# Should medical students deliver babies?



Prof Caroline de Costa James Cook University FRANZCOG

At a time now long ago in the latter part of the last century, as a sixth-year medical student, I was attached to one of the venerable maternity hospitals of Dublin for a two-month term.

We were expected to live in the hospital residence and devote most of our waking hours to the study of pregnancy and birth, either in the labor ward, as it was then known, or 'on district' in the company of house officers who, with varying degrees of skill, drove the hospital's ambulance themselves and attended parturient women in the tenements of the city. (It being Ireland, the option of putting on the ambulance siren

and speeding through the streets of inner Dublin was especially useful for getting to the pub before closing time.) Medical students were required to perform at least 20 normal deliveries. This included staying with the woman throughout her labor and until the placenta was disposed of, and the patient was cleaned up and made comfortable to the satisfaction of the midwife in charge.

The hospital was huge. The women, as public patients, had no say in who delivered their babies and I was able to do many more than the prescribed twenty. The point of these reminiscences is that I found these hands-on encounters so exciting and interesting that I decided forthwith to embark upon a career in obstetrics and gynaecology. I am sure that many colleagues of my vintage could describe a similar experience.

Fast-forward to 2008. For our fifth-year students in the James Cook University School of Medicine (JCUSOM), in Cairns and at our other sites, in a curriculum already packed with newly-evolving sciences and clinical obligations as well as all the traditional ones, we have developed an eight-week course in Reproductive and Neonatal Health (RNH). Students rotate through this course in groups of six (soon to increase to up to eight) and spend at least one week attached to birth suite. A particular focus of JCUSOM is the training of doctors who, we hope, will tend towards rural practice. For RNH we therefore require our students to 'perform' two deliveries, including staying with and supporting the woman and her partner during labor and afterwards – and to follow the full course of three other labors and births (normal, instrumental or caesarean.) Of course, performing two deliveries does not an obstetrician make, but our students will mostly go on to internships with Queensland Health in the second year of which they are sent as locums to cover small country hospitals, where although there are no dedicated maternity units, pregnant women may nevertheless present unannounced in advanced labor. For the aghast junior doctor to inform a woman in this situation that he/she has never assisted at a birth may, we feel, be less than helpful.

Some JCU students undertake their clinical years in Darwin in conjunction with students from Flinders University and it has been noted by our Darwin students (sometimes petulantly) that the Flinders students have no such clinical requirements to be signed off. This difference in students' requirements is what led me to make an informal survey of medical schools across Australia and New Zealand, the findings of which I now report. Some of these schools are still in their early years and therefore in the developmental phase when it comes to birth suite experience, nevertheless it is clear that this is an issue to which obstetricians in academic roles throughout the country are devoting much attention.

'...our most important role is to imbue students with a good understanding of the wonderful processes of normal pregnancy, labor and birth while also conveying to them that sometimes natural and physiological events can go rapidly and fundamentally wrong...'

At first glance, it might seem that there are two quite different models – the 'traditional' model, albeit watered-down with regard to numbers of births, that I experienced and that many schools still apply, and the 'Flinders' model, with no such prescribed requirements. In fact, closer observation reveals that all of us face the same problems and potential obstructions and have the same underlying concerns when it comes to decisions about how to impart information about pregnancy, labor and birth to budding doctors, and how to inspire (some of) them to consider a career in obstetrics or other aspects of women's health - objectives that must be achieved if our daughters and grand-daughters are to receive quality care. I am most grateful to all of my colleagues who so willingly shared details of the requirements of their own schools and their personal views with me. A synopsis of all schools' requirements is shown in Table 1 on page 34.

#### **Our objectives**

All agreed that our most important role is to imbue students with a good understanding of the wonderful processes of normal pregnancy, labor and birth while also conveying to them that sometimes natural and physiological events can go rapidly and fundamentally wrong, and that we can recognise, treat and sometimes prevent such abnormalities. In doing this, we hope to give students a life-long awareness of the roles of both obstetricians and midwives in reproductive health, even those who plan to become ophthalmologists or health administrators. We also hope to interest and attract enough of them into the discipline to prevent obstetricians from becoming an endangered species.

Professor Alastair MacLennan of the University of Adelaide, where from this year students will be required to follow and assist with the delivery of five babies (by any route) and to have a delivery

sheet signed off by midwives, stated that: 'One objective of our course is that they should be able to deliver a baby vaginally in a situation away from more senior assistance. We do think this is an important learning experience and one that motivates some students to consider O and G as a career.' Dr Louise Kornman wrote from the University of Melbourne that: 'We ask that medical students are involved in seven births during their Women's Health term, although we only insist on four... students often consider their delivery suite experience the most exciting of their course and it is from these students we often win over our next group of trainees. So I believe that a certain number of deliveries needs to be mandated for student satisfaction and learning (as they may be expected to be able to help in a delivery in an emergency situation).' However, in units where a set number of deliveries is no longer required, the underlying objectives remain similar. Professor Ian Symonds from Newcastle said that: 'Delivery suite experience is still regarded as an integral part of undergraduate O and G here,' and the Newcastle course guide emphasises that '...the experience gained by time spent assisting at normal and complicated births remains a key part of the attachment.'

Looking in more detail at what course coordinators and departmental heads wrote about the organisation of their courses, it is clear that overall, clinical exposure is similar across the country. Dr Danielle Wilkins described the Monash requirements, which are specific: 'Monash medical students have nine weeks of combined O and G experience. They are either rural or urban-based for the full nine weeks. One of these weeks is spent one-on-one with a specialist, which is known as the Mentor Week and is very popular with the students. During the other eight weeks, they attend tutorials as well as immersing themselves in the clinical aspects. They must maintain a logbook of their experiences and the MINIMUM criteria are very clearly defined, in summary - three normal births, five vaginal examinations, five Pap smears, eight outpatient clinics and six examinations or history presentations. They are also asked to witness an instrumental birth, a caesarean and vaginal repair.'

However, it is clear that the Flinders course, while not requiring numbers, equally exposes students to a whole range of clinical experiences. Professor Marc Keirse, Head of the Department at Flinders University, made the very important point that the delivery



Proud Mum Barbara Rattler with her new-born daughter Becky-May, delivered by JCU medical student Scott Thompson (at left) in Cairns Base Hospital on 25 January 2008. All well!

is only a small part of the whole process: 'I certainly emphasise to our students that any fool can catch a baby (far easier than catching a two year-old who may run away!) but that you need a bit more than that to understand labor and what it does to a woman and a baby.' So, whereas Flinders students do not have to have specific procedures signed off, they certainly need to be present in birth suite for a length of time that is more than comparable to that required elsewhere. Marc Keirse explains that '...for L&D (labor and delivery, an abominable name of course!) they have one week of the eight devoted to this and two weekends. There are four students per weekend and they divide the tasks and the time periods among them. Currently, we arrange the weeks so that the L&D week is not in one stretch, but at the rate of one day a week. This way students can mostly have the same day every week and in this manner build a bit of a rapport with the staff who usually have a fixed day of the week too. Whatever days are left open after making the schedules are up for grabs by any student who wants some more exposure. All the emphasis is on understanding labor, including ways of monitoring mother and baby, pain relief, etc. I also insist that it does not end before the placenta has been properly examined and disposed of. So, students who are assigned to a woman in labor do nothing but that – no escaping to a PBL session or any other teaching activity: "When there, you stay there, and if it takes a long time that can be either good luck from a learning perspective or bad luck, but that is how it is."

#### The availability of clinical material and issues of patient consent

All schools face these problems, regardless of whether students are located in large tertiary centres or rotated to smaller metropolitan or rural maternity units for their birth suite experience. One reason is the increasing caesarean section rate, approaching 30 per cent and rising, in most of our teaching institutions, which means that a student may spend hours getting to know a woman and her partner, and observing the progress of labor (or the lack thereof) and then not 'catch' the baby when birth finally occurs by the abdominal route. A second reason is the large number of women who will not consent to a medical student performing the delivery of their baby, even though the hands of that student will be firmly guided by those of an experienced midwife or doctor.

### 'I believe we need to educate our population on the short and longterm benefits of allowing student participation.' (Louise Kornman)

Louise Kornman wrote of the Royal Women's Hospital in Melbourne that '...many Muslim women ... will not permit male medical students and (we have) generally a more assertive population who are not keen for a medical student to be present at the birth. I believe we need to educate our population on the short and longterm benefits of allowing student participation.' A 2001 study from Flinders Medical Centre showed, rather depressingly, that only 62 per cent of antenatal patients questioned were prepared to accept the idea of a medical student participating in their intrapartum care (and a mere 43 per cent if that student were male), although 84 per cent agreed that such participation was important for student education.<sup>1</sup> In fact, only 54 per cent of the study sample understood that the term 'medical student' referred to a trainee doctor and not to a nurse or midwife or other health professional in training.

## Competition with student midwives for normal births

This is a problem for all schools. The Australian College of Midwives requires midwifery students to have performed 40 normal deliveries for basic registration. A 2002 study from South Australia reported mutual misunderstanding of the roles of midwifery and medical students in birth suites, something all obstetricians and midwives will be familiar with. 2 Ian Symonds wrote that: 'I removed the mandatory requirement for 'hands-on' participation in normal delivery three years ago ... However, we discussed this issue again recently and there was a proposal from the students that we go back to specifying a minimum number of deliveries. The reasoning here was that students are sometimes excluded in favour of student midwives (SMs) and told that this is because the SMs have to get a certain number of deliveries and they do not. In my experience, in units where there was a mandatory minimum number of deliveries, this still did not stop medical students being excluded in favour of student midwives, but did generate a lot of anxiety amongst the students that they would fail the attachment unless they got all their deliveries. It also tended to make them concentrate on one aspect of intrapartum care (ie the last part of the second stage) at the expense of other equally important experiences.' And Marc Keirse says that in South Australia, '... there is substantial competition from midwifery students ... any labor that ends in a 'non-catch', whether by caesarean or instrumental delivery, does not count, but if you happen to get your nose in the door in time to cut the cord, you are 2.5 per cent closer to becoming a midwife.' He again stresses that the important thing for students (medical and midwifery) to understand is what is happening to the woman and her baby during the whole process. One way that Flinders deals with this situation of midwife competition for births is by rostering students on for weekends in birth suite. At Adelaide, Alastair MacLennan points out that, 'Students prepared to stay overnight in the delivery suite achieve more deliveries'.

Another approach adopted by many is to involve midwives directly in the overall supervision of medical students' time in birth suite. Of course, medical students have and always will be supervised by individual midwives managing individual normal cases and many centres appear to involve midwives in direct teaching – in Cairns all our students have an initial birth suite orientation and instruction in the basics of normal labor with the midwife in charge of the birth suite. At Newcastle, however, this has been taken several steps further: '(A) feature of the Newcastle program is that we employ a midwife educator to supervise the medical students on delivery suite. As well as direct supervision of intrapartum care, she does small group teaching, is one of our examiners and acts as an advocate for the medical students amongst her midwife colleagues.' Professor John Bushnell, currently setting up the course at Wollongong, described his experience in New Zealand, where a similar plan was introduced, as productive. This role of midwives as teachers and mentors of medical students is further described by Louise Homan, who oversees the JCU Cairns students, and Ange Bull, in the article on page 36 from Darwin, where both JCU and Flinders students come under her direct midwife supervision.

#### Other demands on student time

Many schools are tending towards integrated training programs so that, while nominally attached to rotations such as reproductive health and to clinical activities such as those occurring in the birth suite, there are conflicting demands on students to attend general practices on a weekly basis, as well as lectures and tutorials for the whole class or year that deal with a range of topics outside of reproductive health. In addition, many students must take outside jobs in order to survive financially – Alastair MacLennan reports that

Adelaide medical students (in an undergraduate course) average 13 hours of paid employment per week, and a similar figure applies to JCU students, also undergraduates, in Far North Queensland. The need for outside employment may be even greater amongst students in the many new four-year post-graduate courses (see Table 1 on page 34). Although more mature than undergraduates, and therefore supposedly more astute at time management and study techniques, these students have a shorter timeframe than undergraduates for clinical exposure and, being older, are perhaps more likely to have acquired the responsibilities of families and small children.

#### Increasing numbers of medical students

There are now 19 medical schools across Australia and all established schools are increasing intakes substantially. In 2006, a total of 1632 medical students graduated from Australian medical schools. In 2012 more than 3400 will do so. Exposing incoming students to sufficient clinical material to make them into competent interns, if not complete doctors, poses enormous challenges and the need for innovative and lateral thinking, not least in the area of women's and reproductive health. The figures for current and projected intakes in all schools are illuminating, as shown in Table 1. There are particular challenges for the newly-developing schools. How they are meeting these challenges is well explained on the opposite page by Simon Broadley of Griffith University and also in the article on page 39 by Rodney Petersen and Julie Quinlivan about the new Notre Dame Sydney Medical School.

'For future medical graduates...to have the Diploma of MB BS pressed into their hands...though without ever once having witnessed the miracle of normal birth, would to my mind be a great tragedy.'

To summarise, I can do no better than to refer the reader to the comments by Brett Daniels on the opposite page. Brett is currently a third year registrar at Launceston General Hospital, Tasmania, who was clearly inspired, like myself, by his student experience, but nevertheless aware of the constraints on current teaching. All of us, in private, public or general practice, who practise obstetrics or provide antenatal care, must be prepared to teach and demonstrate the art and science of our discipline to those coming behind us. Wherever possible, students should be directly involved in the processes of labor and birth. For future medical graduates, following four, five or six years of study, to have the Diploma of MB BS pressed into their hands by a Vice-Chancellor, though without ever once having witnessed the miracle of normal birth, would to my mind be a great tragedy.

#### References

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The Griffith Medical Program is based on the Flinders Program and like them, we do not stipulate a specific number of births to be witnessed in our

Women's Health rotation. Our reasons for this are multifactorial.

The first is the academic principle that our objective is to produce functional interns by the end of our program. We are not aware of any intern who would normally be involved in delivering babies as part of their normal duties. However, this may change with plans to widen the potential placements for interns to include general and rural practice. In these circumstances, it is likely that students being placed in such an environment may require additional training.

Secondly, as an academic principle it is unreasonable to expect any degree of competence to be attained by simply watching or even being involved in a small number of procedures of any type. In most circumstances it is thought that to attain even basic competence of a simple clinical skill (for example, lumbar puncture) takes at least ten supervised practice attempts. We have determined that to provide this for medical students with regard to delivery, or lumbar puncture for that matter, is just not possible.

This leaves us with simply expecting students to have an experience of many procedures which would previously (and quite unrealistically) have been expected to be covered comprehensively in a medical program, including deliveries. As we are not expecting any specific level of competence, we do not stipulate a specific number of deliveries to be witnessed, attended or assisted with. However, as with all other clinical areas, we strongly encourage students to be as involved as reasonably possible with all aspects of the clinical care pathway and for O and G this includes deliveries. Students are rostered to attend the birth suite and it is recommended that they observe deliveries of all types. This obviously involves a lot of tacit learning and also provides a context for much of their study in obstetrics. In practice, most (if not all) of our students have witnessed several deliveries.

We have also, as a matter of principle, shied away from the notion of a tick list of procedures for students to work their way through the course. We feel this distracts them from the real purpose of being in the clinical environment, which is to learn. Medicine is not train spotting. Instead, we try to promote a philosophy of total immersion in the clinical environment, which we find the slightly more mature students of our post-graduate course do, for the most part, take on board fully.

Inevitably, there are always issues of knowing what your students are up to out in the field. However, we do not believe that having a check list (which is generally easy to fabricate and fudge) is an efficient way of flagging students who are struggling and it also provides the wrong emphasis. I am not sure what the answer is to spotting weaker or less keen students but I think the key is to have concerned clinicians.

Finally, there is the issue of access to clinical material. The Gold Coast has just seen an influx of almost 1000 medical students in two new medical schools, utilising a relatively small number of clinical sites not previously designated as 'Teaching Hospitals'. The clinical sites are already at near capacity in terms of training nursing staff and midwives, and other para-clinical staff. The competition for exposure to the birth suite has been high. We have been warmly received by all of the obstetric units and the birth suite staff, however, in view of the clinical demand and existing teaching load we have avoided aggravating things by stipulating additional teaching requirements. We have allowed expectations to be largely driven by the clinical providers and, as a consequence, I am not aware of any student having left their Women's Health term without seeing at least one delivery in our first cohort. Again though, our numbers are about to double as of 2009 so it is hard to know whether this pattern will remain.



**Dr Brett Daniels** 

O and G Registrar Launceston General Hospital, Tasmania

Medical students should deliver at least one baby before they graduate. They should also dissect a cadaver, draw blood from a real vein and hold the

laryngoscope as they guide an ET tube through the vocal cords. If they can assist at cardiac surgery and sit with a patient as they are told that the shadow on their X-ray is actually a cancer, then they should have those experiences too. These are some of the privileges and responsibilities of the study and practice of medicine and we should strive to provide them to the next generation of students

These experiences are not about the development of technical excellence. My first delivery as a student was with a midwife who had been working for long enough to have delivered me and a woman having her fourth baby, who kindly consented when I nervously asked if I might help deliver her baby. A plastic apron, a brief struggle to get the gloves on, a firm hand from the midwife on mine as I'm ordered to 'control the head' and 'protect the perineum' and the baby is out and in my hands. All in all I did five deliveries, the prescribed number as a student, then moving aside so my colleagues could get their quota. While I only learnt a little about delivery technique after five births, the lessons learnt about respect for the experience of the midwives and how fortunate we are to be involved in our patients' lives at such critical personal moments, have remained with me. These are the most important reasons why we should work to ensure future students can enjoy the experience of birth. It has the two-fold benefit of being both a personally rewarding event, as well as a real test of a student's development as a doctor. The level of interpersonal skill required to enable a student to gain the consent of the midwife and mother to attend the delivery, and the ability to maintain this relationship through a labor is one that no doctor should graduate from medical school without.

"...we should strive to relate the satisfaction that we as obstetricians gain from our work and provide opportunities for students to experience it for themselves.'

With the increasing number of medical students and medical schools, it is becoming ever more difficult to provide students with a fixed quota of deliveries. For example, at the hospital in which I worked in 2007, we had about 2000 deliveries a year. Approximately 500 of these are caesareans leaving 1500 vaginal deliveries. There are eight O and G registrars and five residents, two or three of whom are doing their DRANZCOG. There are about half a dozen midwifery students. There are a number of women who won't consent to a medical student being present. There are approximately 80 medical students who rotate through the service over a year, except when they are on holidays or have to leave the unit to attend lectures. What this seems to mean in practice is that most students who want to get their hands on a delivery are able to, but none of them will ever do more than one or two, and some will simply miss out despite their best efforts. There are also a small number who have no intention of trying to get involved in anything that is not strictly compulsory.

As much as I believe that these students are diminishing the value of their medical training by such an attitude, I do not believe that we should make it compulsory for students to deliver a fixed number of babies during their course. This is no longer practical in many Australian medical schools. It is also not appropriate for mothers and babies to be attended by students who only turn up because it is a course requirement. Rather, we should strive to relate the satisfaction that we as obstetricians gain from our work and provide opportunities for students to experience it for themselves.

# Table 1. Requirements of Australian and New Zealand medical schools for students in birth suite 2008

| Medical School                                       | Undergraduate (UG)<br>or Postgraduate(PG) | Student intake 2008<br>and projected for 2012<br>(number of students) | Mandatory<br>requirements<br>for birth suite<br>deliveries | Details of<br>mandatory<br>requirements   | Comments from relevant supervisors  |
|--|---|---|--|---|---|
| Australian National<br>University                    | PG  | 85;95   | Yes  | 'Signed off involvement in one labor'.  |   |
| Bond University                                      | UG 50%<br>PG 50%                          | 85;88   | Yes  | Witness 2<br>normal, do 3<br>normal.  | 'Students find<br>being in BS fun and<br>a good learning<br>experience.'  |
| Deakin University                                    | PG  | 150;180   | Not yet<br>decided   |   | 5 week endocrine/<br>reproductive<br>systems block in<br>year 2, 7-week<br>women's health<br>block in year 3.   |
| Flinders University                                  | PG  | 123;128   | No   |   | See article by Ange<br>Bull on page 36.   |
| Griffith University                                  | PG  | 150;150   | No   |   | See insert by Simon<br>Broadley on page<br>33.  |
| James Cook<br>University                             | UG  | 155;200   | Yes  | 2 normal<br>deliveries, 3<br>labors followed<br>to delivery<br>by whatever<br>method. | Students generally enthusiastic about birth suite experience.   |
| Monash University                                    | UG  | 305;317   | Yes  | 3 normal births,<br>1 caesarean,<br>1 instrumental<br>delivery.                       | One-on-one mentor week with specialist very popular with students.  |
| Newcastle<br>University                              | UG  | 188;196   | No   |   | Students often consider their delivery suite experience the most exciting of their course.  |
| Notre Dame<br>University,<br>Fremantle and<br>Sydney | PG  | Sydney 112;120<br>Fremantle 104;120                                   | No   | Mentor program.   | See the article on page 39.   |
| University of<br>Adelaide                            | UG  | 170;177   | Yes  | Until 2007 1-2,<br>from 2008 assist<br>with 5 deliveries<br>by any route.             | We do think this is an important learning experience and one that motivates some students to consider O and G as a career.  |
| University of<br>Melbourne                           | UG but changing to PG after 2008          | 327;330   | Yes  | 7 desirable,<br>4 mandatory<br>births.  | 'Students often consider their delivery suite experience the most exciting of their course and it is from these students we often win over our next group of trainees.' |

| University of New<br>South Wales   | UG        | 274;285     | Yes                            | 4 weeks in year<br>4- witness 2<br>births, 8 week<br>mentorship in<br>years 5-6 – do 2<br>deliveries.   | 'O and G has<br>expanded its<br>exposure in the new<br>UNSW curriculum.'   |
|------------------------------------|-----------|-------------|--------------------------------|---|--|
| University of<br>Queensland        | PG        | 400;416     | Yes                            | Witness 2, do 3 normal.   |  |
| University of Sydney               | PG        | 274;285     | No until 2007,<br>now changing | One normal delivery will be required.   | 'Yes the students<br>love the births<br>– it's when they<br>decide to become<br>obstetricians.'  |
| University of<br>Tasmania          | UG        | 128;133     | Yes                            | Two normal deliveries.  | Dedicated midwife<br>to 'shepherd'<br>students in Birth<br>Suite.  |
| University of<br>Western Australia | UG and PG | 205;213     | Yes                            | At least 3 normal<br>deliveries.  | Some students might get only two but see a lot of managements and we would accept that.  |
| University of<br>Western Sydney    | UG        | 100;104     | Not yet<br>decided             | Still in course of<br>development.<br>Will be using<br>several outer-<br>suburban and<br>rural hospitals.   | Will probably have<br>a minimum number<br>– would like to think<br>our graduates could<br>attend a birth in<br>an urgent setting<br>outside a hospital.  |
| University of<br>Wollongong        | PG        | 80;83       |                                | Still in course of development.   | Will be using a<br>number of rural<br>hospitals.   |
| University of<br>Auckland          | UG        | 170 in 2008 | yes                            | 5th year, active involvement in 5 births. 6th year as trainee interns, students are rostered on the delivery unit for periods and complete their '5' requirement if they have not done so already. 6th year students also get further involvement averaging 3 to 10 deliveries including c/s. | 'As a specialty and a College I think we need to do all we can to be innovative in getting clinical access for students. When I ask the ITP applicants why they want to do O and G, they always say it was because they had a good experience in med school in O and G.' |
| Otago University                   | UG        | 240 in 2008 | Yes                            | Requirements<br>are to attend<br>deliveries only.   | Figures show that<br>currently about 50%<br>actually deliver<br>a baby and have<br>'active involvement'<br>in the management<br>of 3 other births.   |

Figures for student numbers include a small number of overseas students; in some cases projections are for 2010.

#### Acknowledgements

Caroline de Costa would like to thank all her colleagues who responded so promptly and often at length to her requests for information, in particular, Marc Keirse who wrote from Belgium and Peter Stone who kindly provided up-to-date New Zealand information. (An interesting incidental observation was that in early January, Australia's traditional holiday period, every academic approached was hard at work!)

# Midwives teaching medical students at **Royal Darwin Hospital**



Ange Bull Clinical Midwifery Educator Royal Darwin Hospital

Midwives and midwifery practice are essential to the endeavours of medical students in gaining the experience required to complete their study in obstetrics. It is commonly perceived that midwives greatly influence the medical student's access to laboring women and their opportunities to be involved in the birthing process.

In Australia, there is little research into the role of midwives who teach medical students and the effect this role has upon the real experience of birth gained by medical students.

In 1999, Flinders University of South Australia, through the Northern Territory Clinical School and in cooperation with the Royal Darwin Hospital, commissioned the

introduction of a joint Clinical Midwifery Educator (CME) position within the Maternity Unit. The position is similar to the role of the American certified nurse-midwives who have been teaching medical students and residents for many years both formally and informally.<sup>1</sup> Clinical placement, education and assessment responsibilities for medical students, midwifery students and midwives are integral to the position and the CME is afforded academic status by Flinders University.

The position was developed in response to numerous issues. There was an identified need for an educator to coordinate the clinical practicum for midwifery students. The maternity unit lacked a position that focused on ongoing midwifery education for midwives within the unit. However, the difficulties many medical students experienced in meeting their clinical learning objectives in their third year obstetrics rotation was a major factor in prompting the development of the joint CME position.

Evaluations from medical students in 1999 showed distinct problems with gaining experience in the delivery suite. Medical students frequently met resistance to their approaches to be included in the care of laboring women and, although it is every woman's right to refuse a student, evaluations reflected some degree of hostility coming from midwives who were aiming to protect women's birth experience by discouraging medical student involvement

Various reasons can be cited for these difficulties. Medical students may not have had the experience in working closely with disciplines outside medicine, which may have contributed to their apprehension and reluctance to step into an environment dominated by midwives. Many midwives didn't know what to do with medical students and lacked the confidence to teach them.

Through the CME position, these problems have largely been overcome primarily by supporting and encouraging midwives to engage in working with medical students with a team focus. Midwives are specialists in the realm of normal birth and have a keen interest in high quality working relationships with obstetricians for the benefit of women. To this end, midwives at Royal Darwin Hospital have gained confidence and excelled in the bedside teaching of midwifery practice to medical students, allowing them to achieve a sound knowledge base in normal birth and an important insight into the role of the midwife as the primary carer.

Recent positive attitudes towards medical students within the maternity unit, specifically by the Clinical Midwifery Manager of Delivery Suite and senior midwives, have greatly enhanced the learning opportunities available for medical students. These attitudes, along with the role of the CME, have been reflected positively in recent medical student evaluations of the obstetric placement.

Among the identified benefits are the two-way sharing of knowledge and an increased level of motivation gained as a result of working with enthusiastic medical students.'

The CME encourages medical students to access birthing women in a way that will enhance the woman's birth experience. By working with midwives and gaining a rapport with women, the medical student can take on the role of support for women in labor, an aspect of care that is known to reduce the need for interventions and enhance the woman's birth experience.2

Spending time with the Community Midwifery Practice, a midwiferyled model of care, affords the student an experience in continuity. The students have the opportunity to meet the women during their antenatal visits, are on-call for the woman when she goes into labor, attending to her care with her midwife and following her into her home as part of the Community Midwifery Practice postnatal service. Alternatively, women can be followed through from meeting in the medical antenatal and midwife clinics at the hospital. In these circumstances, the midwifery philosophy of women-centred care is complimented by the rapport women gain with Senior Medical Officers (SMOs) that allows them to welcome the student into their birth experience.

Attending the midwifery handover in the delivery suite and being introduced to women alongside their midwife as a member of the team who is caring for her has resulted in very few requests from women to exclude the student from her care. There have been

numerous instances where feedback from women regarding the medical student attending the birth has reflected positively on medical student involvement. Statements include: 'My medical student was the one who was there for me throughout the whole experience', and 'I was really scared until I saw (the medical student), and then I just calmed down'. This highlights the privilege of being able to share a woman's birth experience.

The educational role of the CME includes clinical bedside teaching and tutorials. A series of weekly tutorials covering aspects of normal birth as well as cardiotocography and neonatal resuscitation are given and rarely missed by any medical student. The CME also contributes to the PBL teaching program for obstetrics including issues related to bleeding in pregnancy, domestic violence and postpartum haemorrhage.

'The midwifery philosophy of women-centred care, where the woman is central to the decisionmaking, compliments the focus for medical students to undertake their vocation via a patient-centred approach.'

Evaluations of medical students' skills in obstetrics are attended by the CME focusing on normal birth, with an important aspect of the assessments being the opportunity for students to gain feedback on their performance. The CME assesses the students' skills including history taking and examination of antenatal women presenting to the delivery suite or in the antenatal clinic. Students also benefit from combined feedback and assessment when the CME participates in marking oral critical appraisals and the formative OSCE alongside obstetricians and paediatricians. The midwifery philosophy of women-centred care, where the woman is central to the decision-making, compliments the focus for medical students to undertake their vocation via a patient-centred approach. Feedback given to students in regard to the doctor-patient relationship is therefore enhanced by the underlying philosophy of midwifery.

The role of the CME regarding medical students has been expanded in recent years to include a detailed orientation of medical students to the unit on their first day. The orientation covers geographical layout of the birthing suite and antenatal clinics, introduction to senior midwifery staff, discussion of learning opportunities and how to access them as well as emergency procedures that the students may find themselves helping with whilst in the area. An orientation booklet, which complements the Northern Territory Clinical School (NTCS) Women's Health course book and has a predominantly normal birth focus, is given to students on their arrival in the Maternity Unit. Orientation has proven to be very important to medical students who would otherwise be feeling apprehensive and burdensome on their first day in a new area.

The success of the CME position in significantly enhancing the experience of medical students during their obstetric rotation can be attributed to various factors. The CME is an integral member of the maternity unit with responsibilities spanning both medical and midwifery professions. This unique position allows coordination of medical and midwifery student learning opportunities so as to exist in harmony within the birthing environment.

Support for the CME position includes a good working relationship with midwives and obstetricians who hold academic status with

Flinders University. This ensures there are avenues for reporting regarding medical students that may be experiencing difficulties. The CME holds membership on the NTCS academic committee, which provides a forum for two-way communication regarding changes to the medical student curriculum or placement requirements. Via this forum, the CME has input into the medical curriculum and actively advises the school regarding future directions for medical student placements within obstetrics.

The outcome of the instigation of the CME position for medical students has been a greater opportunity to gain in excess of the required obstetric experience in a welcoming environment with dedicated students frequently experiencing the role of accoucheur. Moreover, whilst medical students offer valuable assistance when working in a busy unit, the benefits to midwives surpass having an 'extra pair of hands'. Among the identified benefits are the twoway sharing of knowledge and an increased level of motivation gained as a result of working with enthusiastic medical students. One midwife commented that medical students are like a catalyst in encouraging midwives to keep up-to-date.

The interdisciplinary role of the CME has enhanced the relationship between the medical and midwifery professions within the Royal Darwin Hospital. Future directions include an aim to extend the successes of the CME position into the urban community and other hospitals in the Northern Territory.

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**Louise Homan**Midwife/Nurse Unit Manager
Birth Suite
Cairns Base Hospital

I trained as a midwife at Cairns Base Hospital in 1987 and have practised in the unit as a midwife since. For the last seven years I have been in the role of Nurse Unit Manager.

The last 20 years have seen an interesting shift in training requirements for both midwifery and medical students. We have seen midwifery training move to the tertiary sector, with an increased emphasis on the academic and a decreased emphasis on the involvement of medical officers as teachers of midwifery students. We have seen the reverse with medical officer training, with an O and G rotation now offered, a requirement to obtain clinical skills and greater midwife involvement in the training of medical students.

Competition for clinical experience is strong. Being a teaching hospital, there are always students from various disciplines eager to obtain exposure to learning opportunities. In addition to medical students, the unit accommodates placements for student midwives, undergraduate nursing students, ambulance officers, junior doctors on the O and G program, and practising medical officers and midwives seeking upskilling. Students are encouraged to be motivated, pro-active and flexible in order to achieve their learning goals. However, with over 2500 births in 2007, students are still well-placed to achieve these goals.

'I have enjoyed being involved in the teaching of medical students and feel more shared teaching of midwifery students and undergraduate medical students should be considered.'

Feedback from students and midwives has been very positive from both a clinical and academic perspective. Students are encouraged and supported to care for the laboring woman for the duration of the labor and birth. This assists the consolidation of theory to practice and enables the student to focus on the overall birth experience rather than on the task aspect of doing a delivery. Many students have described their excitement at having just had a baby! Midwives use it as a valuable opportunity to share their expert knowledge as the most appropriate care providers for low-risk women, promote the importance of the midwife/woman relationship and build and strengthen relationships with the medical profession.

There is a strong emphasis on a positive midwife/medical officer relationship both in our unit and the rural and remote facilities we work in partnership with. This relationship is based on mutual understanding, trust and respect for each others' roles, responsibilities, knowledge and skill.

I have enjoyed being involved in the teaching of medical students and feel more shared teaching of midwifery students and undergraduate medical students should be considered. Several students on rotation have expressed an interest in pursuing a career in O and G, and with the wealth of knowledge and learning opportunities available to them in our unit, it would be a good opportunity to invest in their enthusiasm.



**Dr Susan Fleming**Clinical Director, Women's Health
Dunedin Hospital
New Zealand

At Otago University, students are required to attend a minimum of five deliveries. They struggle to get their hands on normal deliveries because they compete with midwifery students. The goal is that at least three of the deliveries are normal. This experience can be accumulated over their fifth and sixth years of training.

'Most students feel welcome in delivery ward but not always welcome into the birthing or delivery rooms. We are presently attempting to do a better sell of the benefits to the woman of having a student present at her birth.'

Most students feel welcome in delivery ward but not always welcome into the birthing or delivery rooms. We are presently attempting to do a better sell of the benefits to the woman of having a student present at her birth. Only a minority of our LMCs (lead maternity carers), who are all independent midwives, actively promote to women the option of having a medical student present. If students were not required to be present at normal deliveries, I am sure many would not persist in their attempts to find a willing midwife and laboring woman.

I feel that if there was not a mandatory requirement for students to be present at normal births, the majority of students would only ever see a caesarean birth. This is likely to undermine their confidence in the normal and has the potential to bias their attitudes towards intervention when dealing with pregnant women in the future, particularly if they have no further exposure to obstetrics after graduation.

