



Workforce Baseline Report

NHS Grampian Workforce Profile

March 2005

## Introduction

This baseline report gives the workforce profile for directly employed staff within NHS Grampian and examines the trends over the 10 year period 1994 – 2004. The report highlights a number of workforce implications for the service and should be viewed within the context of our strategic vision for healthcare services in Grampian for 2010;

- Grampian will have the combined strength of Primary Care and Acute Services through the use of managed clinical networks and clear patient pathways that cross traditional organisational and geographical boundaries. The needs of teaching and research will be integrated into these pathways. The public and communities will have direct influence on their health service through a new bottom-up approach to planning. Clinicians will have a much stronger role in planning workable responses to the challenges of service improvement.
- The focus of services will be on networks of care that fully integrate the contribution of all clinicians. The North of Scotland Networks will develop to maximise the sharing of services, facilities and educational opportunities. The formalisation of networks will result in appropriate organisation of specialist services in Aberdeen, Inverness and Elgin to maintain the high standards of clinical governance and will provide stability for tertiary services in Grampian and indeed, throughout Scotland.
- Specialist Acute Hospitals will concentrate on providing services for defined patients or procedures that require the specialist skills and facilities that can only be provided in their central locations. The focus on hospital based Acute Service (rather than community based Acute Services) will enable the reorganisation of services at Foresterhill, Woodend and Dr Gray's Hospital. This will streamline their work and enable them to reduce the pressure on their systems and make most efficient use of expensive resources.
- The clearer definition of specialist services will stimulate the creation of a range of new intermediate care services that is provided jointly by Primary and Secondary Care Clinicians. Intermediate care services will deliver treatment and care for patients who require more support than is normally provided at GP Practice level but do not require the specialist services of the acute hospitals.
- The development of Rapid Patient Access through Diagnostic and Treatment Centres will stimulate innovation, such as the introduction of mobile diagnostic facilities and increased use of tele-medicine, and result in the reorganisation of services provided to communities, balancing the need to provide clinical safe services with local convenience and accessibility.
- The development of diagnostic and treatment centres, combined with a shift in the balance of long term NHS care to more innovative and integrated community based health and social care services, will change the form of community hospitals across Grampian. The modernisation of services will stimulate a range of different solutions, including NHS, Local Authority, Voluntary and Private Sector Partnerships, sharing skills and resources and allowing alternative funding opportunities to be exploited to provide improved local services.
- Joint working between the NHS, Local Authorities, the Voluntary and Private sectors will be developed to provide an integrated, joined up health and social care system for the people of Grampian based on their individual needs.

With this changing pattern of care new skills will be required to be developed to ensure we have the right people with right skills in the right place at the right time.

To achieve this we have both a national and local framework which sets out the longer term vision for the NHS Workforce.

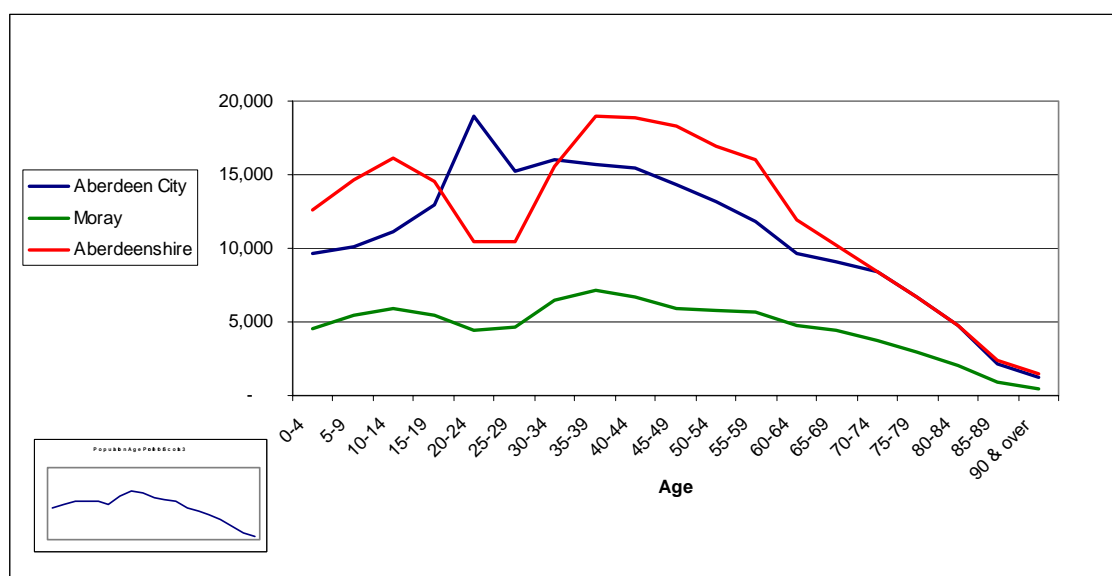
- Many first time/routine contacts between patients and the NHS will be provided by nurses or other health and social care professionals in community based settings eg Pharmacy.
- Non medical healthcare professionals will undertake work traditionally done by doctors, with medical staff concentrating on those activities which require their unique skills.
- Health and social care assistants will undertake appropriate aspects of routine work currently undertaken by nurses, and other healthcare professionals.
- GPs will focus on patients with complex health problems and provide a wider range of diagnostic and treatment services in the community. GPs will work more closely with colleagues who are more specialised as part of a team.

- More older people will be supported at home or intermediate care facilities. Their treatment will be managed by community based health and social care professionals.
- Major Acute Hospitals will focus on providing 24 hour intensive and high dependency care. They will be centres of excellence for tertiary and hi-tech services acting as a focus for care networks.

Within the Grampian area there is strong competition to attract staff and the recent workforce market assessment “Skills for Health Organisations” shows a steady growth in the healthcare workforce of around 1% per annum, with a higher rate of growth for medical staffing (3% since 1995) and AHP’s (4% since 1995). This is reflected in demand for services which is up 3% per annum in Acute and 1% per annum in Primary Care. It is predicted that the workforce and demand growth will be maintained if not increased, as is the case in every developed country, due to the ageing population and medical and technological advances. Indeed staffing levels in the NHS are low compared with most comparable health care systems.

## Population Age Profile in the Grampian Area

**Chart 1: Population Age Profile**



Source: (data sourced from GROS population estimates – 30 June 2003)

The above Chart shows the age profile for the NHS Grampian Board area for each of the three local authority areas of Aberdeen City, Aberdeenshire and Moray. The shape reflects the Scottish trend (inserted at left hand bottom) of an ageing population.

Within Aberdeenshire there is a clear dip in the workforce population for the age group 20–35. This is however partly compensated for by a peak in the Aberdeen City workforce population for the equivalent age group.

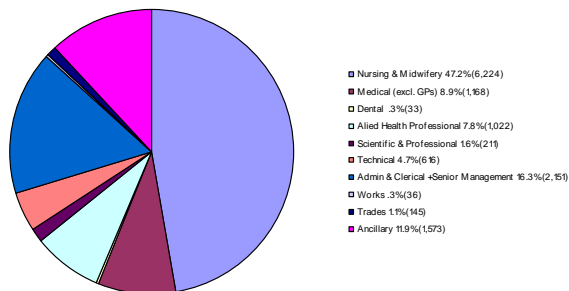
Within Moray there is a higher proportion of older people (65+) to working age (20–65) which is likely to increase demand pressures on the local Health Service. Across Grampian it is predicted that the number of people aged over 85 will increase by 24% between 2000–2010, with the increase in Aberdeenshire being 36%.

### Workforce Implications

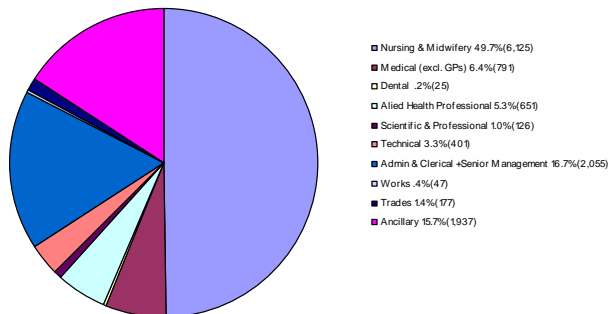
Along with an increased requirement for chronic disease management and intermediate care services, there is a need for increased support from integrated Health & Social Care teams to prevent unnecessary admission and facilitate early discharge from hospital. Within Grampian multiple emergency admissions for people aged over 65 have doubled in the past 10 years and national statistics indicate that people over 65 account for  $\frac{2}{3}$  of hospital bed days and 40% of emergency admissions.

## Staff Profile

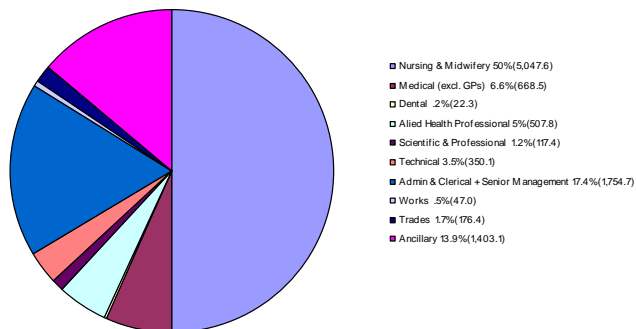
**Chart 2: Headcount by Professional Group as at 30 September 2004**



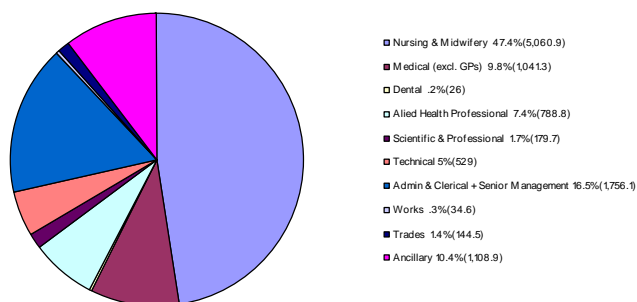
**Chart 3: Headcount by Professional Group as at 30 September 1994**



**Chart 4: WTE by Professional Group as at 30 September 1994**

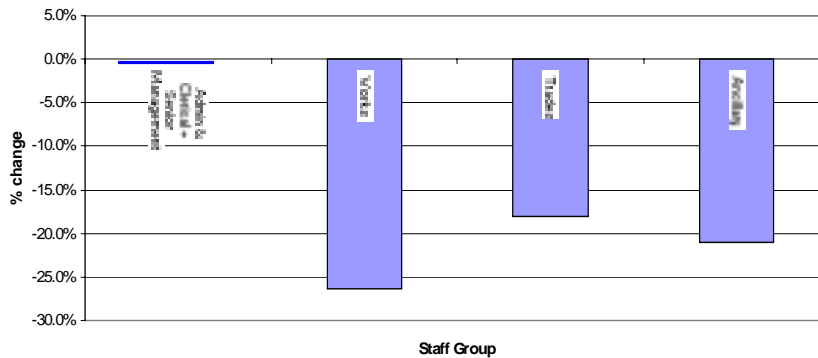


**Chart 5: WTE by Professional Group as at 30 September 2004**



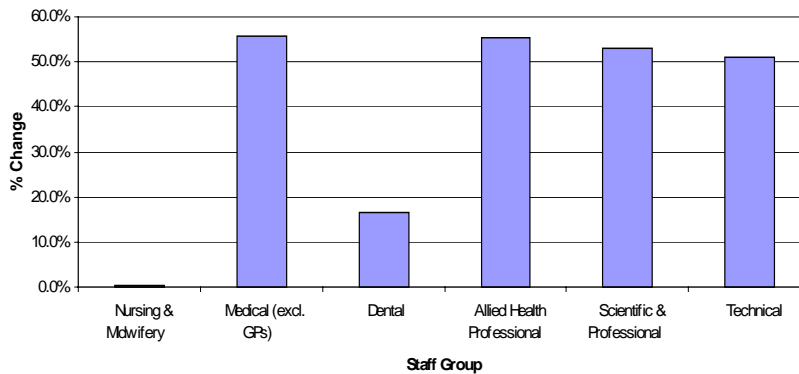
Source: ISD Scotland

**Chart 6: Percentage Change in WTE Non-Clinical Staff between 1994 and 2004**



Source: ISD Scotland

**Chart 7: Percentage Change in WTE Clinical Staff between 1994 and 2004**



Source: ISD Scotland

In summary, there has been an increase in clinical, and decrease in non-clinical, staff over the last 10 years.

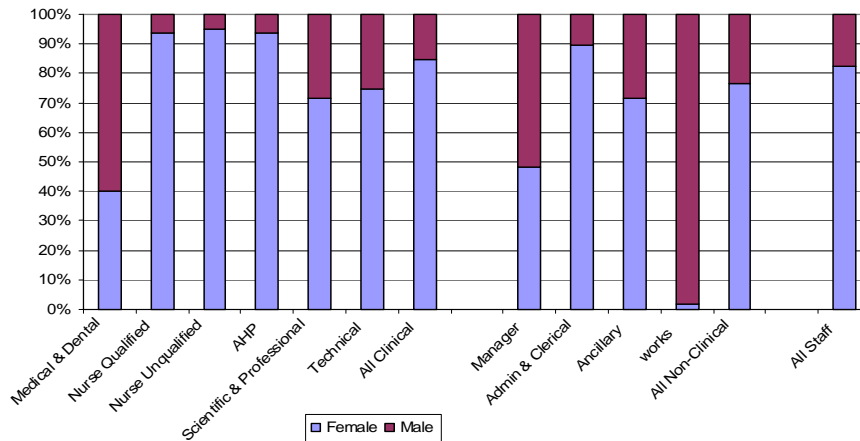
The decrease in non-clinical staff can be explained by the decision to outsource some Ancillary, Works and Trades professionals within Grampian in the 1990's.

The main areas of increase in clinical staffing are within the Medical, AHP, Scientific & Professional and Technical professions. The increase of over 50% in AHP, Scientific & Professional and Technical staff is due to the expansion of multi-professional team to make best use of contribution that each profession can make. It should also be noted that there has been a noticeable expansion of the hospital medical workforce (55.8%). Nursing & Midwifery has had a small expansion of 0.3%. Nursing & Midwifery remains the largest percentage of the workforce and is therefore less likely to noticeably expand.

## Analysis by Professional Group

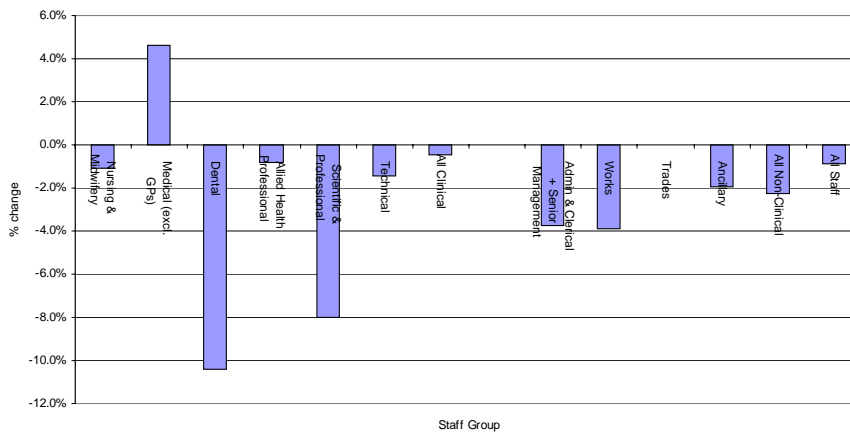
### Analysis by Gender:-

**Chart 8: Percentage of Staff Group by Gender (February 2005)**



Source: Local Grampian Workforce Systems

**Chart 9: Percentage Point Change in WTE/Headcount Ratio – Clinical & Non-Clinical Staff as at 30 September 1994 and 2004**



Within Grampian the workforce is currently predominantly female other than in the Works Profession (1.6%). National figures show an increasing feminisation of the workforce, with the proportion of female hospital doctors, dentists and GPs currently just over 40%.

Interestingly, the NHS Grampian figures show a move to full-time working for hospital medical staff. Further analysis highlights that this increase is primarily amongst Consultants and Doctors in Training, whilst the Staff Grades show a move away from full-time working.

## Analysis of Ethnicity:-

Around 95% of Scottish residents described their ethnic origin as White at the time of the 2001 Census. In the ethnic data derived from the annual medical and dental census and the equivalent non-medical census, 97% of NHS Scotland staff who completed the ethnicity question described themselves as White. Just over 17% of medical and dental staff in NHS Scotland were of non-white origin; within this total 8.5% were Indian and 4.1% were of "Other" groups. In the non medical and dental staff group, less than 1% described themselves as non-white.

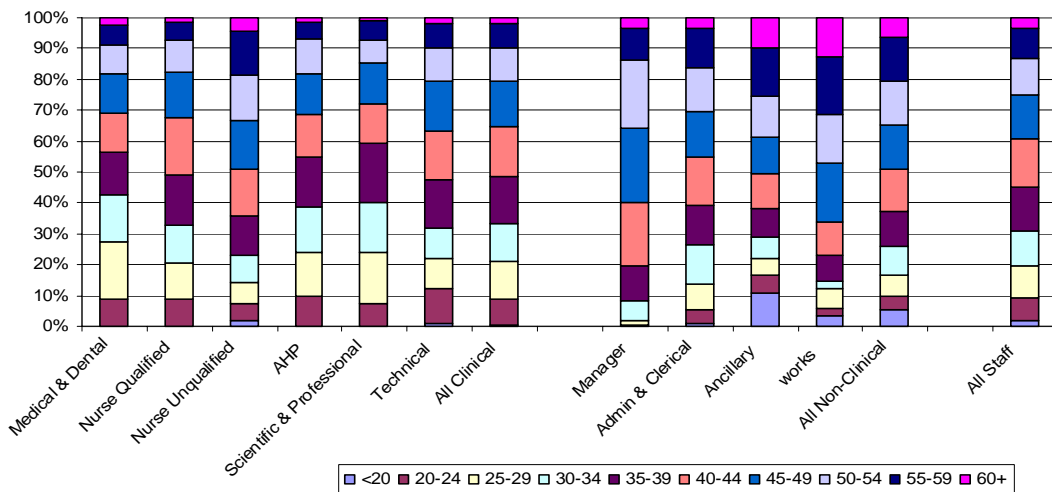
Insufficient data is currently held within NHS Grampian. However, there is no reason to suggest that it will vary significantly from the Scotland figures.

## Analysis of Disability:-

Data is not recorded centrally on the number of staff who consider themselves to be disabled.

## Analysis by Age:-

**Chart 10: Age Profile for all Staff Groups (Headcount)**



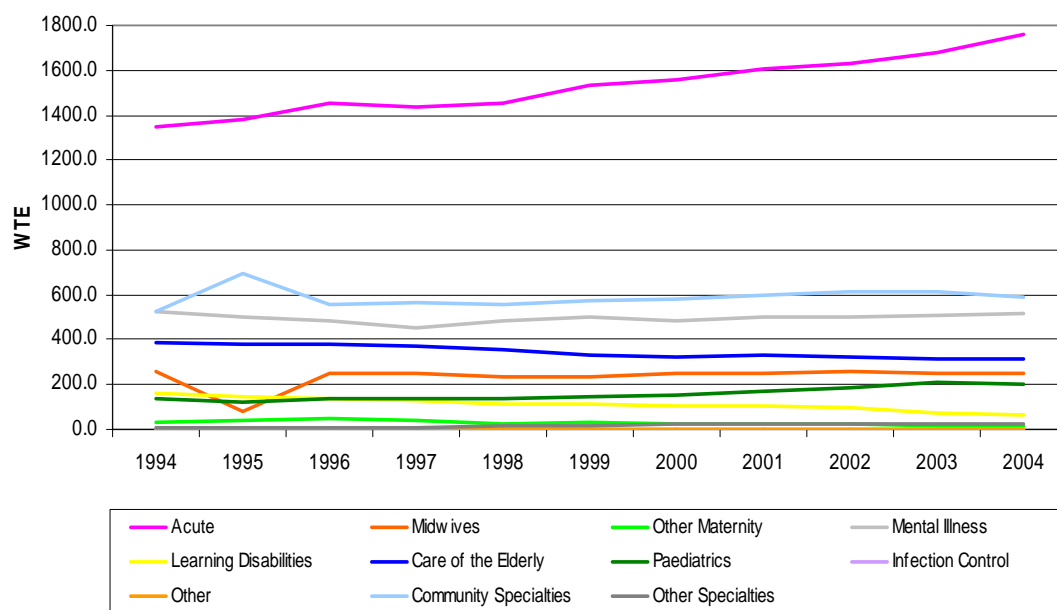
Source: Local Grampian Workforce Systems. Data as at 30/09/2004.

When looking at all staff, we have a reasonably even distribution of age groups. We are however concerned about the 55+ age group who are going to be retiring within the unqualified Nursing, Works and Ancillary staff groups. Having already outsourced Works and Ancillary services, we will continue to have problems due to the high employment situation within the Grampian area (unemployment is less 2%).

The general direction of healthcare provision is towards Care in the Community and providing support at home. We have difficulty recruiting home carers in Grampian and are therefore increasingly using unqualified nurses and developing the Career Pathway. While we are currently making more effective use of unqualified nurses working in integrated health & social care teams, we also recognise the need for more pro-active workforce redesign in this area.

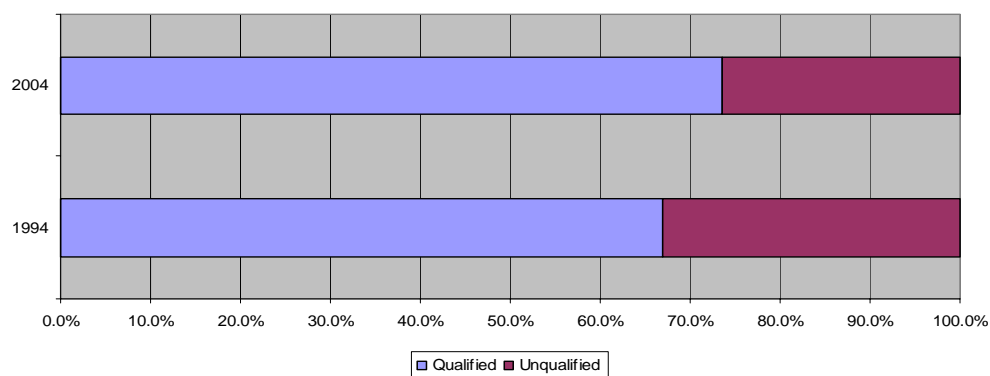
## Nursing and Midwifery

**Chart 11: Trend in WTE by Specialty 1994-2004**



Source: ISD Scotland

**Chart 12: Percentage Change in Skill Mix 1994-2004**

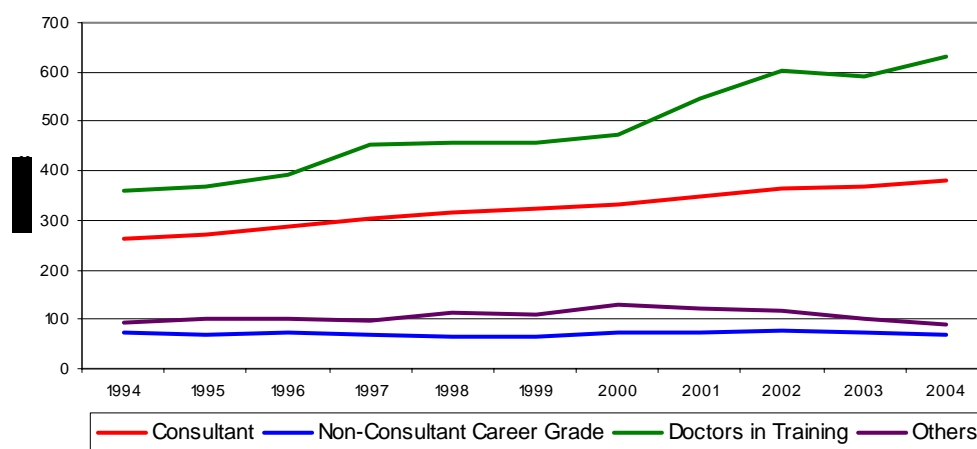


Source: ISD Scotland

Within Grampian we are moving towards an increasingly qualified staff in nursing (from 67% in 1994 to 74% in 2004). When looking at a break down of WTE trends in nursing specialties, we have a continuing increase in the number of staff in the Acute specialty. Primary Care nursing numbers have remained relatively stable. The decrease in demand of NHS-employed Mental Health Nurses is as a result of Community Care strategies. This decrease is similarly reflected in the Care of the Elderly specialty as the result of implementation of community care policies.

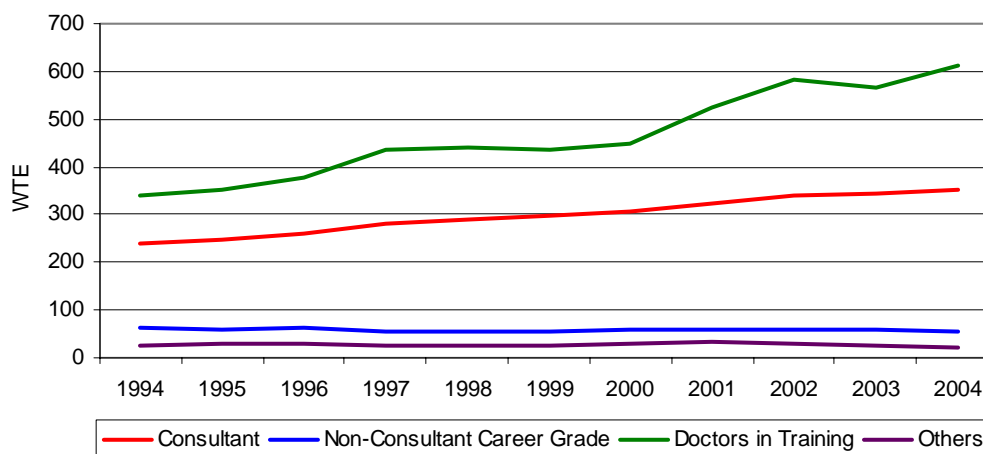
## Medical and Dental

**Chart 13: Trend in Headcount by Grade 1994-2004**



Source: ISD Scotland

**Chart 14: Trend in WTE by Grade 1994-2004**



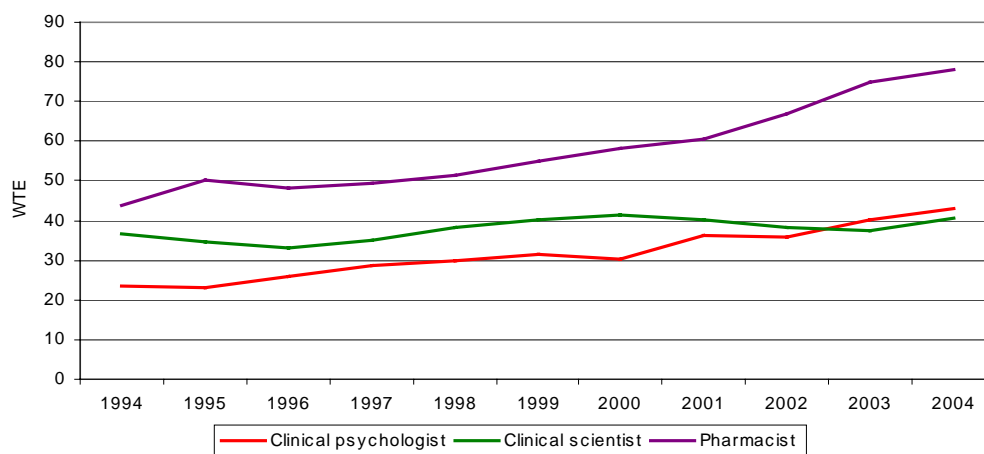
Source: ISD Scotland

The number of non-Consultant Career grades has remained static. There has however been a significant rise in the number of Consultants (4.7% wte per year and 4.3% headcount per year for the last 10 years) and Doctors in Training (8.0% wte per year and 7.5% headcount per year). This has been reflected as an overall percentage rise in medical staff as part of the multi-professional team.

The overall ratio of Consultants to Doctors in Training has moved from 1:1.42 in 1994 to 1:1.74 in 2004. Across Scotland the average ratio is 1:1.5 and with the move to Modernising Medical Careers, it is currently suggested that the ratio should be 1:1. It is clear that there is a need to review Consultant numbers within NHS Grampian to meet the needs of the service and medical training requirements, and this review should be done in conjunction with a review of GP numbers to meet the anticipated service redesign requirements.

## Scientific & Professional

**Chart 15: Trend in WTE by Staff Group (Qualified) 1994-2004**



Source: ISD Scotland

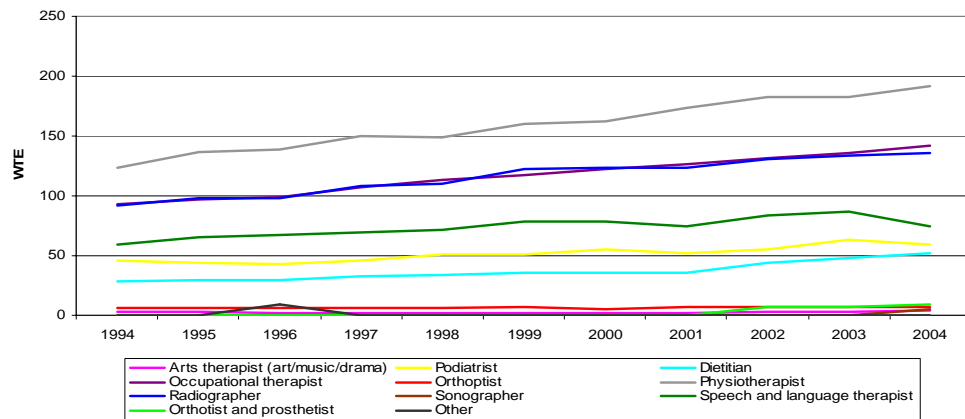
The number of Pharmacy and Clinical Psychology staff has been steadily increasing since 1994. There was a sharp rise within Pharmacy in 2000, as the number of Pharmacists working alongside GP Practices was increased to try and improve prescribing management. We anticipate that this increase in demand for Pharmacists will continue as their role within the multi-professional team expands and the new Pharmacy Contract is introduced.

## Technical

The change in grading structures for Dental Ancillaries and Cytology Screeners during 2001 and 1998/99 respectively, has meant that there are no clear trends available for this staff group.

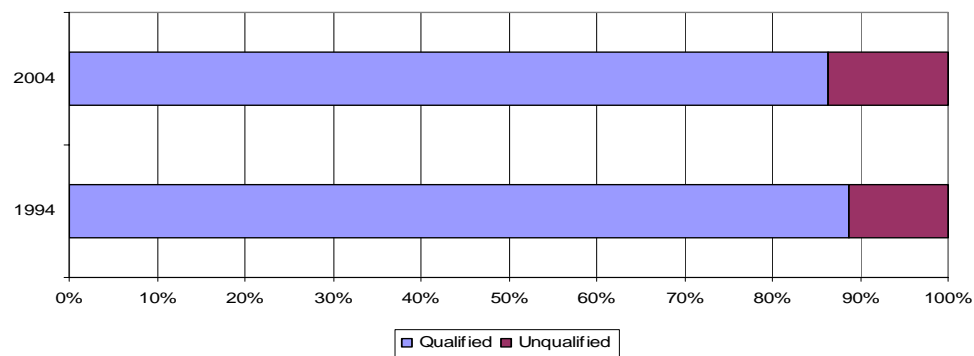
## Allied Health Professionals

**Chart 16: Trend in WTE by Staff Group (Qualified) 1994-2004**



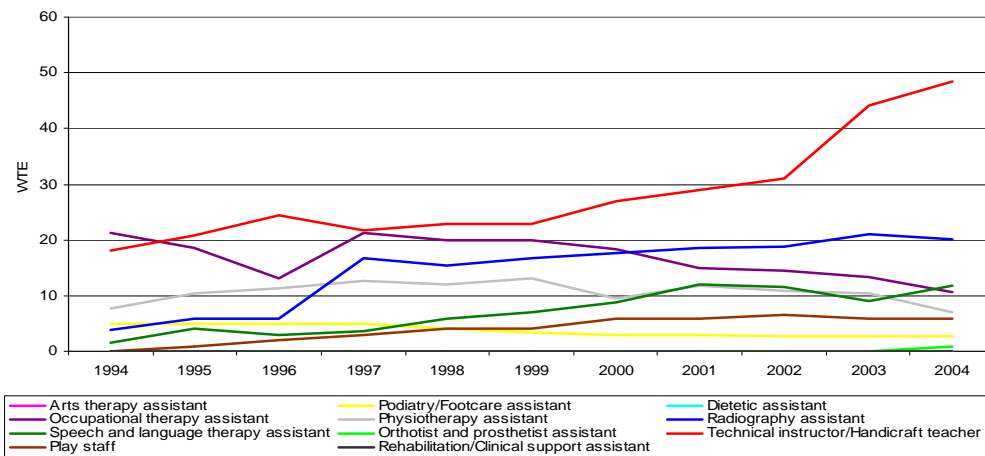
Source: ISD Scotland

**Chart 17: Trend in WTE by Staff Group (Qualified) 1994-2004**



Source: ISD Scotland

**Chart 18: Trend in WTE by Staff Group (Unqualified) 1994-2004**



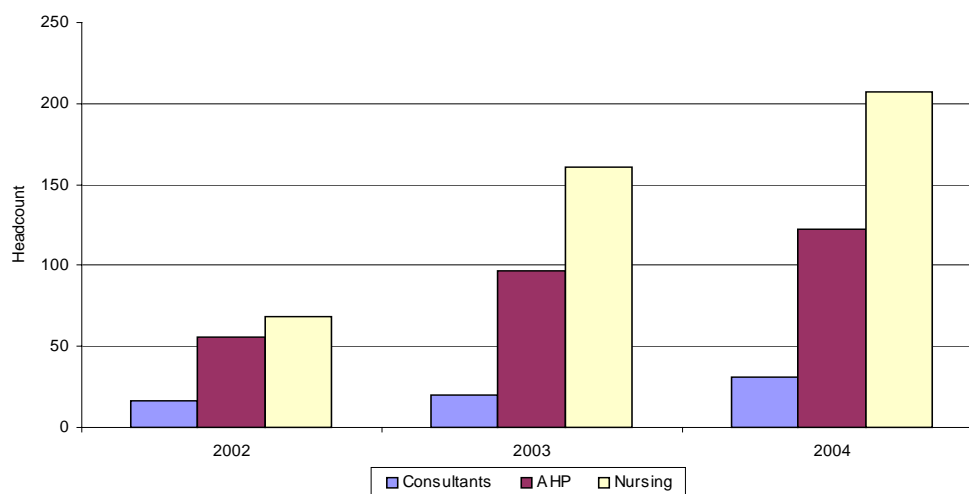
Source: ISD Scotland

In general, the number of qualified AHP staff has increased. However those professions for which the WTE numbers have started to drop over the past year are Speech & Language Therapy and Podiatry, by 10.7% and 2.4% primarily respectively due to recruitment difficulties within Grampian. This is reflected in both WTE and HC trends.

The Charts indicate a general rise in the use of AHP support staff to make more effective use of the skills of the qualified staff. There has also been an increase in the use of the Technical Instructor grade – particularly for higher level Physiotherapy and Speech & Language Therapy assistants.

## Partnership Agreement Commitments

**Chart 19: Cumulative Headcount of Additional Consultants, Qualified AHP and Qualified Nurses recruited 2002-2004**



Source: ISD Scotland

The Executive Partnership Agreement (2003) contained 13 specific workforce commitments. This included Scottish targets of :-

- 1,500 additional Qualified AHP's
- 600 additional Consultants to be recruited by 2006
- and 12,000 Qualified Nurses and Midwives to be recruited by 2007

Our staff numbers have been steadily increasing within Grampian. Over the three year period highlighted we have recruited an additional 31 Consultants, an additional 122 qualified AHP's, and an additional 207 Nurses.

If we assume a 10% Grampian contribution towards meeting the Scottish targets, we have reached 52% for Medical, 81% for AHP's, but only 17% of the way towards the Nursing target. However, it should also be noted that with the moves towards care in the community an increasing number of nursing staff are now employed within the private and voluntary sector and within GP practices, rather than employed directly by the NHS.

## Vacancies

**Table 1: WTE Trend in Nursing & Midwifery Vacancies as at 31 March 2004**

	Establishment	Staff in Post	Total Vacancies	% Vacancies	Vacancies >3 Months	% Vacancies >3 Months
2001	5190.1	5000.1	181.7	3.5%	41.6	0.8%
2002	5147.0	4859.6	258.1	5.0%	54.8	1.1%
2003	5208.7	4952.7	247.7	4.8%	50.6	1.0%
2004	5334.2	5133.0	185.4	3.5%	48.1	0.9%

Source: ISD Scotland

**Table 2: WTE AHP Vacancies as at 31 March 2004**

	Establishment	Staff in Post	Total Vacancies	% Vacancies	Vacancies >3 Months	% Vacancies >3 Months
2001	730.6	689.6	43.4	5.9%	11.6	1.6%
2002	738.0	740.4	37.5	5.1%	2.3	0.3%
2003	868.0	774.7	45.5	5.2%	19.2	2.2%
2004	847.5	788.8	64.8	7.6%	22.3	2.6%

Source: ISD Scotland

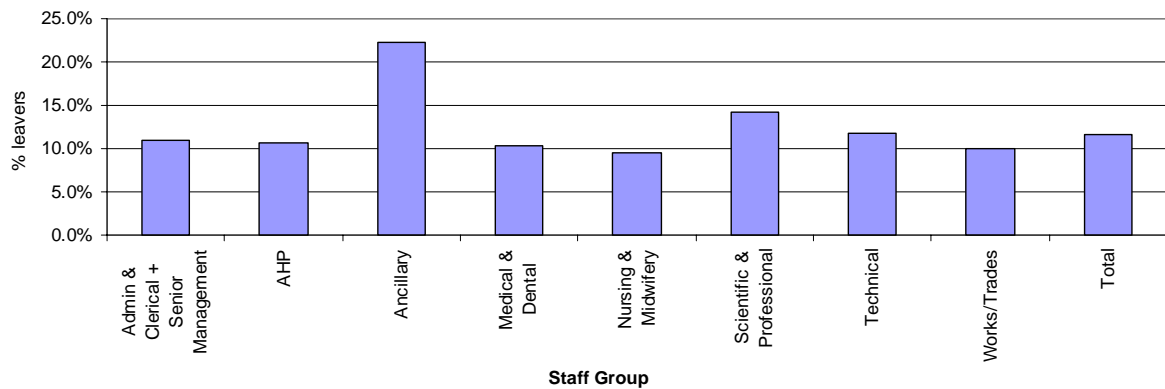
From 2001–2004 the vacancy factor for Nursing & Midwifery has varied between 3.5%-5% with from 0.8%-1.1% remaining vacant for more than 3 months. The vacancy factor peaked during 2001/2002 but has gradually declined since.

AHP vacancies have grown however from 5.9% in 2000/2001 to 7.6% in 2003/2004 with posts remaining vacant for more than 3 months rising from 1.6% in 200/2001 to 2.6% in 2003/2004. While there has been a greater increase in demand for AHP rather than Nursing & Midwifery staff over this period, it is clear that Grampian is suffering from recruitment difficulties for this group of staff.

The average vacancy rate across Scotland is 3.1%, with the overall vacancy rate in Health and Social Services being 1.7%. Within Grampian the average vacancy rate in Aberdeen and Aberdeenshire is 3.7% and in Moray 4.8%, with unemployment currently below 2%. These figures reflect the difficulty we will have in recruiting qualified staff, particularly for those staff groups with no local training schools in the area.

## Turnover

**Chart 20: Percentage Turnover by Staff Group for September 2003 – September 2004**



Source: Leavers taken from local systems, headcount data taken from ISD Scotland

There is no national data for Scotland on turnover rates. However the overall percentage turnover within NHS Grampian for 2003/2004 was 11.6%, with higher levels of turnover amongst Ancillary and Scientific & Professional staff.

## Recruitment and Retention

Within NHS Grampian, the key areas of recruitment difficulty are:-

- Medical – GPs (particularly in rural areas), Consultant Psychiatrists, Community Paediatricians and Radiologists.
- Nursing – G Grade Community Nurses, D/E Grade Care of the Elderly Nurses, Community Night Nursing, Learning Disability Nurses, Theatre and Orthopaedic Nurses.
- Dentists.
- Radiographers.
- Clinical Psychologists.
- Speech and Language Therapists.

Some national initiatives have been developed to support improved recruitment in these areas eg the flexible training programmes for clinical psychology trainees and local initiatives are currently being developed in an attempt to meet these recruitment needs eg;

- The development of local educational opportunities for 'pre registration' students.
- The use of overseas recruitment campaigns.
- The development of local training schemes.
- The development of planned work experience opportunities with secondary schools.
- The development of a local recruitment handbook.
- The development of Return to Practice programmes.
- The development of strategies to ensure best use of students who do not complete their pre-registration training.
- Flexible working arrangements.
- The development of improved career pathways eg HNC for nursing auxiliaries and the development of new advance practitioner role.

In addition Agenda for Change and the new Knowledge and Skills Framework should provide;

- The opportunity for joint training across disciplines due to the consistent application of a single knowledge and skills framework.
- The potential to retain staff through better assessment of individual staff needs and thereby supporting role fulfilment and ongoing personal development.
- The opportunities to explore how existing but not utilised knowledge and skills might be applied to a wider range of 'mapped roles'.
- More coherent CPD provision based on the needs of the individual and service rather than the availability of courses.

## Conclusion

This Workforce Profile highlights a number of forces and drivers on future workforce requirements including the ageing population, skills shortages in some specialties and move to more flexible working patterns within the framework of the Working Time Regulations. It is clear that the redesign of the medical workforce incorporated within the Junior Doctors hours of work, new Consultant and GMS contract and Modernising Medical Careers necessitate a move towards planning the workforce on the basis of the multi-professional team required to support the patient pathways through the service. Within Grampian this work is being taken forward through the integration of Workforce Planning and Redesign into the major Service Redesign Projects incorporated in the Change and Innovation Plan.