

## HWA taps into data to plan Australia's future

Health Workforce Australia is using MSOD data to prepare a National Training Plan to help Australia become self-sufficient in the supply of doctors, nurses and midwives by 2025.

'We are interested in a few parts from the MSOD dataset, including aspects that give us characteristics of the medical students, which we believe may be useful for us,' said Ian Crettenden, the Executive Director of Information, Analysis and Planning for Health Workforce Australia (HWA).

Mr Crettenden said as well as helping to establish baseline data, there was particular interest in the potential of questions asked of first and final year students about their intended medical speciality.

'These may potentially help us with predicting the rates of entry into particular specialities,' he said. 'We want to look at how good a predictor these intentions are. If they do act as a predictor, this will be very useful.'

HWA, which is headed by Chief Executive Officer Mark Cormack, was commissioned by the Australian Health Ministers' Conference (AHMC) to develop the National Training Plan, which will provide the estimated numbers of professional entry, postgraduate and specialist trainees that will be required between 2012 and 2025 to achieve self-sufficiency.

Self-sufficiency is defined as a situation in which all of Australia's requirements for medical, nursing and midwifery professionals in 2025 can be met from the supply of domestically trained graduates without the need to import overseas trained doctors, nurses and midwives to meet a supply gap.

The plan will look at the current supply and demand of doctors, nurses and midwives and make projections into the future to show the likely trends in supply and demand, allowing HWA to identify any supply gaps or oversupply that could arise in future.

### MSOD UPDATE

- **PGY1 data has been received from 298 graduates of the three pilot schools. The data is being analysed and will be released soon.**
- **The Commencing Questionnaire is now being implemented at all 18 medical schools, covering 10 undergraduate and 12 graduate entry programs.**
- **MSOD is funding more than eight research projects (see over the page for more detailed information)**
- **Research results have been presented recent conferences, including those held by the Royal Australian College of General Practitioners, the Australian Association of Practice Managers and the Global Community Engaged Medical Education Muster.**



**Health Workforce Australia's CEO Mark Cormack**

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HWA regards the MSOD database as a highly reliable data source. 'One of the advantages of the MSOD is that it achieves a high response rate and there is a lot of useful information,' Mr Crettenden said.

He said the project aimed to smooth peaks and troughs in student numbers and ensure an effective supply of medical professionals, and adequate training and professional places. 'This means students should have more predictability in their future career,' he said.

'For example, if you need a certain number of specialists by 2025, how many undergraduate students are needed in each of the preceding years?'

An interim report will be completed in August, which will then be open to public submissions. A final report will be presented to the AHMC by the end of the year.

### TO OUR PARTICIPANTS

We would like to thank all students who participated in the 2011 Commencing Medical Students Questionnaire, which was administered at the start of the university year to most students in all Australian medical schools. We are finishing the 2010 Exit Questionnaire, and seeking responses from interns who completed their university studies in 2010. Please complete the five-minute survey. MSOD participants who graduated in 2009 from Sydney, Griffith, Flinders, ANU, Monash, Melbourne, Notre Dame (Fremantle) and University of Queensland are also being followed up. Please look out for an email with a link to the survey. Later this year, a similar questionnaire will be sent to those who graduated in 2010 from ANU, Bond, Flinders, Griffith, Monash, Melbourne, Newcastle, UNSW, Notre Dame (Fremantle), UQ, Sydney, Tasmania, UWA and Wollongong.

### REPORTS NOW ONLINE

National reports on the MSOD data are now available on our website. These reports primarily contain frequency tables with some quantitative analyses on demographic, educational, qualitative and career intentions data. For details go to [www.medicaldeans.org.au/medical-schools-outcomes-database/publications-resources/data-and-progress-reports](http://www.medicaldeans.org.au/medical-schools-outcomes-database/publications-resources/data-and-progress-reports)

### INAUGURAL RESEARCH FORUM

The MSOD Project will host a forum on the 4th November 2011 in Sydney to share research outcomes and synthesise research undertaken to date. The aim is to generate consolidated research and collaboration opportunities and explore the possibilities of translational research. Attendees will include MSOD stakeholders, the chief investigators of MSOD research grants, and medical workforce and education experts.

### STUDENT RESEARCH SCHOLARSHIPS

The MSOD Project is set to introduce student research scholarships through the Australian Medical Students' Association (AMSA), which will enable students to undertake research on the MSOD data. Further information will be available on the Medical Deans website, [www.medicaldeans.org.au](http://www.medicaldeans.org.au)

## RESEARCH: INDIGENOUS STUDENTS

### Establishing basic facts

A research project that aims to review information about Indigenous medical students and lay the foundations for further research into how to increase the number of Indigenous medical graduates is nearing completion.

Led by Dr Lilon Bandler, Senior Lecturer in Indigenous Health Education at the University of Sydney's Faculty of Medicine, the six-month project has examined MSOD data to build a profile of Indigenous students.

'There is a lack of literature and hard data about Indigenous students, so we examined MSOD data from 2005-2009 to establish some basic facts,' Dr Bandler said.

'Then the questions we wanted to look at included: Are Indigenous students different to non-Indigenous students? Are there particular needs we need to meet? And are there areas or universities they are not accessing, and can we change that?'

Dr Bandler said because there was only a small number of Indigenous students, the MSOD data proved very useful. 'We were able to aggregate data across Australia and across years to look at a larger number of students, which is giving us information about trends in the community.'

The study, in conjunction with University of Sydney lecturer Giti Datt, identified 135 Indigenous students, and looked at various parameters, including their age, gender, previous study, the place they have lived longest, and their dependants (if any).

'The numbers appear to be increasing slightly, but not to the level that the Australian Indigenous Doctors' Association or Australian Medical Association have recommended. They wanted 350 by the end of 2010, and it is nowhere near that.'

Numbers vary between medical schools. 'New medical schools have worked hard on admitting Indigenous students and we don't know graduation rates yet as some of those schools have not yet had a graduating year.'

'These are still small numbers, we are not yet able to look at graduation rates across all medical schools. And there is certainly a need for qualitative research,' Dr Bandler said. 'This is the first time this issue has been properly studied and we expect it to highlight what we need to find out next.'



Dr Lilon Bandler

## RESEARCH: WHERE DOCTORS WORK

### Does personality make a difference?

Why do some doctors choose to work in an isolated rural community instead of an urban centre?

This is one of several questions being addressed by a team led by Macquarie University's Associate Professor Mike Jones, who added two personality instruments to the MSOD questionnaire given to the 2011 student intake at six universities.

'If you have a medical degree you are considered as good as any candidate to work in a remote area, but our hypothesis is some people are better suited than others,' said Associate Professor Jones.

'The implicit assumption is that any qualified medical practitioner with appropriate training can practise in rural and remote locations, but this assumption would seem implausible given the high turnover and low recruitment rates into rural practice.'

Associate Professor Jones, the Deputy Head of the Psychology Department, said little was known about the characteristics of individual doctors who choose to work in rural areas.

'We have more than 1000 respondents, which is a large sample for our purposes, and have asked where they plan to work when they begin medicine, as well as other questions.'

Researchers will receive data in June and produce initial results by August. 'Then we will put the data aside for about seven years and wait for the cohort to enter the workforce. Then we will ask how they feel as they begin working as doctors, where they plan to work, and then track them through their careers for as long as possible.'

'Our aim is to help identify individuals who best fit into a rural lifestyle, both socially and professionally, and provide evidence-based insights and a better understanding of the personality traits and personal attributes of individuals who are most suited to rural practice.'

'This will considerably expand our knowledge about the role of individual factors, particularly personality, temperament and background on medical student intentions and practitioner career choices, and will contribute to rural recruitment and retention policies.'

Associate Professor Jones said the study was believed to be the first prospective longitudinal study of its type. The research is a collaboration between the University of Queensland, Newcastle University/University of New England, University of Sydney, University of Western Sydney, Australian National University and Flinders University.



Assoc. Prof. Mike Jones

## RESEARCH: SPATIAL ANALYSIS

### Mapping medical movements

A project that uses geographical information systems and spatial analysis to map students enrolled in the MSOD project is under way.

'The first part of the project is a simple display of where the medical schools are and where they draw their students from,' said Associate Professor Kirsty Douglas, from the Australian Primary Health Care Research Institute.

'From there we can overlay multiple data layers and address complex questions and issues in a visually appealing manner.'

Associate Professor Douglas said there was evidence that students who trained in rural areas were more likely to work in rural areas, and other evidence that doctors who came from rural areas were more likely to work in a rural area.

'In the long-term, the work we are doing with the mapping will allow us to see how much of an influence those aspects actually have.'

'In other words, is it the student or the culture of a medical school that has

a greater influence on what that student practises and where they practise?'

Associate Professor Douglas said national medical registration and data gathering by Health Workforce Australia offered areas for future data analysis and display. 'We see this project as the first step in what we hope can become a powerful and detailed long-term analysis. There is a huge potential here.'

More than 12,000 student records are being used in the first stage of the project, which is being carried out in collaboration with the Robert Graham Centre in Washington.

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Assoc. Prof. Kirsty Douglas

The MSOD project is hosted by Medical Deans Australia and New Zealand in collaboration with eight stakeholder organisations

