NORTHERN RIVERS
University Department of Rural Health

Dr Deborah Schofield,
Associate Professor,
Australian Rural Health Research Collaboration,
Faculty of Medicine, University of Sydney.
PO Box 3074,
Lismore, NSW, 2480

Health Workforce Study
Productivity Commission
PO Box 80
Belconnen ACT 2616

15 July 2005

Dear Commissioners Woods and Owens,

I would like to make the following submission to the Health Workforce Study on behalf of the Australian Rural Health Research Collaboration which is part of the School of Public Health at the University of Sydney.

Best regards

Deborah Schofield

INITIAL SUBMISSION FROM THE AUSTRALIAN RURAL HEALTH RESEARCH COLLABORATION (UNIVERSITY OF SYDNEY) to the PRODUCTIVITY COMMISSION HEALTH WORKFORCE STUDY

1. Introduction

The Australian Rural Health Research Collaboration is a partnership between the Northern Rivers University Department of Rural Health (Lismore), the Australian Centre for Agricultural Health and Safety (Moree) and the Broken Hill Department of Rural Health. The collaboration has an innovative and robust program of nationally and internationally significant research which leads to sustained improvement of the health of rural and Australian communities. One important part of that work is the health workforce research program which has focussed on demographic change and the health workforce and understanding choices about rural and remote employment.

2. Demographic change and the health workforce

The Intergenerational Report released by the Treasurer in 2002 highlighted ageing as a source of increased demand for health service over the next 40 years[1].

The health workforce is also rapidly ageing and at the same time health professionals are reducing their working hours. These factors, combined with the increased demands of an ageing population, are contributing to emerging workforce shortages.

Determining the extent and timing of future workforce shortages depends on timing of older workers retirement. A recent study by Schofield and Beard examined the movement of different age cohorts through their careers towards retirement using Australian Bureau of Statistics Census data for 1986 to 2001.[2]

The nursing population is ageing more markedly than GPs. For example, in 1986, 40% of GPs were aged 40 or more, but by 2001 this proportion had increase to 55%. For nurses, the increase was from 30% in 1986 to 60% in 2001. About 55% of GP were from the baby boomer cohort (aged 41 to 59 years) in 2001, and 60% of nurses.

While we face an increase in shortages of doctors and nurses due to generational change, these shortages are imminent for nurses as they retire earlier than GPs. For example, of nurses aged 50-54 in 1986, 86% of that cohort had left the nursing workforce by age 65-69 (Table 1). However, only 39% of doctors had retired by the same age. Given that the attrition rate from the nursing workforce is very rapid from the age of 60 years, and the oldest baby boomers are now 59 years of age, we are on the cusp of a very rapid attrition from the nursing workforce. It is likely that in 15 years half of the nursing workforce will have retired.

[1] Budget Paper 5: Intergenerational Report 2002–03. Canberra: Commonwealth of Australia, 2002.

[2] Schofield and Beard. 2005. Baby boomer doctors and nurses: demographic change and transitions to retirement. *Medical Journal of Australia*, 183:2 (July 18) , pp 80-83 (http://www.mja.com.au/public/issues/183_02_180705/contents_180705.html)

PO Box 3074, Lismore NSW 2480
Phone: +61 2 6620 7570 Fax: +61 2 6620 7270 Email: NRUDRH@med.usyd.edu.au

Table 1: Cumulative attrition rates of older general practitioners and registered nurses, 1986–2001

Year	50–54	55–59	60–64	65–69	70–74	≥ 75
General practitioners						
1986						
1991		11%	23%	36%		
1996			15%	34%	55%	
2001				39%	61%	64%
Registered nurses						
1986						
1991		28%	51%	78%		
1996			66%	88%	93%	
2001				86%	96%	*

Shadings trace the cohorts through the table. For example, blue shading shows those aged 50–54 years in 1986 were aged 55–59 years in 1991, and had attrition of 11% (GPs) or 28% (nurses) over the 5 years. Blue is the oldest war and depression group; grey is the youngest pre-depression group; green is the oldest pre-depression group.

Source: Health workforce extract from ABS Census 1986, 1991, 1996 and 2001. * Numbers too small. Calculation of cumulative attrition rates for each cohort: CAR=1 – N_{ti}/N_{t1} where CAR= Cumulative attrition rate, N = number of people, ti=census data and $t1$=first census in series (1986). ◆
Source: Schofield and Beard (2005)[2]

As the GP and nursing work forces have aged there has been a gradual decline in hours worked which exacerbates workforce shortages. The median hours worked by GPs has fallen from 49 to 44 hours per week from 1986 to 2001. For nurses, the decline has been from 39 to 33 hours per week over the same period. Feminisation partly explains the fall in GP working hours but not all of it. For example, 80% of male baby boomer GPs were working 41 or more hours per week in 1986, but of the younger male cohort of 2001, generation X, only 64% worked these hours.

Although GPs retire later than nurses, they tend to decrease their hours as they move towards retirement.

An important question to consider is "why do doctors and nurses leave the workforce at different rates and are there lessons to be learned to influence future workforce needs?". Although the census data do not directly answer this question, the wider literature on retirement provides some useful indicators.

There are several reasons why nurse may retire earlier:

- Most nurses are employed within the hospital system and have access to employer superannuation.
- Female nurses are eligible for the aged pension at a younger age than men.
- Lower income is consistent with earlier retirement, as less income (and therefore assets) is required to generate the same proportion of pre-retirement earnings.
- Hospital-based nurses have less flexibility of working hours with shift work.
- Physically demanding work and health problems such as musculoskeletal injuries are determinants of early retirement.
- Most nurses are female and women tend to leave the workforce earlier.
- Wives are on average younger than husbands, and shorten their working life to

align their retirement with that of their spouse.

Although women are observed to retire earlier in general retirement studies, we found no difference in the rate of attrition of male and female nurses.

Reasons GPs may retire later include:

- Older GPs are more likely to be male and men tend to retire later.
- Higher earnings on the job and number of years of education decrease the probability of job exit.
- Job satisfaction is also important in reducing doctors' intentions to retire.
- GPs, usually self-employed and without compulsory superannuation, may not have developed an awareness of the need for retirement savings until later in life.
- In retirement, GPs are unlikely to qualify for no more than a small part-rate aged pension, and not until aged 65 if they are male.
- Without significant savings, GP's potential fall in income in retirement may be significant and provides incentive to continue to work.
- Being self-employed, they do not face a mandatory retirement age and are able to continue to work flexibly.

However, we cannot assume that doctors in the future will work in large numbers beyond traditional retirement age. This is because there will be more female GPs who tend to retire earlier and reduce their hours of work. Also, if GPs had greater superannuation and retirement savings they may choose earlier retirement.

The retirement patterns of doctors and nurses are also important for the future of the wider economy. The health workforce was about 450 000 in 2001, comprising 6% of the total workforce, with more than half being doctors and nurses. Therefore, the retirement patterns of the medical and nursing workforce will noticeably affect the future labour market and taxation revenue.

Therefore policymakers face a critical challenge to ensure workforce needs are met over the next 20 years. The need will be particularly acute for nurses, but whether the later retirement patterns for GPs will continue is not certain. There is a need to encourage ongoing employment among older clinicians, albeit at reduced hours, continued participation of younger workers. The policy response will be crucial to ensure that the Australian health workforce is adequate to meet the growing community demand of the twenty-first century.

3. Impact on rural and remote areas

Any increase in health workforce shortages can be expected to have a greater impact on rural and remote areas where workforce shortages are already evident. Accordingly, it is important to understand the factors that impact on where health professionals choose to work. For this reason we have established the Careers in Rural Health Tracking Study (CIRTHS) a longitudinal study of career preferences and choices.

There are numerous studies that indicate that rural background and also rural undergraduate and postgraduate training are predictors of rural employment.[3] However, location of employment is an important life as well as career decision and the influences can reasonably be expected to be more complex. Therefore we are examining the impact of a wider range of factors such spouse characteristics (education, employment, preferences), children and schooling, the work environment, financial remuneration and career path, distance from family and friends, access to cultural and other services, economic and infrastructure factors (such housing and transport), the physical environment and other requirements and incentives (such as bonded students and government incentives). This work will help to identify what factors encourage and those which discourage rural practice and how willingness to work in a rural area translates into actual workforce participation.

[3] Laven G, Beilby J, Wilkinson D, McElroy H. Factors associated with rural practice among Australian-trained general practitioners. Medical Journal of Australia, 179, 75-79, 2003;
Wilkinson D, Laven G, Pratt N, Beilby J. Impact of undergraduate and postgraduate rural training, and medical school entry criteria on rural practice among Australian general practitioner: a national study of 2414 doctors. Medical Education, 37, 809-814, 2003;
Woloschuk W, Tarrant M. Does rural educational experience influence students' likelihood of rural practice? Impact of student background and gender. Medical Education, 36, 241-247, 2002;
Woloschuk W, Tarrant M. Do students from rural background engage in rural family practice more than their urban-raised peers. Medical Education, 38, 259-261, 2004.

PO Box 3074, Lismore NSW 2480
Phone: +61 2 6620 7570 Fax: +61 2 6620 7270 Email: NRUDRH@med.usyd.edu.au