

The Health Careers in the Bush Alliance comprises of the three Queensland Health funded Rural Health Training Units, which are located in Toowoomba, Rockhampton and Townsville. It also includes the Queensland Rural Medical Support Agency, James Cook University's Mount Isa Centre for Rural and Remote Health, Association of Independent Schools of Queensland, Queensland Aboriginal and Islander Health Forum, Queensland Community Services and Health Industry Training Council, Education Queensland, the university rural health clubs in Queensland and the Royal Flying Doctor Service.

The Health Careers in the Bush Alliance has enabled the member bodies to broaden their scope to include recruitment and retention strategies that are sustainable, culturally secure and reflect the life-long learning cycle.

HCB strategies targets:

- those in the transitional years from primary school through to higher education and beyond
- parents
- teachers
- careers advisers.

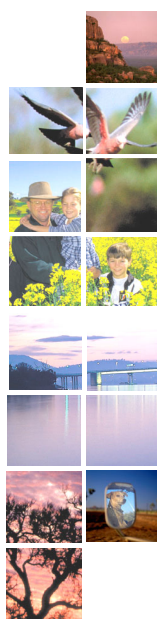
The recruitment strategies, designed to inform, encourage and support students, include:

- Year 10 Health Careers Workshops
- Year 12 Health Careers Workshops
- Indigenous Pathways to a Health Career Workshop
- Pathways to a Health Career – Roadshow
- Health Careers in the Bush Website, CD-ROM, video and promotional materials.

Since 1995, 452 Year 10 and 114 Year 12 students have participated in 21 Health Careers Workshops funded by Queensland Health through its three Rural Health Training Units.

A survey conducted of Year 12s in 1998, obtained a 79% response rate. Of the respondents, 58% indicated that they had commenced studies in a health-related degree. Preliminary results of survey's undertaken since 1998 and anecdotal evidence, indicate that the workshop series has been successful.

The results of this longitudinal study is of great significance in identifying, developing and promoting long-term recruitment and retention strategies to address Queensland's health workforce shortfalls.



METHODOLOGY

Research design

The research design was quantitative in the form of a questionnaire survey that consisted of open ended and closed questions.

Subjects

A mail survey of 282 past participants of the Year 10 and 12 Health Careers Workshops conducted between 1995 and 2000 in Queensland by the three Queensland Health Rural Health Training Units and The University of Queensland. A total of 88 (31.5%) usable questionnaires were obtained.

Data collection

Data collection began on 28 November 2001 and is to date still being collected. This study reports the results of questionnaires received up to and including the 25 January 2002.

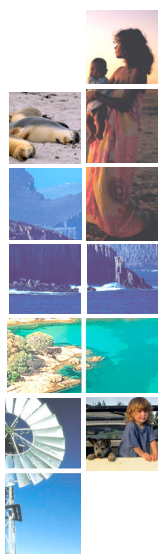
Instrument

The questionnaire was compiled in collaboration with members from the Health Careers in the Bush Alliance and was constructed to collect three basic macro quantitative variables: demographic, geographic and economic.

The questionnaire contained 51 items, a number of which were of a five point Likert scale type. The first 14 items examined gender, date of birth, current residential status. Items 15 through to 26 examined matters concerning education, including the level of tertiary qualifications attained or currently studying. Item 25 sought factors as to why students had not pursued a course of higher education, such as financial, personal, academic or other. Exploration of the support received from parents, teachers and guidance officers was sought in items 28 to 34. Items 35 to 45 required the subjects to indicate their financial issues including scholarships they have applied for and their current employment status with relation to pursuing higher education. Items 46 to 51 specifically sought information about their perception of rurality and whether the Health Careers Workshops were of benefit and if they had assisted with their current career pathway choice.

RESULTS

Of the 282 students who participated in the study, 88 (31.5%) responded to the questionnaire, 76 females and 12 males. Historically, the workshops have attracted more females than males over the years and so the low number of male responses could be equated to this poor ratio.



Student career pathways

The survey results indicate that 52% (N=46) of the respondents have either completed or are currently studying a health related tertiary course. 23% (N=20) are studying a non-health related tertiary level studies and 25% (N=22) gave a nil response. Of the 23% studying a non-health related tertiary level course, a number of the respondents indicated that they had plans of upgrading to a health related degree or were completing the degree to gain entry into The University of Queensland's Graduate Medical Course. Of the 25% who gave a nil response, a number of them had either started tertiary study and pulled out, whilst others had gone on to have a family or were working full-time.

The figures in Table 1 show that of the 52%, the most popular course entered was Nursing (N=14), followed by Medicine (N=5), Biomedical Science (N=5) and then the Allied Health and associated professions.

Table 1 Tertiary level studies currently being completed or completed by past workshop participants

| | | | | | | | |
|--------------------|----|------------------|---|-----------------|---|----------------------|---|
| Nursing | 14 | Pharmacy | 4 | OT | 1 | Naturopathy | 1 |
| Medicine | 5 | Speech Pathology | 3 | Nutrition | 1 | Environmental Health | 1 |
| Biomedical Science | 5 | Podiatry | 2 | Medical Imaging | 1 | Health Science | 1 |
| Physio | 4 | Psychology | 2 | Social Work | 1 | | |

Level of education attained with relation to geographic area

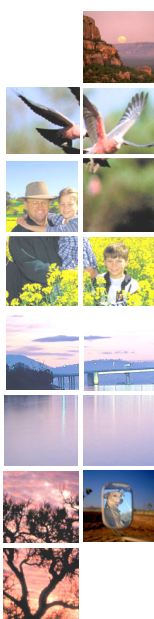
All respondents had completed Year 12, the majority (39%) in the year 2000. 75% of past participants finished their schooling in Rural, Remote and Metropolitan Area classification (RRMA) 4-7 state schools and the remaining 25% in both state and private schools located in RRMA 1-3.

Table 2 below provides details of the students who obtained Overall Position (OP) scores. 73% received OPs in the range of 1-10, 14% obtained OPs in the range of 11-22, with 13% either not receiving an OP or achieving an alternate state ranking.

Table 2 Students who obtained OP scores

| | | | | | | | |
|------|----------|------|----------|------|--------|----------|----------|
| OP 1 | 9 (10%) | OP 4 | 10 (11%) | OP 7 | 8 (9%) | OP 10 | 1 (1%) |
| OP 2 | 9 (10%) | OP 5 | 8 (9%) | OP 8 | 3 (3%) | OP 11-22 | 12 (14%) |
| OP 3 | 14 (17%) | OP 6 | 2 (2%) | OP 9 | 1 (1%) | Nil | 11 (13%) |

A total 94% (N=83) of students submitted applications to a Tertiary Admission Centre, of which 85% (N=73) of those applications were made to the Queensland Tertiary Admission Centre (QTAC). One student submitted an application direct to TAFE Queensland, while the remaining 10 students submitted applications to nearly every other state in Australia.



- They gave me an insight into to what to expect. It was especially scary for me as I was the first one in my family to go to Uni.
- I was always interested in the health field, but the workshops showed me how to take the next step to achieving my goal. They provided me with new friends and professional contacts and reinforced my interest in the health professions.
- The tours of the universities and the opportunity to talk to qualified health professionals, made me feel more confident about living in the city while studying to successfully graduate. It was also great to have the support of other like-minded individuals. After attending these camps, I felt that I could successfully achieve having both a career in health and being able to live in a rural or regional area.
- The Rural Health Career Workshops provided exposure for students to career opportunities that they possibly hadn't contemplated. These workshops are an excellent way for students to find out about health professions that are less well publicised than medicine and nursing.

Level of support received from parents and teachers

Table 4 provides the results of the level of support students received from parents in choosing a health career. The students were asked to indicate on a scale from 1 to 5 (excellent to very poor), the level of support they had received from their parents during the time they were considering their chosen career pathway. 82% of students believed their parents had provided them with excellent support and guidance with only 10% stating that the support was good. 8% stated that they had received either nil to average support. 34% (N=30) of the parents were qualified health professionals of which 66% were surveyed as providing excellent support to their daughter or son in making their career decision.

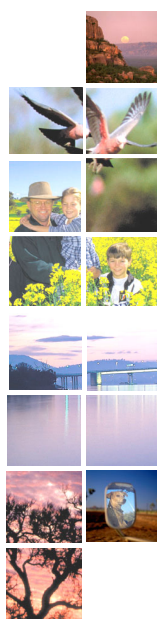
Table 4 Level of support received from parents

| | | | | | |
|-----------|----------|---------|--------|-----|--------|
| Excellent | 72 (82%) | Average | 4 (5%) | Nil | 1 (1%) |
| Good | 9 (10%) | Poor | 2 (2%) | | |

The participants were asked to comment on the level of support received from teachers and career advisers whilst at school. Table 5 reports that 19% commented that they had received excellent support, while the majority of the cohort 62%, stated they had only been provided a good to average level of support and encouragement. 15% of teachers provided a poor if not very poor level of support.

Table 5 Level of support received from teachers and career advisers

| | | | | | |
|-----------|----------|---------|----------|-----------|--------|
| Excellent | 17 (19%) | Average | 27 (31%) | Very Poor | 6 (7%) |
| Good | 27 (31%) | Poor | 7 (8%) | Nil | 3 (3%) |



Factors impacting on career decision

When asked what factors impacted on their decision to pursue a health professional course, the majority, 47 respondents, stated that it was because of their genuine interest in becoming a health professional. Five (5) believed it was due to their family background, six (6) the OP they attained, three (3) job availability and a number of students listed personal interest, income, variety, career security, rural opportunities and the desire to help people in need.

Factors which impacted on their decision not to pursue a health professional course included burnout, pregnancy, family dislocation, interest in another field, time and travel. Two (2) students stated that the health careers workshop helped them make the decision not to pursue a health career pathway. The most popular reasons were university course prerequisites (8) and the cost of going to university (5). 69 students did not respond to the question.

Employment and financial position

Only 21 students stated that they investigated scholarship options of which only 5 were successful in attaining such a scholarship. This result clearly demonstrates the fact that more information needs to be provided to students at workshops on both the state and commonwealth scholarships available.

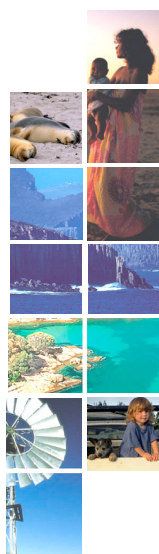
Ten (10) of the respondents indicated that they had completed their tertiary studies and were currently working full-time. Twenty-four (24) stated they were working part-time to support themselves whilst studying. The health related occupations currently being pursued included Intern, four (4) Assistant Nurses, five (5) Registered Nurses, two (2) Pharmacy Assistants, a Radiographer, two (2) Speech Pathologists and a Medical Scientist working in a rural pathology laboratory. Graduates were employed in a number of rural locations including Mount Isa, Longreach, Gin Gin and Warwick. For those working to support themselves financially through university, occupations ranged from working in retail to farmhand, childcare and university tutor.

Perceptions of rurality

Most participants (61%) thought of themselves of having a strong rural background, while 19% considered themselves coming from a regional/provincial area. Whether it was since they have moved from a rural/regional area, or that they have always thought of themselves in this way, 8% of respondents considered themselves as city or metropolitan people.

In summary, the value of not only this study but the Health Careers Workshops, are well expressed in the participants following final comments:

- With the intention of going on to study the Graduate Medical Course at The University of Queensland in 2004, I can only thank the RHTU for giving me the opportunity to seek out and pursue my goal. I'll be heading back to the bush!
- I think these workshops are really important in recruiting health professionals of the future.



- I believe that the health careers workshops are a vital initiative and provide an invaluable support network for rural students. They not only provide encouragement, but also show students how to achieve their goals.
- The help offered by this program motivated me to get out there and give a rural health career a go. Now looking to my professional practice units as an undergraduate I am hoping to be able to conduct all of these outside the metro area so I will be better prepared for a career as a rural health professional.
- I am currently working as a Speech Pathologist in a remote area. I was motivated to accept this position after a guest speaker at my workshop in 1995 who had been a doctor in this community, spoke of the wonderful lifestyle and opportunities that a health practitioner in a rural and remote area has. After 3 months in the job, I agree!
- I think the workshops had a huge impact on my desire to study medicine. They showed me what I would have to attain and what I would have to do to get there. They also ignited my interest in working rurally.

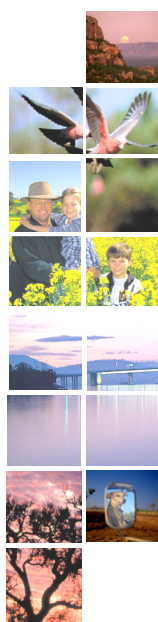
DISCUSSION

Rural and remote students with a genuine interest in pursuing a health career face barriers both real and perceived. These barriers include inappropriate marking scales that are used to gauge whether or not a student is eligible for entry to university courses, the lack of financial support and motivation. (Heaney, 1998)

The results of this study have imparted further evidence and proven once again Dr Heaney's and many other researchers theories that students, parents and teachers need to be provided with relevant and accurate career information earlier rather than later in their career life cycle. The research has reiterated that early exposure to university campus life for students' assists in dispelling fears and anxieties about having to relocate to study. It is still too early to establish a solid link between students who perceive they come from a rural background or classify themselves as a rural person and who have followed a rural health career pathway. Further study also needs to be undertaken in the area of factors of influence in determining a students career pathway.

The application process and follow up of students entering our long-term tracking system through the health careers workshops also need to be revisited by all Health Careers in the Bush Alliance members. As stated, it could be deduced from this study that there is no significant advantage for students to attend both a Year 10 and 12 Health Careers Workshop.

Although of no great revelation, the research has proven that students who attend rural and remote high schools are not disadvantaged in terms of being able to attain the academic level to enter tertiary level studies. It certainly has been demonstrated that students from rural and remote areas do not receive the same opportunities as their regional and metropolitan counterparts in accessing career and general university information.



The results to date are extremely encouraging. This study has demonstrated that the Health Careers Workshop series warrants continuation as part of the Health Careers in the Bush state-wide program.

CONCLUSION

The study has provided critical evidence that the initiatives currently being undertaken in Queensland under the banner of Health Careers in the Bush are increasing the number of rural and remote students entering health professional courses, and increasing the number of health professionals working in rural and remote Queensland.

This paper has described a successful and innovative approach to long-term recruitment and retention of rural health professionals. It has provided information on the potential of the HCB program, and the reality of what can be achieved through a sustainable, state-wide, culturally secure recruitment strategy for rural and remote students pursuing a health career pathway.

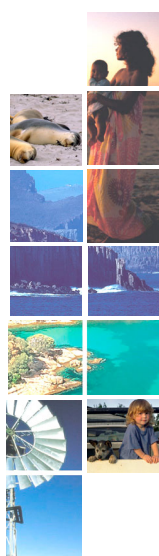
The Health Careers in the Bush program will fill the gaps and provide a longitudinal tracking system of our future rural and remote health professionals, which will assist in addressing the health care needs of communities in rural and remote Queensland, Australia.

ACKNOWLEDGEMENTS

We wish to express our gratitude to the large number of people over the past ten years who have contributed to the success of the Health Careers Workshop series, in particular: LuJuana Abernathy, Deborah Bishop, Danielle Hornsby, Janet Iffinger, Jan Jones, Kate Lessing, David McSwan, David Price, Anne Stradley and the many others who have supported this successful workshop series over the past 9 years. Thanks must also go to the funding sponsor, Queensland Health and the three Queensland Rural Health Training Units, Cunningham Centre, North Queensland Rural Health Training Unit and the Yangulla Centre.

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PRESENTER

Natalie Hindmarsh has worked in the area of rural medical education and support and the recruitment and retention of health professionals to rural Queensland for the past eight years. A past employee of The University of Queensland's School of Medicine, Natalie has now been with the Cunningham Centre since October 2000 in her capacity as Education Project Officer. The Cunningham Centre is one of three rural health training units funded by Queensland Health to provide education, training and support to health professionals in southern, regional, rural and remote Queensland, Australia.

After spending many years pursuing a collaborative approach to the recruitment and retention of our future rural health professionals, Natalie was nominated in July 2001, as State Co-ordinator for the Health Careers in the Bush program in Queensland.

