From conception to birth—a holistic approach to midwifery: yes, it can happen in a public rural facility

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RURAL BACKGROUND

Northeast Health Wangaratta (NHW) is located in the central Hume region of north east Victoria about two and a half hours from Melbourne. The area is picturesque and the primary industries are tourism, agriculture, viticulture, textiles and wood products. The primary catchment population of the rural city of Wangaratta is 26 000 with the overall referral catchment population in the central Hume corridor is around 70 000 people.

NHW is a regional referral hospital and provides a very diverse range of acute, sub-acute, psychiatric and aged care services to central Hume. The range of services includes emergency services, intensive care, medical, surgical, obstetrics, paediatrics, rehabilitation, psychiatry, community, and residential aged care.

The Midwifery services offered at NHW can be accessed through three models, with the hospital delivering 450 babies each year. The midwifery service is supported with a level 2 special care nursery.

The three midwifery models are:

- private care with an obstetrician
- shared care between the hospital and local general practitioners
- Community Midwife Program (CMP).

OUTLINE OF THE PROGRAM

The Community Midwife Program is an innovative model of midwifery care, which focuses on case management within a modified group practice setting. Each year 120 families enter the program and are cared for throughout their pregnancy, labour, birth and postnatal period by a group of 5 Midwifery practitioners. The model caters for both low and high-risk pregnancies. The degree to which the program works with the obstetric medical team at the hospital depends on the risk of the pregnancy. The key quality for clients of the program is the relationship developed with the CMP midwives, this facilitates trust and rapport and provides confidence with the midwives who care for them.

Each woman on entering the program is assigned a primary care midwife however all midwives will see all woman over the antenatal period. Each of the midwives is formally credentialled demonstrating the essential advanced skills required to work in
the program. The midwifery team conduct all antenatal care including antenatal classes, ordering of pregnancy related diagnostic tests (radiology and pathology) and routine antenatal assessments following the Three Centres Guidelines on Antenatal Care project, Mercy Hospital for Women, Southern Health and Women’s and Children’s Health 2001 (Three centres guideline 2001). All women in the CMP stream of care are referred to the main stream antenatal clinic for review by the medical team for one routine visit following the 18-week ultrasound unless risk factors develop necessitating a higher degree on medical involvement.

AIM

To offer high-quality family centred midwifery care to all women choosing to birth at Northeast Health Wangaratta. This model is offered to all women ensuring equity of access.

HISTORY

In Victoria it became clear following the release of the 1990 Ministerial Review of Birthing Services that women needed increased access to a broad range of midwifery options including care managed by midwives. Northeast Health Wangaratta in partnership with Ovens and King Community Health Service was successful in gaining money from the Commonwealth Department of Health to develop a Midwife Care project (MCP). This project commenced in 1996 and run until 1998, the pilot successfully trailed midwife lead (Gumley 1999). The pilot included midwives both employed by Northeast Health Wangaratta and those practising independently with visiting privileges to Northeast Health Wangaratta.

Following the success of the pilot in 1999 the Community Midwifery Program was commenced as a new stream of care offered to women choosing to have their baby at Northeast Health Wangaratta. The major difference between the pilot MCP and the CMP is CMP midwives are all employed on salary at Northeast Health Wangaratta. No independent midwives practice in the program, this removes the insurance issues and also gives the organisation greater control over the group practice model, its development and the performance management of the midwives.

In 2001 the CMP entered a new phase becoming a pilot Victorian Nurse Practitioner Project, this has enabled the development of a comprehensive credentialling process, clinical guideline and policy framework to underpin the midwives advance practice program. The final report on this project was completed in September 2002 (Haines 2002). CMP is now an embedded service offered to the catchment population of Northeast Health Wangaratta and includes outreach antenatal clinics to the more remote areas.
OBJECTIVES

- To continue to promote greater choice in birthing for women.
- To emphasise the role of the midwife as the primary care giver.
- To recognise that pregnancy and birth are in the majority of cases, “normal life events” requiring minimal medical intervention.
- To support women’s decision making about health care.
- To provide continuity of care throughout pregnancy, birth, and the postnatal period.
- To continually evaluate advanced midwifery practice through research.
- To enhance the Community Midwife Program through liaison and referral.
- To maintain best practice by participating in professional development.

IMPLEMENTING A CMP STREAM

Each process in developing the CMP has involved an interdisciplinary steering group to map out the care model, and oversee the steps to required to put the model and change of practice into place. Over time the steering group has had different members and periods of abeyance but the constant key stakeholders have been Obstetricians, both CMP and ward midwives, finance department, nursing management and consumers. The continued backing and involvement of the key stakeholders particularly the Obstetricians is the key to the establishment and success of the CMP at Northeast Health Wangaratta it has given everyone the opportunity to be involved hear each others view points and shape the current program.

The steering committee have from time to time set up working parties who have reported back on specific tasks relating to credentialling, clinical guidelines, skills development, policy development and outcomes. The steering committee endorsed each of the processes involved in starting and developing the CMP model at Northeast Health Wangaratta but has now concluded.

As the CMP is now a formally adopted model of care offered by Northeast Health Wangaratta the mechanisms of governing the program have been aligned with that of the hospitals other programs. The CMP has moved to be managed under the wider midwifery program mechanism, reporting to the Unit Manager of Midwifery and Surgical services. The CMP presents its outcomes and particular cases of interest to the midwifery consultative committee which is an interdisciplinary peer review committee within the health service, it also reports into the health service wide mainstream and clinical risk management quality framework.
THE CMP TEAM

The CMP team is five midwives each working 0.5 FTE working a seven day four week rotating on call roster. The rotating roster allocates each midwife to antenatal clinic weekly and provides the call system. The 2.5 FTE of midwives cover each others annual leave. A backup system from ward midwives is in place to cover unexpected leave such as sick leave. Each year a team leader is chosen from within the team who becomes the manager and spokesperson for the CMP. The team is close knit by necessity and case management meetings occur weekly.

With the introduction of nurse practitioners into Victoria the team is moving into two levels of midwives, midwife practitioners and advanced practice midwives. This tiering has proven successful in the Victorian Nurse Practitioner pilot for mentoring and career development of the midwifery workforce.

As the model involves oncall, overtime and recall with no formal allocated shifts negotiations have occurred with the Australian Nursing Federation to reach agreement that Midwife Practitioners are remunerated at grade five ($62,000pa full time) and advanced practice midwives at Grade 4 ($55,000pa full time). All CMP midwives are paid a 25% commuted overtime allowance in lieu of oncall and overtime rates. Midwives are responsible for managing their workload and time. The CMP books ten clients per month to ensure workloads remain manageable. In order to address Occupational Health and Safety issues around safe working hours no CMP midwife works greater than a 10 hour session, either the ward midwives will take over the management of the woman or the next oncall CMP midwife will be called in.

Modified caseload

Each woman and their family are allocated to a named midwife who is the case manager. Through the antenatal period the woman will see all of the CMP team. After the 18-week ultrasound the woman is referred to the medical team for review after which all care is provided by the CMP team according to the Three Hospitals Antenatal Guidelines 2001. Should any additional risk factors arise at any time throughout pregnancy, birth, labour, or the puerperium referrals are made and care managed by the appropriate clinician in partnership with the CMP team. Ante and postnatal education is comprehensive and provided individually by the CMP team however women are able to join the antenatal classes conducted by Northeast Health Wangaratta. Throughout the antenatal period woman carry their medical record with them to be completed by the CMP midwife or any referred clinician. Northeast Health Wangaratta is currently exploring the opportunity to develop a web based client record for midwifery clients with Orion through their disease management module.

All births occur in the delivery rooms at Northeast Health Wangaratta, for normal births women then stay at the hospital up to 36 hours under the care of ward midwives following the case management plan directed by the CMP midwife. For women who are high risk or who have complications, longer periods of in-hospital care occur. Women discharged within the 36-hour timeframe receive additional home supports such as nappy wash and home help to ensure a positive early home settling in period for mother, baby and family.
The CMP midwife follows up the woman and baby daily at home for an average of five days and as needed for up to six weeks post delivery. During this time referrals are made to the maternal and child health nurse and any other service that maybe beneficial to the care of mother and baby. A six-week post natal visit concludes the care provided by the CMP midwives and formal referrals back to the family General Practitioner are made. A pap smear clinic is provided for CMP booked women should they wish to utilise this service.

The skills

The CMP midwife is an advance skilled midwife able to provide all the care requirements of a normal midwifery client throughout pregnancy, delivery and the puerperium. To be credentialled to work in the CMP team midwives must annually demonstrate the following.

- Competency against the ACMI standards for practice of midwifery assessed by their peers.
- Perineal suturing competency either by initial package completion or proof or ongoing practice
- IV cannulation competency either by initial package completion or proof of ongoing practice
- CTG interpretation ongoing education
- Completion of the Pathology and Radiology investigations competency kit
- Pre and Post test HIV / Hep C counselling skills
- Genetic Screening counselling skills by attendance of regular education sessions on the topic
- Completion of the Family Planning Victoria Sexual and Reproductive Health course parts one and two.

Generally CMP midwives will have a minimum of 5 years postgraduate experience.

Each year the midwife must present to the credentialling committee made up of the health service Director of Nursing, Obstetrician and the Midwifery Unit manager. The midwife’s curriculum vitae must demonstrate evidence of all of the above and be supported with two professional references evidencing their advanced skills ability.

In the near future additionally the Nurses Board of Victoria must endorse the midwives working at the level of Midwife Practitioner. These Midwives will be required to complete education and demonstrate competency in pharmacology for the schedule of drugs relevant to midwifery clinical practice to take on the new role of prescribing medications. It is planned that Midwife Practitioners in the future will be educated to Masters level.
The policies

The CMP runs as any other unit in the health service with a comprehensive business plan in line with the organisational operational and strategic plans.

Over the development periods of MCP and CMP the steering committee have developed a series of policies that facilitate the midwife lead care philosophy, these policies are:

- Admitting Privileges and Credentialling Policy – outlining the processes involved for a midwife to be credentialled at Northeast Health and have admitting rights including visiting access, case management across the continuum of care, referral to specialists and discharge.

- Clinical Practice Guidelines for Midwifery Admissions of Clients to Northeast Health Wangaratta outlining when women should be admitted for care.

- Policy and Guidelines for Ordering Pathology and Radiological Investigations, this policy outlines the tests CMP midwives can order and the reasoning behind each test.

- CMP Group Practice Guidelines outlining the team management procedures such as remuneration and sick leave relief. This policy also includes the aims and team philosophy and the team mechanisms.

- Nurse Practitioner Drug Formulary Clinical Practice Guideline outlining the medications that can be prescribed by Midwife Practitioners within the CMP and the reasoning behind each medication. This policy is currently in draft awaiting the formalisation of the Nurse Practitioner legislation in Victoria.

- Midwifery Consultation / Referral to Medical Specialist Clinical Practice Guideline outlining the process of referral of clients to General Practitioners, Obstetricians or Paediatricians.

- Antenatal Clinical Practice Guidelines, Northeast Health Wangaratta has adopted the Three Hospitals Antenatal Guidelines 2001 across all midwifery streams including CMP.

The cost

The CMP is a free service provided to families who choose this model of care. The cost of providing the program is born entirely by Northeast Health Wangaratta funded via the Victoria acute health budget on a case mix basis.

The process of cost comparisons between conventional and caseload midwifery are interwoven and complex, however making assumptions that post natal in hospital care costs are the same for both groups and the major cost is salaries and wages the two streams work out very even on a cost comparison. For the majority of cases in the CMP there are minimal medical costs, however the midwife labour costs are higher recognising the need to renumerate midwives for the advanced level of practice and responsibility.
The major issue around cost is the program shifts all antenatal costs from Medicare costs to health service costs. Midwives are unable to have provider numbers and therefore cannot charge Medicare for routine antenatal visits, likewise pathology and radiology cannot be billed to Medicare, as doctors are not routinely the initiators of these tests in the CMP model. If midwives had access to Medicare funding then the CMP would be a favourable model cost wise for midwifery care in the state public health system.

**Rurality**

The CMP is ideally suited to the rural model and is adaptable to take into consideration the distance factor, which is prevalent in rural Australia. Women who use the CMP are located up to 150kms from Wangaratta, the team have in response to demand set up two outreach centres in the region, with antenatal clinics provided in these centres as required. The team recognises that those travelling need to arrive in Wangaratta early in labour, the birthing rooms are home like and accommodate partners and other family members as desired.

**OUTCOMES**

To forge a legitimate place in midwifery care delivery the CMP must demonstrate that the service they provide benchmarks or compare favourably against the state and local averages across a range of areas.

**Birth outcomes**

A comprehensive range of obstetric indicators for normal versus assisted deliveries and babies born with Apgar scores greater than 4 at five minutes is measured. The service offered by the Community Midwife Program compares most favourably against the mainstream model of care offered at WDBH and the state figures as shown in Table 1. The overall rate of normal delivery has remained consistently high over a sustained period of time.

**Breastfeeding**

The benefits of breastfeeding infants exclusively for the first four months of life with continuation into the second year have been well documented and form part of the World Health Organisation’s recommendations for Safe Motherhood Policy (1996).

Education, encouragement and support of breastfeeding is a high priority in both the ante and postnatal periods of the CMP. Breastfeeding initiation and persistence of breastfeeding has been high within CMP clients for the first six weeks. After this time the women are discharged from the program and then are followed up by the Maternal and Child Health Service. Figure 1 shows the percentage of mother’s breastfeeding at birth and on discharge with the CMP comparing well with the overall NHW percentage. Further research is required to assess breastfeeding percentages at 4 and 6 months.
Table 1 Comparative birth outcomes local and state (%)

<table>
<thead>
<tr>
<th>Delivery outcomes</th>
<th>CMP (n=426)</th>
<th>NHW (n=61,569)</th>
<th>State (2000) n=61,569</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total normal vaginal deliveries</td>
<td>74.2</td>
<td>61</td>
<td>63.5</td>
</tr>
<tr>
<td>NVD primigravida</td>
<td>63</td>
<td>No data</td>
<td>50.3</td>
</tr>
<tr>
<td>Forceps delivery (all confinements)</td>
<td>5</td>
<td>4.4</td>
<td>7.0</td>
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<tr>
<td>LUSCS</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Emergency</td>
<td>8</td>
<td>12</td>
<td>12.0</td>
</tr>
<tr>
<td>Elective</td>
<td>11</td>
<td>19</td>
<td>11.0</td>
</tr>
<tr>
<td>Total</td>
<td>19</td>
<td>31</td>
<td>23.0</td>
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<tr>
<td>Apgar &lt; 4 @ 5 mins (live births only) (n=151)</td>
<td>0</td>
<td>No data</td>
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<tr>
<td>Still births</td>
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<td>0.7</td>
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</table>


Figure 1 Breastfeeding retention, Wangaratta/CMP, 2001–02 (n=430)


Client satisfaction

In order to assess client satisfaction with the CMP a comparative survey was conducted between clients in the four models of care offered at Northeast Health Wangaratta. The sample size of the survey was 136 with results indicating satisfaction with CMP equal to or better than the other models of care as indicated in Figures 2, 3 and 4.
**Figure 2  Involvement in pregnancy decision making**

![Involvement in pregnancy decision making](image)


**Figure 3  Confidence in antenatal care by model type**

![Confidence in antenatal care by model type](image)

**Figure 4** Rating of care during labour

![Bar chart showing ratings of care during labour for CMP, S/C, Pvt Obs, and Pvt GP.](chart)


**Length of stay**

Clients of the CMP have reduced length of stay in hospital as demonstrated in Figure 5 which compares over a 2 year period the length of stay of CMP client against the Victorian State average.

**Figure 5** Postnatal length of stay < 3 days, Victoria/CMP, all confinements

![Bar chart showing postnatal length of stay for Victoria and CMP in 1999 and 2000.](chart)

Source: Epi Info, Victorian Perinatal Data Collection Unit.
THE FUTURE

In the immediate future the CMP will change its labour profile to include the endorsed Midwife Practitioner roles this will introduce new challenges for skills and education development to the team.

Northeast Health Wangaratta is currently implementing a clinical decision support Information Technology program Orion across the acute hospital. One of the extensions to this project is the ability to have web based medical records, CMP is interested in piloting a web based midwifery record as a pilot to compare the effectiveness of this against the client held notes process currently in place.

RECOMMENDATIONS

Providers of Midwifery services review there models of care and consider introducing a CMP model similar to that developed by Northeast Health Wangaratta to allow pregnant women the option of a family centred stream of care.

That the Commonwealth Government follows the lead of State Governments and removes the barriers to the development of Nurse/Midwife Practitioner models in Australia. The area in need of most urgent reform is that involving the allocation of Medicare Provider numbers to Nurse/Midwife Practitioners who are formally endorsed by the state Nurses Board for advanced practice.

BIBLIOGRAPHY

Gumley S. 1999. Midwife Care Project. A partnership between Ovens & King Community Health Service and Wangaratta Base Hospital. Final Report to Department of Health Victoria and the Alternate Birthing Services Program.


PRESENTER

**Chris Giles** is the Director of Nursing at Northeast Health Wangaratta, a position held for the past three years. Before this Chris spent six years as Director of Nursing/Health Service Manager at Carnarvon Regional Hospital in WA. Chris has extensive experience as a nurse and midwife and has been involved in local government and other community projects. After choosing to branch into a management role Chris has completed a Graduate Diploma in Health Management with the University of New England.