



The
University
of Sydney

Sydney Medical School



Sydney Medical Program
FIRST EVALUATION REPORT
2009

Information and Contact Details

Evaluation Unit
Office of Medical Education
Sydney Medical School
University of Sydney NSW 2006
<http://www.ome.med.usyd.edu.au>

ACADEMIC STAFF

Head of Evaluation: Professor Heather Jeffery
Ph: 9114 0584
heather@med.usyd.edu.au

Senior Lecturer, Evaluation: Dr Linda Klein
Ph: 9036 7688
lklein@usyd.edu.au

Lecturer, Evaluation: Karen Garlan
Ph: 9036 5060
kgarlan@med.usyd.edu.au

ADMINISTRATIVE STAFF

Assessment & Evaluation Manager Pieta Joy
Ph: 9351 2584
p.joy@usyd.edu.au

Assessment & Evaluation Officers Dominique (Nikki) Briones
Ph: 9351 6295
d.briones@usyd.edu.au

Claire Johnson
Ph: 9036 7582
c.johnson@usyd.edu.au

The Evaluation Unit reports to:

Associate Dean,
Learning and Teaching: Associate Professor Tessa Ho
Ph: 9036 6430
tessah@med.usyd.edu.au

Dean,
Sydney Medical School Professor Bruce Robinson
Ph: 9351 6570
dean@med.usyd.edu.au

Introduction

Evaluation is considered an essential element of the educational process within the Sydney Medical Program and is overseen by the Office of Medical Education (OME) within the Sydney Medical School.

Program evaluation is about collecting, analysing and utilising information gained from students, staff and program developers so that decisions are made in an evidence-based manner. Evaluation goes hand-in-hand with assessment, seeking to determine how well the educational needs of students have been met and whether educational standards have been attained.

By conducting evaluation throughout the 4-year medical program and beyond, the program is assessed for educational quality. Curricula are regularly updated to ensure the most recent educational innovations are implemented. To do this effectively, it is important that all stakeholders take part.

Students, teachers and program developers are invited to become partners in evaluation – to take part in the ongoing cycle of curriculum development and improvement for the benefit of future students.

Participants in evaluation are asked to give honest and considered feedback in a context that ensures confidentiality and anonymity. In return, evaluation reports are made public, complete with proposed actions for change.

An evaluation committee comprising stakeholders of the Sydney Medical Program has been established to ensure that information is gathered systematically and results are put to optimal use.

About This Document

This document provides information for stakeholders concerned with the Sydney Medical Program. A brief background to the history, development and management of the evaluative process is given to provide both a resource and context for evaluation. The evaluation activities and the highlights for 2008 are presented.

Heather Jeffery
Head of Evaluation

A photograph of three students (two men and one woman) looking intently at a whiteboard. The whiteboard has handwritten notes in black marker, including 'I activity', 'visual fields + blind spot', 'accommodation', 'pupillary reflexes', 'III, IV, VI', 'H box', 'sensory for', 'corneal reflex', 'masseter', 'open jaw', 'jerk', 'VII', 'MUSCLES', and 'MOUTH say'.

Evaluation of the Sydney Medical Program

OUR GOAL

To establish an evaluation process that is broad, responsive, interactive and useful; thus enabling a dynamic response to curriculum improvements within a culture of information and change.

Our objectives are to:

- Work toward best practice in evaluation and education
- Use evaluation findings for informing change
- Continuously communicate and collaborate with all stakeholders

A brief history of the Sydney Medical Program¹

The University of Sydney opened in 1852, the Faculty of Medicine in 1856 and the Medical School opened in 1883 with a five year curriculum based on a Scottish approach to medical education. Basic physical sciences were taught first, followed by medical sciences and then structured clinical teaching. The curriculum was increased to six years in 1926 and subsequently reduced to five years in 1974 and back to six years in 1984 with corresponding changes to curriculum content but retention of a similar traditional structure.

In 1991 the Faculty voted to establish a new medical course. This was in response to a rapidly expanding knowledge base, curriculum overload, didacticism and a failure to meet community expectations of trained medical graduates. In 1992, in the largest attendance ever recorded at a meeting, the Faculty overwhelmingly supported a radically new postgraduate medical course.

In 1997, the first intake of postgraduate students was accepted into the new four year, problem-based curriculum, called the Graduate Medical Program (GMP), later known as the University of Sydney Medical Program (USyDMP). These first students graduated in 2001. The USyDMP was accredited in 2005 by the Australian Medical Council for 10 years.

In 2006 Acting Dean, Professor Bruce Robinson, initiated the first review of the medical program by Professores Emeriti Goulston and Oates². This review was accepted in 2007 and a new governance structure was initiated, including the formation in August that year of the Office of Medical Education (OME),³ to be responsible for:

- Delivery, management and evaluation of the Sydney Medical Program
- Implementation of the review recommendations
- Coordination of a standard curriculum in consultation with the University of Sydney's six clinical schools

In 2008, implementation of curriculum changes began in line with the review recommendations. These now continue more fully in the 2009 program, renamed the Sydney Medical Program.

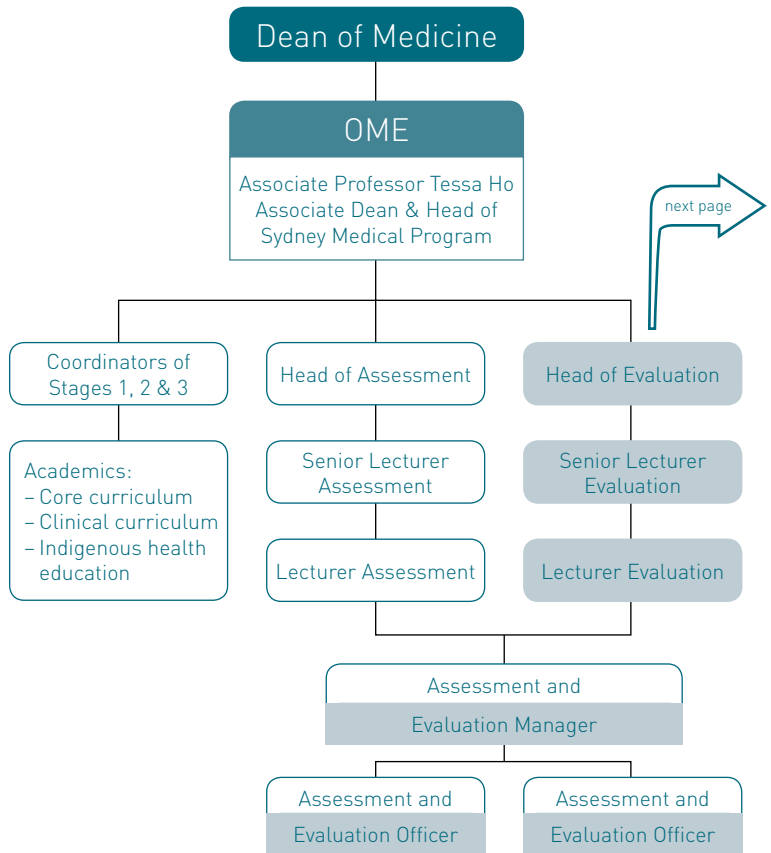
¹ Young JA *The history of the Medical Curriculum at the University of Sydney*. (address to the Faculty of Medicine Graduation 10th May 2002).

² Kerry Goulston and Kim Oates. *Review of the University of Sydney Medical Program 2007*. Available at www.medfac.usyd.edu.au/forstaff/usydmp-review.

³ Office of Medical Education, available at www.ome.med.usyd.edu.au.

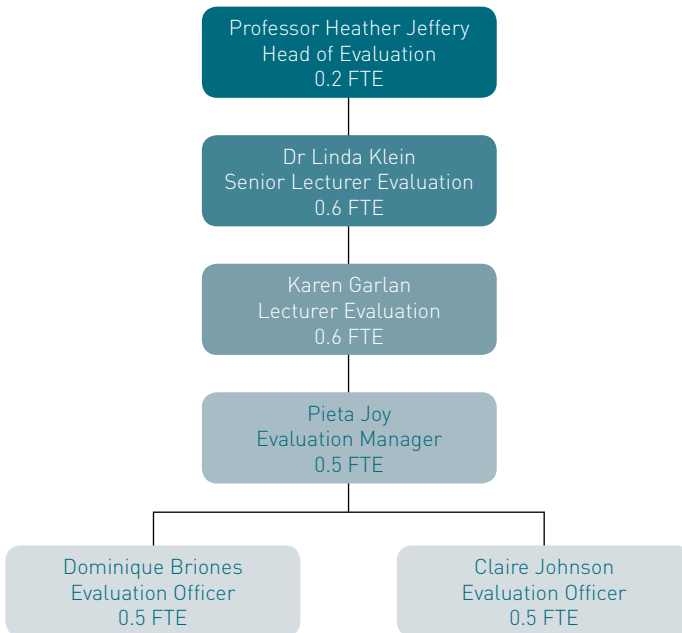
Structure of OME

As part of the 2007 review recommendations, an executive was formed with the Head of OME, stage coordinators, an assessment team and evaluation team. By the end of 2008, all positions (as shown below) were filled.



The Evaluation Unit, headed by Professor Heather Jeffery, reports directly to Associate Professor Tessa Ho, Head of OME, who reports directly to the Dean of Medicine, Professor Bruce Robinson.

New staff within a new structure for 2008



Service role

Within our service role we:

- Conduct evaluation to assist in program development and curriculum revision, working with all stakeholders to ensure representation of all views
- Audit research that involves Sydney Medical Program students.

Research role

Within our research/academic role we pursue research in areas relevant to the education of medical students and development of future practitioners.



Professor Heather Jeffery

Head of Evaluation Unit

Heather (MBBS, PhD, MPH, MRCP(UK), FRACP) brings years of practical experience to the Evaluation Unit, including expertise in education, research, program evaluation, as well as clinical practice. Her maternal and child public health background has led to international consultancies for the World Bank, UNICEF and Ministries of Health. Her specialty areas include maternal and neonatal health in advantaged and disadvantaged countries, situational analysis, implementation of evidence and evaluation at international and local levels. Particular educational interests include curriculum development, evaluation and teacher training methods that change behaviour. Heather aims to create a rigorous, relevant evaluation program to improve curriculum for the benefit of all stakeholders



Dr Linda Klein

Senior Lecturer Evaluation

Linda (BSc(Hons), MSc, PhD) graduated in Psychology in the USA before moving to Australia in 1978. She worked in various health research roles and established a research consulting company focusing on research design, data management, statistical analysis, reporting and publishing results. She has conducted many quantitative and qualitative evaluation projects in diverse areas, including general practice, occupational health and safety and quality use of medicines. In conjunction with her PhD project, she managed the evaluation of a national consumer medicines program which involved collaboration with national and local stakeholders in a participatory framework to achieve agreed outcomes. Linda is committed to strategic, quality evaluation, using a variety of methods that incorporate all stakeholders.



Karen Garlan

Lecturer Evaluation

Originally from Liverpool, UK, Karen came to Australia in 1979 to find her fortune but ended up working in medical education instead! Karen graduated from Macquarie University, BA Dip Ed in 1995 and completed her Masters in Higher Education at Sydney University in 2005. Karen worked at the Northern Clinical School, Royal North Shore Hospital for five years before taking up the post of Executive Officer at the Western Clinical School, Westmead where she worked for six years. Karen hopes to use her extensive clinical school experience to further stronger relationships between clinical schools and OME especially in the field of evaluation.



Pieta Joy
Assessment and Evaluation Manager

Pieta began working in the Assessment and Evaluation Unit, in November 2006 and became Manager of the Unit in February 2007, a role which she continues in OME. Pieta oversees all administrative functions for evaluation. She monitors tasks such as formatting and distributing surveys, scanning and preliminary analysis of data, circulation of results, and maintenance of the evaluation website. Pieta graduated from UNSW in 1998 with a BA (Linguistics) and in 2002 with a MA (Applied Linguistics). She has worked in a variety of administrative roles, including the coordination of over 200 short courses at Sydney Community College. She has spent time in London and Montreal working as a copywriter, proof reader, editor and legal researcher – experience that helps her at OME where attention to detail and accuracy are paramount.



Dominique (Nikki) Briones
Assessment and Evaluation Officer

Nikki (BSc, BA(Hons)) completed degrees in Psychology and Medical Sociology and is currently undertaking a Masters of Education at the University of Technology, Sydney. After a brief stint in corporate human resources, Nikki returned to her alma mater in April 2008 to join OME. Nikki currently works in the frontline of the evaluation process, actively involved in the formatting, implementation, preliminary analysis of surveys and dissemination of evaluation results. Nikki acts as the point of contact for matters regarding the newly-formed Evaluation Committee and for applicants wishing to conduct research with students. Nikki also helps manage the content on the Evaluation website and assists with assessment.



Claire Johnson
Assessment and Evaluation Officer

Claire completed a BA (Linguistics and Spanish) at the University of Sydney and is currently undertaking a Masters in International Public Health at the University of Sydney. After some years spent overseas in a myriad of roles including investment banking HR (a timely departure), Claire returned to Sydney and joined the OME in April 2008. Claire's role includes maintaining a database of current research projects involving medical students; organising evaluation for staff and students; preliminary data analysis; formatting surveys; collating and distributing evaluation results; maintenance of the evaluation website; and providing administrative and operational support required for the development and management of assessment and evaluation.

An Evaluation Committee was convened and met for the first time on 24th February 2009. The purpose of this committee is to provide a forum for the Office of Medical Education, students and teachers to discuss, support and advise on the evaluation of the Sydney Medical Program undertaken to improve the quality of teaching and learning, with particular reference to the recommendations made by the Curriculum Review of October 2007.

The committee members comprise individuals from the following:

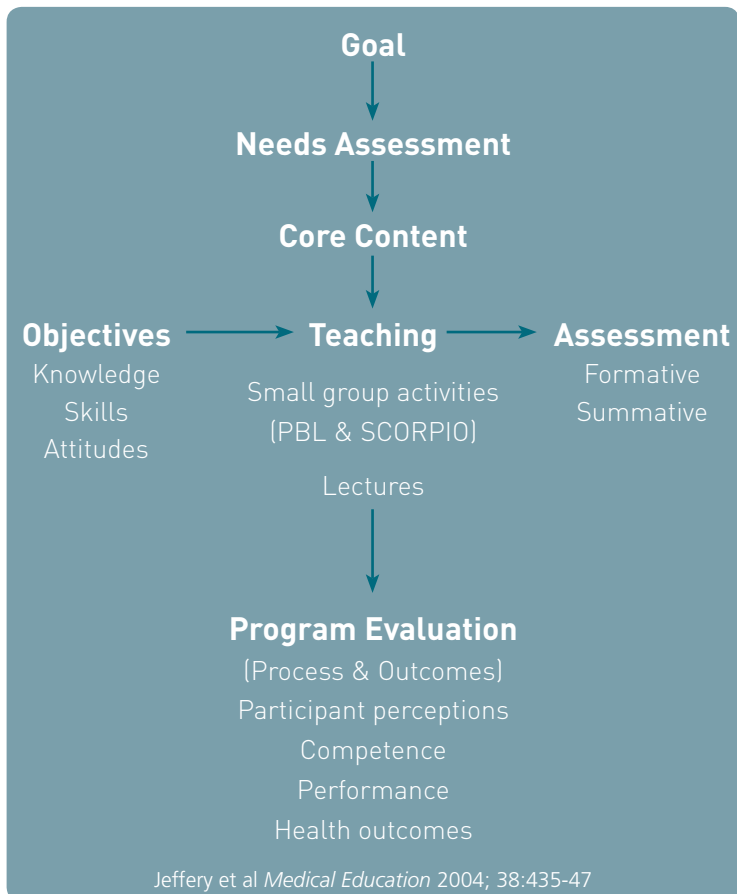
- The Evaluation Unit academic and administrative staff
- Associate Deans of clinical schools
- Executive Officers of clinical schools
- Medical Education academics
- Stage Coordinators and Core Block Chairs
- Specialty Block and Theme Coordinators
- MedSoc student representatives from each stage of the Medical Program.

This committee will meet five times per year for 1 to 1.5 hours.

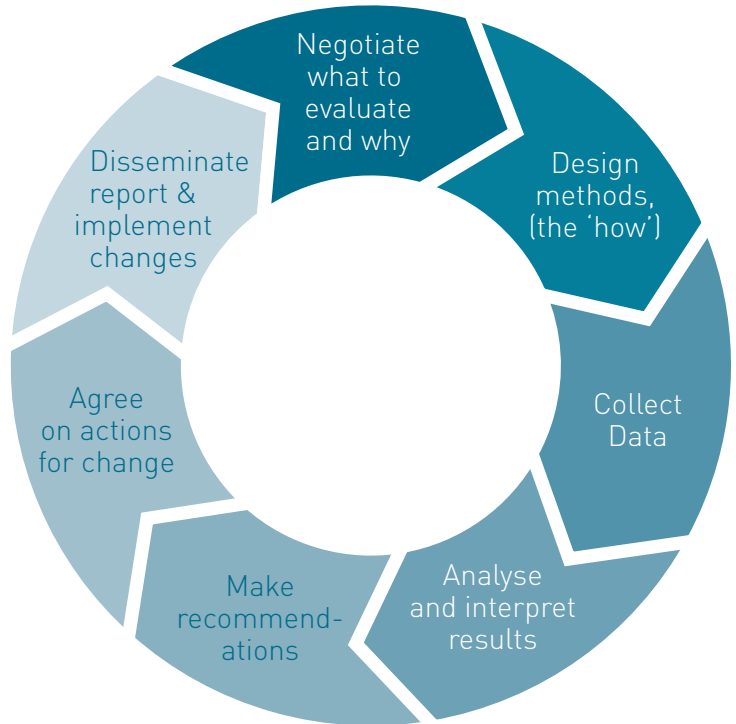
The Evaluation Committee has a strategic role. The committee's functions include:

- Providing advice and assistance to the Evaluation Unit
- Helping establish appropriate evaluation processes
- Facilitating co-operation among stakeholders in evaluation initiatives
- Supporting dissemination of evaluation information to colleagues
- Encouraging the giving and receiving of feedback at all levels
- Identifying issues and prioritising strategic evaluation each year.

Curriculum evaluation is integral to the educational quality improvement process with feedback being the driver of change. A four tier evaluation process is described. The first, stakeholder perceptions by quantitative questionnaire and qualitative methods, is central to process evaluation. Outcomes are evaluated by assessment of competence (knowledge, skills and attitudes) and documentation of improved practice in the workplace (performance). The fourth tier is documentation of changes in health care outcomes (mortality/morbidity) resulting from the intervention.

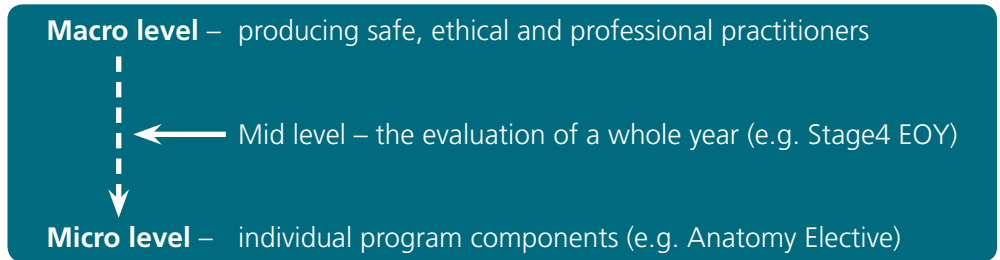


Evaluation Cycle



The evaluation cycle as shown above is one of mutual cooperation between all stakeholders to inform evaluation design, data collection and analysis. Fundamental to this process is establishing clear program or course objectives around which evaluation can be constructed, data analysed and recommendations made. In this way changes are made in curriculum and the process of evaluation can begin again.

The evaluation cycle applies at all program levels.



At each of these levels views of all stakeholders are relevant, including students, teachers or tutors, and executive or administrative staff.

Methods may include quantitative surveys or qualitative interviews or focus groups depending on the evaluation questions.

Strategic planning: Looking forward through 2009

Planning evaluation strategically is important for moving forward into 2009. The Evaluation Unit seeks to review its evaluation processes in collaboration with all OME stakeholders to ensure the best possible service is provided in a dynamic and responsive way, accommodating new methodological possibilities as they become apparent.

This will involve:

- Reviewing past evaluation projects with stakeholders
- Establishing sound methods for new evaluation, methods that ensure:
 - High response rates for a stringent level of confidence in results
 - Evaluation at ‘arms length’ for confidentiality, anonymity and freedom of expression of respondents
- Using broad methods that encompass all dimensions of education
- Asking the ‘right’ questions that address stakeholders’ needs
- Addressing measurement issues
- Designing evaluation that ‘hears’ from all stakeholders
- Completing the evaluation cycle – responding to the issues raised and making changes where appropriate.

Expanding on the Evaluation Cycle, the operational tasks undertaken by the Evaluation Unit will use the following pathway with some variations depending on the aspect of the curriculum to be evaluated.

1. A need for evaluation is identified by any Sydney Medical Program stakeholder(s) and brought to the attention of an academic member of the Evaluation Unit.
2. The task is placed on the agenda of the Evaluation Unit where needs are prioritised and time lines set. A contact person is established for each task.
3. The contact person provides aims and objectives of the program or course to the Evaluation Unit. This is essential for our understanding of the evaluation needs (the 'what' and 'why').
4. Members of the Evaluation Unit discuss evaluation needs with the contact person and other relevant stakeholders.
5. An appropriate evaluation design and methods are determined in collaboration with stakeholders (the 'how'). Decisions will focus on:
 - Mode of data collection (e.g. survey, focus group, mixture)
 - Type of data to be collected (e.g. quantitative or qualitative),
 - Who is to be surveyed or interviewed
 - When and where data are to be collected to ensure a high response rate and valid responses.
6. Data are collected, processed and analysed in accordance with guidelines established by the Unit (both quantitative and qualitative).
7. A report is prepared and reviewed by the Head of OME and the Dean of the Sydney Medical School.
8. The report is then sent to the contact person and the relevant Head of discipline for comment and consideration of areas for improvement. The Head is responsible for dissemination to other relevant stakeholders (e.g. clinical educators, executive officers).
9. Action points regarding changes to be made in response to evaluation findings are provided by course/program developers in a timely manner.
10. The final evaluation report, including action points for change, is placed on the Bulletin Board of Sydney Medical School website for easy access by students and staff.

Evaluation Projects Completed in 2008

In 2008 a variety of evaluation projects were undertaken encompassing the micro and macro levels as shown below. In these projects methods used to collect evaluation data included: quantitative data gathered through surveys and qualitative data gathered through focus groups and open-ended self-report survey questions.

Project	Primary method	Month in 2008	Location
Stage 1 Orientation Survey	Quantitative	February	On campus
PPD Intensive Survey	Quantitative	February	On campus
Block 1 Focus Group	Qualitative	April	On campus
Block 1 Foundation Survey	Quantitative	April	On campus
Stage 4 PWH Rotation2 Survey	Quantitative	April	On campus
Stage 4 CAH Rotation2 Survey	Quantitative	April	Clinical school
Stage 4 PAAM Rotation2 Survey	Quantitative	April	On campus
PPD PBL Focus Groups	Qualitative	June	On campus
Nepean ICA Focus Groups	Qualitative	July	Clinical school
Stage 4 PWH Rotation3 Survey	Quantitative	July	Clinical school
Stage 4 CAH Rotation3 Survey	Quantitative	July	Clinical school
Stage 4 PAAM Rotation3 Survey	Quantitative	July	Clinical school
Stage 4 COMM Rotation3 Survey	Quantitative	July	Clinical school
Stage 4 PWH Rotation4 Survey	Quantitative	September	On campus
Stage 4 CAH Rotation4 Survey	Quantitative	September	On campus
Stage 4 PAAM Rotation4 Survey	Quantitative	September	On campus
Stage 4 COMM Rotation4 Survey	Quantitative	September	On campus
Stage 3 End-of-Year Survey	Quantitative	September	On campus
Stage 4 End-of-Year Survey	Quantitative	October	On campus
Stage 1 End-of-Year Survey	Quantitative	November	On campus
Stage 2 End-of-Year Survey	Quantitative	November	Clinical School
Stage 1-2 OSCE Survey of teachers, examiners & students	Qualitative	November	Clinical School
Implementation of the Curriculum Review	Mixed methods	December	Both sites

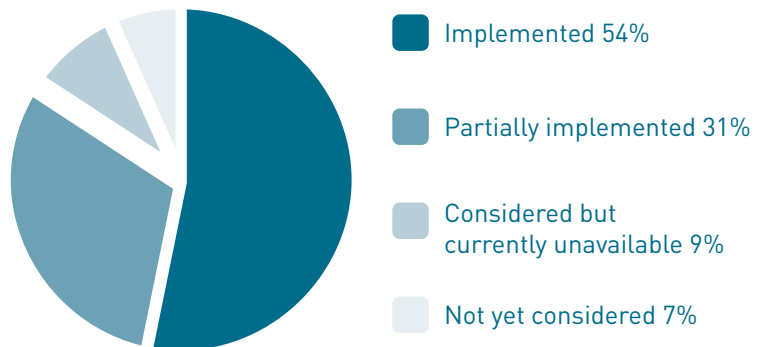
Reports for these evaluation projects are currently available on the noticeboard of the Sydney Medical Program website at <http://www.gmp.usyd.edu.au/> and will also be available on the new Evaluation page at this website.

(1) Implementation of the Curriculum Review

The curriculum review (Goulston K and Oates K , 2007) available at <http://www.medfac.usyd.edu.au/forstaff/usydmp-review/index.php> was a major undertaking. It contained over 400 separate recommendations - most requiring substantial commitments from staff across the Sydney Medical School.

Completion

Face-to-face interviews were conducted (May to Oct 08) with key stakeholders in the Medical Program across all clinical schools, to determine the completion status of recommendations (tasks).

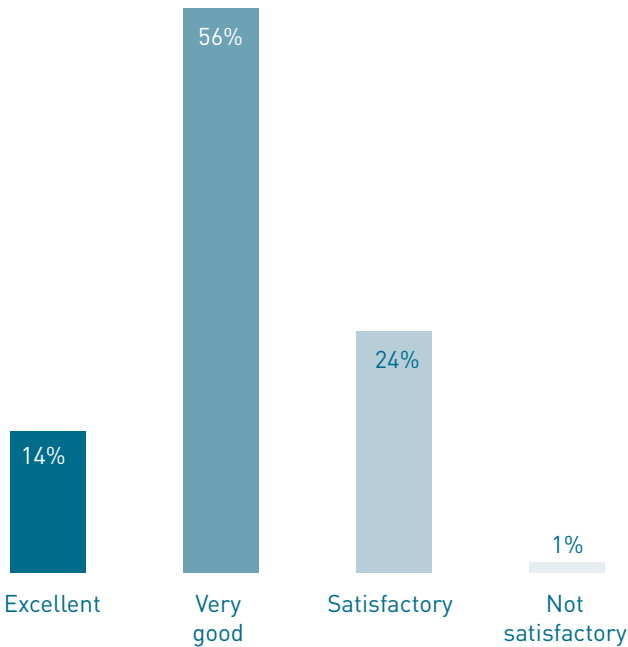


At the time of interview, several areas of the curriculum were yet to be developed thus preventing full implementation by clinical schools and others. This explains a large part of the incomplete items. There were also, however, important items considered impossible due to resource or knowledge limitations as well as a difficult operating environment.

A further evaluation of curriculum implementation is planned for 2009.

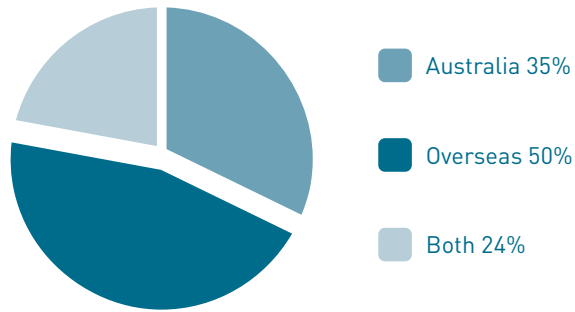
(2) Evaluation of Year 4 at the end of the Medical Program

A high response rate was achieved (88%). Evaluation showed 70% of students in the last year of the Medical Program rated their learning experience as very good or excellent (5% did not answer).



Satisfaction with Medical Training

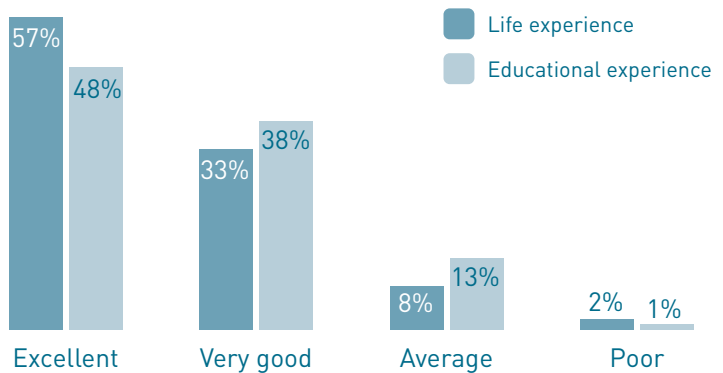
(3a) Electives – local and international



Location of elective term at the start of year 4

- 9% and 17% of elective destinations were in low and middle income areas according to World Bank Economic Ranking, with the remaining 74% in higher income locations.

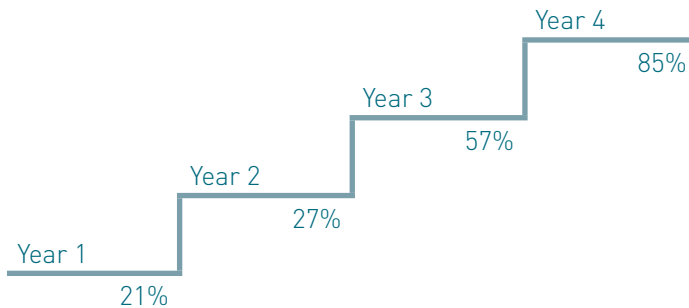
(3b) Electives – A powerful life-long formative experience



Ratings of elective term life experience and educational experience

- 61% of Year 4 students indicated that the elective influenced their career choice compared to 29% that said it did not (10% did not answer)

(4) Student career plans



Year 4 students: Year they decided their career direction (cumulative percentage of year 4 cohort)

What are your aspirations for your future professional life?

A common theme in this category was that students were looking for a good work/life balance. Twenty two students (10%) stated quite specifically that their aim was to balance their work with family and a healthy lifestyle.

Breakdown of responses regarding student aspirations.

Main Discipline	Number	Percent
Surgery	50	23%
Medicine	41	19%
GP	31	14%
O&G	15	7%
Critical Care/Anaesthesia	13	6%
Paediatrics	13	6%
Ophthalmology	3	1%
Psychiatry	2	1%
Other (e.g. ENT, radiology, medical finance)	14	7%
Undecided	32	15%

(5) A new Foundation Block successfully implemented

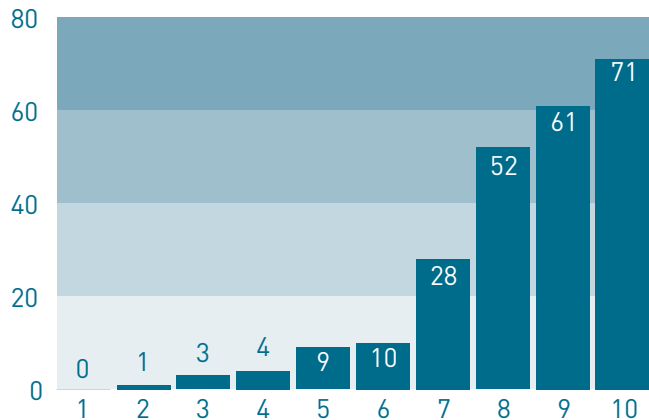
Evaluation showed positive student response for most areas of the Foundation Block.

Evaluation of the tutors' process in Stage 1 Problem Based Learning (PBL) sessions

The questions were derived from Dolman & Ginns' (2005) study that evaluated PBL tutors in eleven performance areas. Reliability required responses from six or more participants per PBL group and hence the need for high response rates.

Survey responses were received from 92% of the Stage 1 cohort (n=249). Of the 32 PBL groups, all except one group had six or more respondents, with an average of eight respondents per group. Students were asked 11 questions about their tutor's process during PBLs.

- Overall, responses were very positive about PBL tutors



Rating (1-10) of overall performance of PBL tutor (6 being sufficient, 10 being excellent)

- The greatest number of students (29%) gave their PBL tutors the highest rank of 10 for their overall performance, while 89% (n=222) of students gave their tutors a rating of six or above (10 students did not respond).

(6) New 2 day intensive Personal and Professional Development (PPD) course

Evaluation showed the PPD course was enthusiastically received by Stage 1 students. Overall, support for most areas was very positive.

- More than 80% of Medical and 70% of Dental students agreed the course had fulfilled five aspects of healthcare,
 - Better understanding of population versus individual health practice
 - Maintenance of personal health and where to seek self help
 - Application of bedside ethics
 - The legal context of healthcare
 - Basic patient safety concepts.
- Comments indicated the presentation on "*The patient perspective on healthcare*" was highly valued by students. Students reported gaining new perspectives on the importance of communication, the patient's perspective and importance of family support.
- Students were randomly assigned to one of nine break-out sessions on "*the centrality of the grounding questions*"⁴. These sessions were the highlight of the course, with many students requesting opportunities to attend more than one. Students reported the 'grounding questions' most often illustrated within each session centred on values, ethics and complexity.
- 80% of Medical and 55% of Dental students agreed the course was effective in conveying how the grounding questions applied to:
 - Professional practice
 - Personal and professional development
 - Ethics in medical practice.

⁴ In 2007, the Sydney Medical School endorsed the Ethics Working Party recommendations that the questions that ground medical and dental care provide the intellectual foundation for the Personal and Professional Development Theme. The grounding questions include (but not limited to) those concerning values, ethics, normality, science, evidence, uncertainty, complexity, taxonomy and ethnomomics.

(7) Gaps identified in students understanding and work experience with Indigenous people

Students were asked in each End-of-Year Survey if they agreed with:

Statement 1

I have a good understanding of the history, cultural development and health of Indigenous people of Australia

Statement 2

I have had experience working with Indigenous people in a variety of clinical settings

	% Agreed Statement 1	% Agreed Statement 2	Survey response rate
Stage 1	49%	8%	96%
Stage 2	42%	15%	79%
Stage 3	55%	26%	86%
Stage 4	66%	53%	88%

ACTION: Continued expansion of teaching and learning resources in Indigenous Health

There is continued work with community organisations to develop further clinical placement opportunities, for example with Northern Rivers University Department of Rural Health (NRUDRH) and their associates. Work with the newly established Poche Centre for Indigenous Health is hoped to further expand clinical placement opportunities, especially for Stage 3 students. Development of teaching and learning resources for cultural education is underway and should be available for 2010.

The Evaluation Unit monitors all research projects that use Sydney Medical Program students as respondents. This ensures that the demands on students by evaluation and research are not excessive. Current educational research projects are listed below.

Chief investigator	Title of project	Year started	Outcomes
Dr Kirsty Foster	Factors influencing the development of professional behaviour in doctors	2006	
Jonathan Yong Honours project	Students' perceptions of learning in Problem Based Learning (PBL) compared to conventional learning	2007	
Dr Adam Guastella Brain and Mind Research Institute	The effects of oxytocin and social exclusion on approach behaviour	2008	
Dr Carolyn Day Drug Health Services, RPAH	Stage Four students' experience of the Addiction Medicine rotation	2008	
A/Prof Charlotte Rees Office of Postgraduate Medical Education, USyd	Medical students' explanations of behaviour following professionalism dilemma situations: An international study	2008	Paper presented*
Prof Judy Searle	Career Choices for Australian Medical Students: How, what, where and why - A Longitudinal study	2008	
Professor Garry Walter Discipline of Psychiatry	Medical students' attitudes towards a career in psychiatry before and after viewing a promotional DVD	2008	
Dr Baindana Sairi Faculty of Pharmacy, USyd	An inter-professional learning and teaching experience in health education and prevention.	2008	
Professor Stewart Dunn Pam McLean Cancer Communications Centre, RNSH	Pathways to Better Communication	2008	
Dr Karl Maton Dept of Sociology and Social Practice, USyd	The current and future role of ICTs at the University of Sydney: the educational implications of staff and student perspectives	2008	

* Knight LV & Rees CE (2008) Medical students' explanations of their own and others' behaviours within professionalism dilemma situations: Implications for the assessment of professionalism. Presented at Association of the Study of Medical Education workshop, 5th June, London.



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For more information, please contact:
Medical Program
Sydney Medical School
Office of Medical Education
The Edward Ford Building (A27)
The University of Sydney NSW 2006 Australia
Tel: (02) 9036 5061 or (02) 9036 6561