, pp298-305
43. Hooper, L (2001b) 'Dietetic Guidelines: Diet in Secondary Prevention of Cardiovascular Disease, Journal of Human Nutrition and Dietetics, 14, pp307-318
44. Sanderson, S (1994) 'Ace Inhibitors in the Treatment of Chronic Heart Failure: Effective and Cost Effective Measures,' Bandolier, 1 (8)
45. SIGN Secretariat (1999), Diagnosis and Treatment of Heart Failure due to Left Ventricular Systolic Dysfunction. Scottish Intercollegiate Guidelines Network, Sign Publication, number 35.
46. Cowie MR, Mosterd A, Wood D et al (1997) 'The Epidemiology of Heart Failure,' European Heart Journal, 18, pp208-225.

47. O'Brien T, Welsh J, Dunn FG (1998). Non Malignant Conditions (Chapter 15) in Fallon M, O'Neill B (Eds). ABC of Palliative Care, London BMJ Books.
48. DOH (1998) Changing Gear – Guidelines for Managing the Last Days of Life in Adults (HSC 1998/115) London DOH.
49. Mallick/ RCP and the Renal Association of London (1991) Provision of Services for Adults with Renal Disease in the UK.
50. Department of Health (2000) The NHS Cancer Plan: A Plan for Investment, A Plan for Reform, London: HMSO
51. NHS Executive (1995) The Calman-Hine Report 'A Policy Framework for Commissioning Cancer Services'
52. Campbell Report (1996) 'Cancer Services: Investing in the Future'
53. Officer for PAMs (1998) PAM Strategy Cancer Services: A Position Paper for the Professions Allied to Medicine, Belfast: Stationery Office Northern Ireland
54. NHS Modernisation Agency; Critical Care programme - AHP and HCS Advisory Group, 'The role of healthcare professionals within critical care services.'
55. Allison et al (1993) Organisation and Evaluation of Home- Enteral Nutrition Services, Clinical Nutrition (12) pp 38-43
56. L'Estrange, F (1997) 'An Audit of Adult Patients on Home Enteral Tube Feeding in a Region of Northern Ireland' Journal of Human Nutrition and Dietetics (10), pp 277-287
57. Matthewson, K et al (2001) 'A Prospective Study of Workload of a Newly Formed PEG Advice Team' in Journal of Human Nutrition and Dietetics (14) pp 21-23
58. Madigan, S M (2002) 'Assessing the Dietetic Needs of Different Patient Groups Receiving Enteral Tube Feeding in Primary Care' Journal of Human Nutrition and Dietetics (15) pp 179-184
59. BDA (2001) Prescribing for State Registered Dietitians: Professional Development Committee Position Paper

60. Gilmour, E and Clencorse, C (1998) 'Parenteral Nutrition. Do Dietitians have a Role? Results of the Parenteral and Enteral Nutrition Group Survey' *Journal of Human Nutrition and Dietetics* (11) pp 307-312
61. BDA (1998) *Continuing Professional Development for Dietitians: Policy Paper*, Birmingham: BDA
62. Scottish Executive (2001) 'Building on Success'
63. Editorial (2002) 'Continuing Professional Development' *Journal of Human Nutrition and Dietetics* (15) pp 1-2
64. Harrison, J et al (2001) 'The Involvement, Understanding and Attitudes of Dietitians towards Research and Audit' *Journal of Human Nutrition and Dietetics* (14) pp 319-330
65. Research and Development Office (2001) *LDM for PAMs*, Belfast: Research and Development Office
66. BDA (2002) *Research Strategy 2002-2007*, Birmingham: BDA
67. BDA (1999) *Briefing Paper on Dietetic Assistants*, Birmingham: BDA
68. Crocker, J (1999) 'The Public Perception of the Role of Dietitian compared with Physiotherapists and Radiographers', *Abstracts of BDA First Recent Graduates Symposium*, *Journal of Human Nutrition and Dietetics* (13) pp 363-371