

Maternal and child health service nursing
workforce assessment—project report
January 2004

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Introduction

This report, prepared for the Community Care Division, Department of Human Services (the department), provides an assessment of the current and future requirements for the Victorian Local Government (local government) Maternal and Child Health (MCH) nursing workforce.

The study includes a quantitative analysis of workforce supply and demand both for the current year as well as projections out to 2012–13. The study also provides qualitative information derived from MCH nurse focus groups in relation to factors affecting recruitment to and retention of staff to the MCH nursing workforce.

The study was conducted under the aegis of an advisory group comprising representatives from the education sector, the Nurses Board of Victoria, MCH coordinators, the department, local government and the Municipal Association of Victoria (MAV).

Workforce assessment

An analysis of workforce supply was conducted using data from the Victorian Nurse Labour Force Survey, the MCH Staff Profile Survey conducted by the department as well as graduate and enrolment data provided by RMIT, La Trobe and Deakin Universities which are the primary providers for MCH courses. A “stocks and flows” approach was used as the basis for estimating changes in the MCH supply pool. This involved a count of the current workforce to establish a baseline which is then adjusted for intakes and losses and expected changes in workforce characteristics.

Using this approach, the total local government MCH workforce was estimated at 455 full time effective staff (FTE) in 2000–01 comprising 322 in metropolitan areas and 133 in rural areas. An increase of 37.8 FTE was estimated for 2001–02 which was more than offset by an attrition of 50.8 FTE. The net effect is an estimated 2.8 per cent decrease to 442 FTE. Projection of these estimates out to 2012–13 generates an estimate for the local government MCH workforce of 332.5 FTE.

The study also generated a projection to cover an “improved supply scenario” on the assumption that policy interventions can be made to improve recruitment and retention of local government MCH workers. Given that graduate numbers have been highly volatile in recent years with some universities experiencing a decrease in intake with others showing an increase, a mid point of five per cent per annum growth rate in graduate numbers was assumed out to 2012–13. It is also assumed that the number of graduates taking up local government MCH work would increase by two per cent per annum, that the proportion of part-time to full-time work would remain constant at 75 per cent and that the number of nurses leaving local government MCH employment, in terms of FTE, would decrease by five per cent per annum over the forecast period. Under this scenario, the total local government MCH nurse FTE would decrease to 429 in 2003-04 and thereafter increase to 502 in 2012–13.

The approach used in this study of workforce demand modelling drew on data from the Australian Bureau of Statistics (ABS) estimated current and projected population numbers, Victorian Department of Infrastructure (DOI) estimates of current and projected population aged 0-6 years and the Victorian Department of Human Services MCH Service Funding Formula. The Funding Formula for the number of funded hours required per child was multiplied by the appropriate projected population for the applicable age groups obtained from ABS and DOI estimates for the years 2001-02 to 2012-13. These projections were then divided by the number of funded hours per

service provision which can be provided by an MCH nurse in one year in order to translate the service demand projections into workforce demand. According to this formula a total of 500 FTE would be required to provide MCH services in 2001-02. Based on the projected decline in the size of the target population, however, this is expected to progressively decline to 469 by 2012-13.

A gap analysis was then conducted between the projections for local government MCH nurse supply and demand. For 2001-02 it is estimated that the estimated pool of local government MCH nurses was 442 FTE, compared with the estimate of 500 FTE required to fully meet the needs of the target population based on the MCH funding formula. This yields a net deficit of 58 FTE. Although over the period out to 2012-13 both supply and demand are expected to decrease, the deficit will widen as the projected decline in workforce supply is greater. The deficit is projected to grow progressively to 137 FTE by 2012-13. It is expected that the deficit will be relatively greater in rural areas (77 FTE) compared with metropolitan areas (59 FTE).

A similar gap analysis was also conducted for projections based on the improved supply scenario outlined above and the same demand scenario. In this case a deficit will remain until 2007-08 and thereafter there is projected to be a surplus of supply for the State overall. This surplus, however, is projected only for metropolitan local government areas with rural local government areas remaining in deficit to 2012-13.

The funding formula for the local government MCH Service comprises a number of components, one of which is an allowance termed Enhanced Maternal and Child Health Service (EMCHS) to provide outreach support, usually in the home to new mothers with significant early parenting difficulties. To illustrate the impact of a change in workforce demand a scenario was modelled where EMCHS was excluded. While this alleviated the size of the deficits, the overall picture remained the same as in the initial calculations, namely a deficit out to 2012-13 in both rural and metropolitan areas in the base case and a deficit in rural and surplus in metropolitan areas in the improved supply scenario.

The following tables illustrate the estimated supply of and demand for local government MCH nurses under both a base case and improved supply scenario.

Table 1 Current and projected workforce and requirements for local government MCH nurses—Base Case

Labour supply and demand	2001-02 Full-time equivalent	2005-06 Full-time equivalent	2012-13 Full-time equivalent
Estimate of workforce (supply)	442	379	332
Estimate of workforce requirement (demand)	500	481	469
Difference	-58	-102	-137

Note: Forecasts provided for each year—this table represents an overview of the forecasts and reflect the first, midpoint and final year of forecasts

Table 2 Current and projected workforce and requirements for local government MCH nurses—Improved Supply

Labour supply and demand	2001-02 Full-time equivalent	2005-06 Full-time equivalent	2012-13 Full-time equivalent
Estimate of workforce (supply)	442	437	502
Estimate of workforce requirement (demand)	500	481	469
Difference	-58	-44	33

Note: Forecasts provided for each year—this table represents an overview of the forecasts and reflect the first, midpoint and final year of forecasts

Data limitations

The projections and conclusions from this study are obviously contingent on the available data including its completeness and quality. Limitations to the data used include the limited and/or volatile data in relation to attrition, graduate recruitment and re-entry of staff to the local government MCH Service. Longitudinal data on local government MCH nurse numbers would improve the reliability and precision of supply estimates. Another conceptual problem is the comparison of FTEs in the supply side and demand side modelling. The supply side calculations are based on a count of actual staff numbers with FTEs apportioned by the relevant part time and full time staff ratios. The demand side calculations are based on hours of funded contact with clients. It has been necessary to make assumptions concerning the comparability of these data elements, which will be reflected in the projections made. It is also assumed that demand factors will remain constant, changing only in accordance with demography. Technological changes, increases in case complexity or policy driven changes can influence demand. No attempt to model these has been made given that there is no quantitative data in relation to these factors.

Qualitative data

The outcome of the nurse group interviews tends to support some of the conclusions drawn from the quantitative modelling. Local government MCH nurses reported a perception of increasing workloads which could correlate with the estimated deficit between supply and demand, though there is no benchmark data to support this view. Focus group perceptions of an ageing workforce, decreasing attractiveness of the local government MCH service relative to other MCH services, and professional isolation in rural areas are consistent with the outcomes of the quantitative analysis, which identified a high component of attrition due to retirement, a lower proportion of MCH graduates entering the local government MCH Service and a widening gap between supply and demand in rural areas compared with metropolitan areas.

Strategy development

Given that the quantitative analysis undertaken suggests a growing deficit between workforce supply in the local government MCH Service, the report outlines with eighteen possible strategies to improve recruitment and re-entry to the service, improve retention and stimulate the supply of the MCH nurse labour market over the long term. An attempt has been made to prioritise these activities. Some of these strategies would be expected to have an impact over the longer term while others may produce a more rapid but shorter term impact on workforce supply.

Key strategies include:

1. Recruitment and re-entry strategies aimed at improving the supply of local government MCH nurses. Key areas for action include the development of scholarship programs, re-entry courses, university open day programs, and marketing programs aimed at stimulating interest in the profession.
2. Retention strategies aimed at providing options for improving the retention of local government MCH nurses including improvement in clinical supervision, and the development of preceptor roles and models to manage competing work demands.
3. Labour market strategies aimed at stimulating the supply of local government MCH nurses over the long term. Key areas for action include the review of the range and extent of services performed by MCH nurses in the local government MCH service, career path development, and ensuring provision for adequate education places.
4. Service provision strategies aimed at introducing aspects of the recently developed *Children First* policy.

Strategies to improve local government MCH workforce supply

Evidence presented in this report indicates that even under optimistic scenarios there is a clear imbalance between existing and future local government MCH nurse numbers and demand for the MCH Service. In the long term it is likely that demand will continue to outstrip potential supply. The magnitude of this imbalance leads to the conclusion that wholesale, systemic change to the MCH Service over the long term, which includes local government, Department of Human Services and education providers, will address current and future workplace issues.

The following strategies to improve MCH workforce supply are grouped into those that should have shorter term, smaller impacts in the areas of recruitment and re-entry, and retention, and those that are likely to have the large scale, long term impact on the MCH labour market over the long term.

The *Children First* policy will influence the future direction of a number of Early Years program areas including the local government MCH Service and thereby mitigate a number of the issues identified in this workforce paper.

1. Recruitment and re-entry

The following series of strategies focus on stimulating the recruitment and potential re-entry of MCH nurses into the profession. It is important to note that while university graduate numbers have been growing over the last three years, the uptake of MCH graduate positions has slowly been decreasing. The reasons for the decreasing conversion from graduates to practitioners are not known.

1.1 Local government areas (LGA) experiencing recruitment difficulties consider the development of scholarship programs whereby midwives residing in the same or nearby LGA are subsidised to undergo MCH education and work in that LGA for a specified time following graduation.

Status Long term

Priority High

Rationale

The results of LGA MCH survey indicate that a number of LGA are experiencing difficulties in recruiting MCH nurses. In response, some LGA are offering scholarship programs to enable midwives to enter MCH training programs. These scholarships have been well received to date. The development of scholarship programs could be further enhanced by the inclusion of "work experience" placements in graduate programs.

1.2 Different MCH Service delivery models to be investigated for use in rural LGA with specific recruitment issues e.g. a combined midwifery and MCH nursing service, and/or the establishment in the future of the Nurse Practitioner role for rural MCH nurses.

Status Ongoing

Priority High

Rationale

Various rural LGA are experiencing difficulty recruiting MCH practitioners, with an estimated nine per cent of regional vacancies unfilled during 2000 (LGA MCH survey). In addition, local government MCH nurses have expressed a need for review of MCH service delivery in these areas. Consideration of options for regional areas experiencing difficulties in recruiting MCH nurses could feed into the broader review of the MCH profession.

1.3 The Department of Human Services and MAV to liaise with the relevant universities on the development of re-entry courses including information sharing on course uptake and graduate levels

Status Medium term

Priority High

Rationale

At the time of this report, RMIT are awaiting accreditation of a re-entry course and La Trobe University's re-entry course is to begin with a full intake of students. This is based on the belief that there is demand for such a program, and anecdotal information suggests there is a significant number of MCH qualified nurses that are not currently working in MCH nursing. The 2000-01 nurse labour force survey indicates that of 1,366 MCH qualified nurses there are 555 nurses that have no involvement in MCH through either a primary or secondary employment position. Re-entry courses would assist in stimulating the MCH labour market, which in the long term could translate to an increase in the size of the work force.

It will be important to ensure that key stakeholders, including the Department of Human Services, are regularly informed on the number of re-entrants to the MCH profession.

1.4 MAV and the relevant universities to organise a forum in which MCH nursing students near the completion of their courses can meet with representatives from the LGA.

Status Short term (and on-going)

Priority High

Rationale

The numbers of MCH graduates entering the MCH profession have decreased in recent years. The proposed forum would assist in promoting MCH vacancies, and encouraging MCH graduates to enter the MCH workforce.

1.5 The Department of Human Services and relevant universities to consider investigating the reasons for the decreasing conversion rate of MCH graduates to practitioners.

Status Short term

Priority Medium

Rationale

Over time, the rate of MCH graduates entering the MCH profession appears to be reducing. RMIT data shows that since 1998, the level of MCH graduates entering the practice has decreased by 20 per cent per annum. This is contributing to both

the existing and projected workforce deficit. University graduate surveys and/or the commission of primary research may assist in identifying the primary reasons for what appears to be a decreasing level of practice attractiveness. In the long term, this research and investigation will assist in identifying an appropriate policy response.

1.6 Universities or the Maternal Child Health Special Interest Group, in conjunction with the Department of Human Services and/or MAV, to conduct an "Open Day Program" targeting midwives and other relevant nursing specialities.

Status Short term (and on-going)

Priority Medium

Rationale

The research process conducted as part of this study shows that there is a perceived lack of awareness of MCH nursing, even within the nursing profession. Other areas of nursing in particular the public acute care sector are currently publicising and promoting heavily, and these high profile campaigns appear to be achieving success. The open day forums should form part of a broader marketing program for the MCH nurse profession.

1.7 MCH nurses, as a profession, to review the marketing strategies of high profile nursing, for example, Acute Care, Mental Health, to determine how and when to market the profession more broadly. The development of an effective marketing strategy could be developed in conjunction with other community-based nursing specialities, such as school nursing.

Status Medium

Priority Medium

Rationale

There is the belief held by many in the MCH profession that MCH nursing is not well understood, even by midwives and other nurses, let alone by school leavers considering entering nursing.

In addition, information gathered through the focus group process indicates that local government MCH nurses perceive local government and other stakeholders as having a low level of awareness of the value of the service. In this respect, the development of an effective marketing program should not only focus on stimulating interest in the profession, but also improving local government awareness of the value offered by the MCH service.

The long term aim of this recommendation is to ensure heightened awareness of the MCH profession as a career choice, and increase stakeholder awareness of the value of the service.

1.8 Identify research and quality improvement opportunities and encourage MCH nurses to undertake this within their practice.

Status Long term

Priority Low

Rationale

Local government MCH nurses have identified the need to conduct research to enhance their practice, and improve service provision and client outcomes. Local government MCH nurses could be involved in the promotion of new initiatives through evidence-based practice. The short term effects of this recommendation include a likely increase in local government MCH nurses conducting MCH nursing research. In the medium to long term, quality improvement and research opportunities for local government MCH nurses will enhance the profile of MCH nursing, and improve the service. It may also provide a greater career pathway for local government MCH nurses.

2. Retention

The following strategies, which focus on the key issues identified by MCH practitioners in focus group discussions, provide options for improving the retention of local government MCH nurses.

2.1 Neighbouring LGA to consider forming agreements whereby relieving and permanent nurses can be shared/rotated between them.

Status On-going

Priority High

Rationale

Many LGA, particularly those covering rural localities, are experiencing difficulties in attracting local government MCH nurses and in engaging relievers. This difficulty is partly due to the limited shortage of practitioners, and also to the limitations associated with rural location (familial issues, geographic isolation). In the short term, providing a system of co-opting resources may provide immediate relief for local government MCH nurses. This may allow local government MCH nurses to take leave such as sick leave or leave for professional development. Local government MCH nurse relievers will also benefit with more consistent employment opportunities and better planning. LGA may also be able to provide a more continuous service. In the long term, more local government MCH nurses may be attracted to permanent work in these areas, knowing they will be adequately relieved when on leave and back log of work minimised. LGA may wish to consider cross border employment arrangements/opportunities for permanent staff such as job sharing which may provide a variety in the work for local government MCH nurses.

2.2 Investigate strategies and models to support local government MCH nurses to manage competing work demands.

Status Medium term

Priority Medium

Rationale

The Victorian Nurse Labour Force Survey (2000) indicates that 32 per cent nurses who work as MCH nurses in their principal job, worked additional unpaid hours, while 17 per cent of nurses who work in MCH as their second job, worked additional unpaid hours.

The research conducted as part of this study indicates that workload is a workforce issue for the local government MCH profession, and a reason for some local government MCH nurses contemplating leaving the service. The short-term impact of providing strategies and models which support local government MCH nurses to manage workload may include time management, reduced stress and improved client service. In the longer term, a more strategic approach to workload management will improve retention rates and attract more local government MCH nurses into the profession.

2.3 Investigate options for improving supervision support and referral networks, particularly for rural, MCH nurses

Status Medium to long term

Priority Medium

Rationale

The issue of isolation and limited professional support is a key consideration for the local government MCH workforce. While isolation is more apparent for rural MCH nurses, metropolitan practitioners also indicate that support and networking, including supervision would assist in providing skill development and professional enhancement. Supervision across Victoria should be encouraged with relevance to the needs of the local government MCH nurses as identified by local demographics. In the long term, improving network linkages will enhance the referral structures within the local government MCH profession and assist in enhancing the quality of the MCH Service.

2.4 Provide more education for clinical MCH nurses to undertake preceptor roles

Status Long term

Priority Medium

Rationale

Many local government MCH nurses have stated that they would like to take up a preceptor role if time allowed, and if there was an educational course available for them to do this. MCH nursing educators have advised that MCH students would benefit from this.

More local government MCH nurses will undergo MCH preceptor education. This would enhance the role of local government MCH nurses and assist in the development of an expanded career path. MCH students would benefit from student placements with clinical local government MCH nurses who have undergone formal preceptor education.

2.5 Develop more flexible modes of learning for rural local government MCH nurses (such as telephone health facilities).

Status Long term

Priority Medium

Rationale

For many rural local government MCH nurses, professional development opportunities are limited by the cost, geographic distance, and availability of relieve. Providing and improving, over the long term, options for delivering education and professional development programs will allow greater education and training opportunities for LG MCH nurses in rural areas. In the long term, providing flexible education programs will enhance the skill and knowledge base of the MCH profession.

2.6 MCH nurses to promote examples of supportive and effective management practices in local government MCH Service.

Status Ongoing

Priority Medium

Rationale

A key concern for local government MCH nurses is the perceived inconsistency in management practices across LGA, and the potential impact this can have as on the local government MCH service. Focus group outcomes indicate that supportive management is a key aspect of job satisfaction for local government MCH nurses.

Ensuring consistent management across a sector is a challenge faced by many professions, and one that requires a long-term commitment to progressive and responsive management practices. Opportunities to promote effective and supportive practices may influence management practices across the sector.

3. Stimulating and monitoring the labour market

The following series of strategies are aimed at stimulating the supply of MCH nurses over the long term. Key areas for action include the clarification of the role of the local government MCH nurse, aligning conditions, and ensuring provision for adequate education places.

3.1 Key stakeholders to instigate a review of the present MCH role in LGA including the range and extent of services performed by MCH nurses. The review should focus on identifying options for expanding complementary workers in the local government MCH Service.

Status Long term

Priority High

Rationale

The local government MCH nurse profession provides a unique and highly skilled service to the Victorian community. Existing workloads and the likely increase in the complexity of client care coupled with existing and forecast workforce shortages, require a long-term policy response. It is unlikely that in the short-term local government MCH nurse numbers will match demand. The *Children First* policy as outlined encourages the department and service providers to take into consideration responses based on the needs of the local area to provide a high quality, responsive service to meet the needs of vulnerable families with children from birth to school age. Exploring options to develop a multi-discipline response coordinated by the local government MCH Nurse and/or new professional models such as the Nurse Practitioner role provides an important opportunity in growing the MCH workforce, and addressing in the long term, the shortfall in supply.

3.2 Investigate data collection procedures and processes to monitor the MCH workforce.

Status Ongoing

Priority High

Rationale

The ongoing monitoring of the MCH workforce is an important consideration for all stakeholders. Presently, data collection on the MCH workforce is limited to a yearly snapshot of the number of MCH nurses working in the local government service. This survey is conducted by the Department of Human Services. Information on re-entry levels, attrition and the size of the non-working MCH pool is, however, limited. This present workforce assessment is limited by these data gaps. The introduction of regular, consistent and integrated data collection process is required to enable ongoing monitoring of the MCH workforce. This will require a high degree of co-operation and willingness on behalf of local government areas, the department, universities and MCH practitioners.

3.3 Encourage universities to increase the number of graduate places, including HECS based, in existing university courses, and ensure that proposals for change, including increasing the number of full-fee paying places, are carefully considered and the ramifications of these initiatives are fully canvassed by universities with all stakeholders.

Status Ongoing

Priority High

Rationale

Providing accessible and reasonable cost education is an important component in managing the MCH workforce. Ensuring that universities are encouraged to make available adequate MCH nurse places, and that courses are relevant and attractive to potential entrants, is an on-going requirement of the Department of Human Services, and MCH professionals. Modelling on graduate numbers has indicated that a doubling in graduate numbers is required to balance the workforce deficit by 2012. This represents the provision of, at least, an additional 26 new graduates per annum to 2005, or alternatively under a less rapid approach, the provision of 12 per annum to bring the workforce into balance by 2012.

4. Service provision

- 4.1 Department of Human Services (the department) in consultation with the Municipal Association of Victoria (MAV), and other stakeholders, to assess the present approach to funding the MCH service. A key consideration for the assessment is the adequacy of the system in covering the full range of services required of the MCH service.**

Status Long term

Priority Medium

Rationale

The Labor Financial Statement, as part of the *Children First* policy, allocated funding over four years which will allow individual LGA and MCH practitioners to deliver the local government MCH Service to meet local community needs. A high share of the MCH nurses consulted during the study process stated that the current funding formula for the MCH service was inadequate. Any review of the funding formula should take into account the changed nature and complexity of the MCH role and ensure adequacy of funding for all aspects of the role including administration, professional development, special needs etc. This is deemed important because many local government MCH nurses cite workload and unpaid extra work as a major source of dissatisfaction, and likely reason for exiting the profession.

In the long term, ensuring sufficient funding for the service may improve staffing levels thus reducing local government MCH nurse workload, increasing the appeal of the profession and improving retention rates.

Conclusion

The results of this study indicate that the local government MCH service faces a potential growing deficit in supply of nursing staff in both rural and metropolitan areas, based on current levels of recruitment and attrition required to meet the projected demand. If policy interventions are made which can increase the supply of graduates to the MCH profession by five per cent per annum and attrition can be reduced to five per cent compared with the 10 per cent observed in 2001–02, it is estimated that supply will meet projected demand in metropolitan areas over the period out to 2012–13 but problems in rural areas are likely to remain intractable.

The conclusions of this study are dependent on the quality of the data and the disparity in this data must be acknowledged. These particularly include the need for longitudinal data relating to re-entry of qualified MCH staff to the local government MCH workforce, and the number of MCH qualified persons not working in MCH roles. While this places limits to the quantitative precision of the forecasts, the data is sufficiently reliable to be confident that the local government MCH Service will face a shortage of qualified staff over the coming 10 years.

It is assumed that demand factors will remain constant, changing only in accordance with demography. Policy makers may need to give consideration to the possibility of changes in demand which may be environmentally driven (for example through changing technology or increases in case complexity) or policy driven (for example through more selective targeting of the MCH services in contrast with the current universal service). If demand does in fact remain constant, it will be necessary to implement strategies to improve local government MCH recruitment and retention and 18 possible strategies have been identified to achieve this. On-going monitoring of the projections provided in this report implementation of the *Children First* policy and actual local government MCH full-time effective numbers will be an important component in assessing the overall impact of the implementation of the strategies provided.