REGULATION OF TRADITIONAL MIDWIFERY IN MINNESOTA:

CONSIDERATIONS & RECOMMENDATIONS

A REPORT TO THE

MINNESOTA BOARD OF MEDICAL PRACTICE

Minnesota Department of Health
Health Occupations Program
June 1, 1992

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June 10, 1992

H. Leonard Boche, Executive Director
Minnesota Board of Medical Practice
106 Colonial Office Building
2700 University Avenue West
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Dear Mr. Boche:

This report fulfills the Health Department's commitment to the Board of Medical Practice to study and make recommendations about the need to regulate traditional midwifery and how best to protect those individuals who decide to have homebirths.

I have a concern that the recommendations are insufficient to adequately protect the public from harm caused by untrained or incompetent homebirth attendants. We cannot abide practices and activity that result in serious, irreparable harm to women and infants. However, there are also limits to the control and regulation that government can exercise and effectively implement. Therefore, the recommendations in this report strike a balance, and I support them. At this time, the most effective regulation of midwifery involves state recognition of homebirth practice as a first step towards promoting safer practice and eventual development of standards while empowering parents to make informed decisions about homebirth risks and the relative skills of midwifery practitioners.

I view this study as the beginning of a process rather than the conclusion of a research effort. Much more is involved than a decision about what the Board of Medical Practice or the Health Department should do in the next legislative session to regulate midwifery and homebirth activity. The Board and the Department must continue the dialogue initiated by this study. I ask the Board to join the Department in making a commitment to learn about, communicate with and build trust with a unique community and diverse cultures. The best way to protect the public is to work collaboratively to educate consumers and to promote and increase access to prenatal care. I believe that the Department, the Board, midwives and homebirth parents have a common goal: safe births and healthy babies and moms. We must work together to achieve this goal.

Sincerely yours,

Marlene E. Marschall
Commissioner of Health

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EXECUTIVE SUMMARY

Traditional midwifery is being practiced in Minnesota and will continue to be practiced as long as there are women seeking birth attendants to assist them in birthing at home. The Board of Medical Practice has authority and there is a framework to regulate midwifery, however, it has not been exercised for a number of years, and midwifery is essentially unregulated at this time. Because of its continued presence in the community, the Board of Medical Practice asked staff of the Health Occupations Program at the Minnesota Department of Health to form an advisory group and to conduct a policy analysis study to make recommendations regarding the following questions:

- **What regulation of traditional midwives, if any, is necessary to adequately protect the health, safety and welfare of citizens?**
- **How can the state best protect those members of the public who decide to have homebirths?**

This report is the result of a policy analysis effort conducted by the Health Department and the Midwifery Study Advisory Group. The significant findings, conclusions and recommendations of Department Staff and the Midwifery Study Advisory Group are described below.

HOMEBIRTH SAFETY AND INCIDENCE OF HARM

The bulk of the research data comparing hospital and homebirth does not show that homebirths are inherently unsafe, and for selected populations, may even produce better outcomes than hospital births. Factors which appear to influence homebirth outcomes are adequate screening, planning and preparation and the presence of a trained attendant.

- The risk of harm from midwifery practice may be low.

Very little conclusive information has been gathered regarding homebirth and traditional midwifery services in Minnesota. Data is difficult to gather in Minnesota because the present methods for filing birth certificates do not allow individuals other than the physician, physician delegated individual or parents to enter attendant information. From the data available, it is evident that approximately .5% of Minnesota births occur in the home setting. These births are attended by a variety of caregivers. Homebirths in Minnesota appear to have good outcomes based upon the birth weights recorded on birth certificate applications and the transfer rates for midwife attended homebirths.

- Despite apparent low overall risk of harm, some midwives and other homebirth attendants engage in unsafe practices.

Department Staff obtained sufficient general information to conclude that unsafe practices are occurring with some regularity. In response to a request for details of incidents involving potential and actual harm to women and

infants, Department Staff received the following information regarding practices known to occur:

- Misrepresentation by midwife regarding experience/qualifications.
- Lack of or inadequate screening for risk factors which would indicate that homebirth is inappropriate for a particular woman.
- Inadequate prenatal care.
- Failure to refer a woman to medical care if indicated or to transport as necessary.
- Insufficient precautions or unsanitary procedures in cases of premature rupture of membranes.
- Inadequate monitoring of women/infant during labor and birth.
- Delay or failure to intervene as needed in labor.
- Lack of informed consent by homebirth consumer.

- Specific examples of unsafe practices and actual harm to women and infants arising from incomeptent practice could not be obtained. This strongly suggests that formal regulatory schemes for midwives and homebirth practices would be ineffective.

Specific evidence of unsafe practices and actual harm to women and infants are not included in this report because homebirth attendants and midwifery representatives did not consent to presentation of such information to the Midwifery Study Advisory Group or to Department Staff.

Reluctance of midwifery representatives to provide information stems from concerns related to privacy of the women and infants involved and prosecution of all midwifery practice as a result of disclosure. Information from birthing parents was not available because homebirth parents generally do not fault the birth attendant in cases of injurious outcomes.

The unavailability of specific evidence of potential and actual harm is a critical issue and has significant implications for proposals to regulate and the options for systems of regulation. The difficulty in obtaining information about harm arising from unregulated practice as part of a policy study strongly suggests that the information will be as difficult to obtain within a formal regulatory framework.

MIDWIFERY TRAINING AND SKILLS

Training of traditional midwives in Minnesota is quite varied. Other individuals of varying abilities and skill levels call themselves midwives and are attending homebirths.

- The individuals attending homebirths include obstetricians, family practice physicians, certified nurse-midwives, osteopaths (with and without hospital affiliations), chiropractors, naturopaths, nurses, physician assistants and trained medical technicians as well as friends and family members.

The safety and quality of services offered by traditional midwives is equally varied. Some women have attained a high degree of skill based on extensive

self-teaching and experience while others have had minimal training and possess rudimentary skills.

- The Minnesota Midwives' Guild has established standards of care and categories of midwifery certification that recognize varying levels of training and skill.

Not all homebirth attendants meet MMG standards, and members of the Midwifery Study Advisory Group expressed serious concerns about the practices of these other "midwives." Unsafe practices described to the Advisory Group include inadequate risk assessment to determine suitability for homebirth, inadequate or absent prenatal care, poor record keeping, lack of transfer of care or referral when the situation warrants, unsafe birthing practices, failure to transport when necessary, and lack of postpartum care.

As is presently occurring, those women who desire homebirths will continue to follow through with their intentions with or without the presence of a trained attendant. The availability and quality of trained attendants in the future will be further influenced by the type of regulation and the manner in which it affects activity concerning midwives and midwifery practices. For example, regulating "midwives" could leave other homebirth attendants unregulated.

- Presently, consumers do not have adequate means of differentiating the quality of services and distinguishing practitioners.

The following elements would better assure the safety of midwifery care to those consumers who choose homebirths and the services of the traditional midwife:

- A community of traditional midwives with a basic level of training which enables them to adequately assess women for risk and to provide care for the normal pregnancy, labor and birth;
- Standards of practice for those who offer their services as traditional midwives;
- A satisfactory back-up system with the medical community should emergencies arise; and
- Adequately informed consumers.

RATIONALE FOR REGULATION

The state has definite interest in and authority to regulate traditional midwives if necessary to protect the health and safety of its citizens.

- It is reasonable to conclude that the health and safety of Minnesotans is not effectively protected by the regulatory status currently afforded midwives.

In the absence of full implementation of a legally authorized regulatory scheme, there is general evidence of unsafe practices occurring in the homebirth community in Minnesota.

Regulatory models exist within the United States and Europe, however, these models cannot be directly implemented in Minnesota without adaptations to meet the specific needs of the communities in this state. Aspects of these models which can be incorporated include:

- An adequate method of risk screening so that referral to the appropriate caregiver can occur.
- Development of healthy attitudes in the public towards pregnancy and birth.
- A basic level of education and skill for practicing traditional midwives.
- Encouragement of a collaborative relationship between traditional midwives and the medical community.
- A method of limiting liability for physicians who choose to back-up traditional midwives.

EFFECTIVENESS AND COSTS OF REGULATION

Department Staff believe and the Midwifery Study Advisory Group concurs that: if a formal mandatory system of regulation were imposed, a significant number of midwifery practitioners would not comply and would practice "underground; and if a formal voluntary system of regulation that established standards for practitioners were implemented, most midwives would not choose to participate.

- Consumers of midwifery services, i.e., homebirth parents, are not willing to come forward when wronged.

If consumers choose to use midwifery practitioners opposed to regulation, and they choose not to come forward with complaints about midwifery practitioners and services, little commensurate public benefit would be gained from imposing a formal system of regulation. The primary purpose and benefit of regulation would be frustrated, and the overall effect may promote a further compromising of public protection for consumers of midwifery services. Regulation which would not be effective should not be implemented. Only those regulatory options should be considered which would enhance public protection.

- The financial cost of implementing a formal regulatory system such as licensure, permitting or registration would be substantial. Department staff estimate the cost would be about $2,000 annually per midwife in the first five years of regulation.

Implenting less restrictive types of regulation may be financially feasible. If a regulatory system such as licensure, registration or permitting is not imposed, the costs cited above may be avoided, and less comprehensive regulations may be equally or more cost effective in protecting the public.

- While there are important reasons to regulate midwifery, the direct and indirect costs of implementing a formal regulation system such as licensure, permitting or registration are substantial and clearly outweigh benefits.

- Less restrictive, inexpensive alternatives to formal regulation systems are available or can be implemented.

Changes to existing civil liability laws and vital statistics reporting requirements and establishing minimal but enforceable standards of safe midwifery practice would require a one-time commitment of resources to legislative and rulemaking efforts. Costs associated with enforcing safe practice standards would be incurred only when investigation and enforcement activity occurred.

- The Department of Health may be the most appropriate agency to assume responsibility for protecting members of the public who decide to have homebirths.

The Department currently conducts several activities that may be sufficient to provide necessary public protection. These include the vital statistics system that can be used to more accurately record homebirth activity and outcomes, investigative authority to respond to egregious homebirth practices, and ongoing maternal and child health activities that may be consistent with an effort to educate the public about the risks and precautions involved in birthing at home.

ADVISORY GROUP AND HEALTH DEPARTMENT RECOMMENDATIONS

The Minnesota Department of Health (MDH) acknowledges that homebirth is occurring and will continue to occur whether or not traditional midwives are regulated. One goal of the MDH's mission as a public health agency involves the promotion and development of good prenatal care and safe birth places and practices for all women and children of Minnesota. The decision as to place of birth is a personal one which the birth parents ultimately make, most often without awareness of alternatives to hospital birth, but in a growing number of cases, with deliberate consideration of homebirth as an option.

There is potential harm from the unregulated practice of midwifery for women who choose to have homebirths and for their infants. There are practices occurring in the homebirth community which are unsafe and have the potential for causing severe harm or death to the woman or infant. The actual and potential harm is significant enough to warrant some kind of regulation, although not necessarily and only of traditional midwives.

MDH Staff and the Midwifery Study Advisory Group recommend phasing in implementation of changes and additions to current regulations by the MDH in collaboration with the Board of Medical Practice. These changes and the sequence and timing of their implementation are as follows:

Step 1

- Revise vital statistics rules to require midwives and other homebirth attendants to sign birth certificate applications, amend other laws to remove concern regarding prosecution for practicing medicine without a license;

- Provide a place for recording the intended and actual place of birth on the birth certificate application;

- Devise a method for identifying and compiling information on homebirths.

Rulemaking by the Health Department would be necessary to amend the vital statistics reporting requirements. The MDH has the capability of extrapolating the information gathered on the birth records for further study as necessary. Costs to implement this change to vital statistics records should be minimal.

- Institute limited immunity for physicians, nurses and other health care providers who accept transports from traditional midwives. Health care providers would only be responsible for the harm resulting from their actions and not adverse outcomes occurring as a result of the actions or inaction of a traditional midwife.

The current legal climate makes acceptance of transports an onerous responsibility for those health care providers who choose to do so. By providing limited immunity, the reluctance of health care providers for accepting women under the care of traditional midwives would, hopefully, be reduced resulting in better care for the woman and her infant. It is also hoped that such a statute would facilitate traditional midwives to transport clients when needed. Limited immunity for medical providers acting as backup to traditional midwives or accepting transfer of care is not recommended at this time. Numerous aspects of liability in these areas remain unresolved.

Legislative action would be needed to enact a statute containing the appropriate language. It is recommended that this proposal be submitted in the next legislative session.

Step 2

- Establish an advisory council composed of representatives of the traditional midwifery community, homebirth consumers and medical community under authority of the Commissioner of Health. The advisory council would advise Health Department staff regarding complaints received about homebirth practices and could assist in evaluating need for further regulation of traditional midwives and/or other birth attendants. The advisory council would also plan educational brochures and initiatives regarding homebirth. The Midwifery Study Advisory Group recommended that the majority of advisory council members be traditional midwives. Several Advisory Group members also urged that a research study or pilot program be conducted, possibly with federal grant dollars, to compare the relative safety of homebirths and hospital births in Minnesota.

- Develop strategies for improving communication between homebirth and medical providers so that there is continuity of care.

The advisory council should be initiated within one year from the release of this report. The need for funds would be limited to statutory per diem and expenses of council members. The advisory council could be funded by allocating a portion of the fees assessed and collected by each health-related licensing board. However, some Advisory Group members have reservations about this funding approach, and recommend that it be re-evaluated in view of recent assessments against this funding source that have not yet been fully realized. It was suggested that the legislature consider a general fund appropriation to the Health Department for this purpose, at least until such time as an estimate of advisory council operational costs can be determined.

Step 3

- The Health Department and the proposed advisory council should develop a consumer education brochure for prospective parents who are considering homebirth. The brochure would not promote, condone or discourage a particular place of birth, but should provide information regarding homebirth and choosing a homebirth attendant. The brochure could contain sample questions to ask the prospective midwife as well as other considerations involved when deciding whether to have a homebirth. The brochure might also contain contacts and resources for further information.

- A protocol should be developed regarding appropriate dissemination of the informational brochure. Distribution of the brochure could occur through various consumer groups, birth educators and possibly through providers of prenatal care and the Maternal and Child Health programs conducted by the Department.

The time frame for this step would be within one year from the establishment of the proposed advisory council. The brochure could be developed inexpensively by Department staff and distributed free at appropriate sites as public information within MDH budgets.

Step 4

- Institute a regulatory scheme similar to that in place for unlicensed mental health practitioners in which unsafe practices would be regulated rather than practitioners. Sanctions should be specified which might include civil penalties and restriction on the right to attend homebirths. Authority to conduct this activity should be given to the Health Department.

A formal regulatory system with jurisdiction over midwifery would not be as effective as definition and regulation for practices deemed unsafe. The unsafe practices occurring within the community are not always performed by traditional midwives, but also involve other individuals attending homebirths.

Formal systems of regulation such as registration or licensure would be ineffective. A registration system is voluntary under Minnesota law and

cannot directly affect conduct of those individuals who do not register. Licensure of qualified practitioners would likely have the effect of driving other attendants underground. Regulation of particular practices can reach individuals regardless of their regulatory status, qualifications or how they refer to themselves.

Legislative action is needed to effectuate laws that would sanction unsafe practices. Authority would need to be given a state agency to enforce these laws, and the Advisory Group recommended that authority be vested with the Department of Health. Components of the legislation would include a definition of midwifery, identification of homebirth practitioners to whom the laws would apply, definition of prohibited conduct, and forms of disciplinary action. The prohibited conduct would include but not be limited to those practices which have been identified as unsafe, such as the following:

- Attending birth as the primary caregiver in which the woman has obtained no prenatal care (to be defined), except in an emergency.

- Leaving prior to placental passage.

- Attending births of women who smoke cigarettes, consume alcohol and/or have diabetes mellitus, epilepsy, active hepatitis, sickle cell disease, renal disease, pre-eclampsia, cardiac disease, liver disease, thyroid disease, lung disease, cancer, systemic lupus, HIV positive, essential hypertension, bleeding disorders, thromboembolism or thrombophlebitis, Rh negative sensitized, or a current psychiatric condition requiring medication.

- Performing homebirth without current adult and infant CPR certification.

- Leaving woman in active labor before birth has occurred.

- Failure to transport in the following situations:
  Cardiac arrest, eclampsia or maternal convulsions, cord prolapse, maternal infection, maternal respiratory distress, active genital herpes, placenta abruptio, uncontrolled maternal hemorrhage or shock, maternal shock, or suspected meconium aspiration.

- Failure to obtain informed consent.

Exemptions may be provided for family members, where homebirth practice has religious basis, or in an emergency. The current authority and statutory definition of midwifery should remain in place until new legislation replaces it. The target date for this step would be the 1994 legislative session. Funding would have to be appropriated to provide the investigative and enforcement capabilities. Funding could be obtained by an allocation of the fees assessed and collected by the health-related licensing boards. Again, some Advisory Group members expressed concerns about this manner of funding.

- Develop and require use of a disclosure form for parents (similar to the bill of rights required in regulation of mental health practices) along with an acknowledgement by the woman of receipt of the disclosure form.

The Midwifery Study Advisory Group recommended that in conjunction with Step 4, the MDH and the proposed advisory council should attempt to obtain funding and conduct research that begins using vital statistic records and other research data to define practice standards for midwives.

Several Advisory Group members expressed concern that the MDH recommendations continue to leave midwifery practice undefined, and that ultimately practice standards and affirmative statements of actions that comprise safe practice should be adopted.

The recommendations in the report are made on the basis of the following rationale:

- A formal system of mandatory regulation would drive many midwives and other homebirth practitioners underground.

- An educational health promotion approach focused on consumers who make the decisions regarding birth place and birth attendant may be more effective than regulatory efforts geared at attempting to control practitioners many of whom do not want recognition or regulation by the state.

- To be effective, regulation requires the cooperation of consumers and practitioners to a minimal extent. Based on research and information received, MDH staff assert that a formal regulatory system would be ineffective because a significant number of consumers would not bring complaints and members of the homebirth practice community would not register with the state.

CHAPTER 1

INTRODUCTION

This report is the result of a study by staff of the Minnesota Department of Health under contract with the Board of Medical Practice. The Board of Medical Practice asked the Department to answer two questions:

- **What regulation of traditional midwives, if any, is necessary to adequately protect the health, safety and welfare of citizens?**
- **How can the state best protect those members of the public who decide to have homebirths?**

Department staff, with the assistance of the executive director of the Board of Medical Practice, formed the Midwife Study Advisory Group to assist in information gathering and analysis of issues related to the practice of traditional midwifery. This report was written by Tom Hiendlmayr and Annette Spencer of the Health Occupations Program utilizing the research done by Annette Spencer and the information gained through the advisory group.

The report is divided into six chapters which identify issues surrounding the practice of traditional midwifery, discusses the various perspectives on these issues and proposes methods and a schedule for regulating traditional midwives. Following submission of this report to the Board of Medical Practice, the Board will consider the information presented and determine a course of action for regulating traditional midwives in Minnesota.

Statute currently requires that an individual who desires to practice as a midwife in Minnesota shall apply to the Board of Medical Practice for a license.[1] The statute also states that a person who publicly professes to be a midwife or accepts a fee for attending women in childbirth is practicing midwifery.[2] The requirements for licensure include production of a diploma from a school of midwifery recognized by the Board, or completion of an examination, and compliance with other requirements of the Board.[3] The contents of the application for a midwifery license and subjects for the licensure examination are also set forth in rules.[4] (See Appendix A for the text of these statutes and rules.)

Despite these provisions, applicants for licensure have been unable to obtain a license because the Board has not exercised its authority to approve or develop an examination or procedure for processing licensure applications. Ebba Kirschbaum was the last individual to be licensed as a midwife in Minnesota. She was licensed as a midwife under Minnesota law and maintained her license until her death in 1984.

In the 1970's a group of local women began practicing as midwives and approached the Board for licensure as midwives. They were told at that time that the Board had not approved any schools of midwifery nor had it developed any examination for license applicants. No licenses for midwifery were issued at that time.

In the absence of successful licensure, the community of traditional midwives attempted to organize themselves. The first attempt, in the 1970s, resulted in Genesis, a group of metro area midwives. A second group, the Minnesota Association of Midwives was organized in the 1980s. Genesis and the Association merged in 1988 to form the Minnesota Midwives' Guild, with members from throughout the state. The group continues in existence today. Not all Minnesota midwives, however, are members of the Guild.

Legislatively, there have been several initiatives addressing the issue of regulation of traditional midwives. In 1983 there was an unsuccessful attempt to repeal the midwife licensing statutes. In 1988 the Board encouraged the homebirth community to initiate a legislative change in the licensing statutes. The Parents' Coalition for Homebirth was formed in response and sponsored legislation to retain the definition of midwifery and add a parents' rights clause to the statutes. An informed consent provision was also added to this legislation. The Parents' Coalition sponsored legislation was heard in committee but failed to progress further.

In the 1990 legislative session, a bill was introduced which defined "traditional midwife," outlined the characteristics of an organization to certify midwives, identified parental rights and set forth an informed consent provision. This bill received a committee hearing but progressed no further.

In the 1991 legislative session, unopposed by the homebirth community, the Board initiated legislation to address the licensing of traditional midwives. The Minnesota legislature amended the licensing statute for traditional midwives resulting in its present form and initiating a study to examine the issue of regulation of traditional midwives.[5] The statute, as amended, allows the Board to retain authority for licensing traditional midwives.[6] The Board gained additional authority to impose requirements for qualification as a traditional midwife as needed to protect the public and to adopt rules to implement Minnesota Statutes, sections 148.30 through 148.32. An additional provision in this law allows the Board to delegate a study to determine the appropriate level of regulation for traditional midwives and the content of any such regulation.

Traditional midwifery has been practiced in Minnesota and will continue to be practiced as long as there is a desire by women for alternative birth attendants. Authority and a framework to regulate the occupation is in place, however, it has not been applied for a number of years, and the occupation is essentially unregulated at this point. Because of its continued presence in the community, it is important to look at how the practice of midwifery impacts the delivery of maternal and infant health care with special attention to its effects on the health and safety of women and their infants.

GLOSSARY

The following definitions provide a common understanding of the terms used throughout this report:

Certified nurse-midwife - An individual licensed as a nurse by the Board of Nursing to practice professional nursing who practices midwifery and is recognized by the American College of Nurse-Midwives as meeting criteria for certification as a certified nurse-midwife.

Midwifery - The assessment and care of women and infants during pregnancy, labor, birth and the postpartum period.

Out-of-Hospital Births

- Planned, out-of-hospital birth - A birth occurring with the assistance of an attendant at a free-standing birth center, birth home, third party residence, or public accommodation (hotel or motel).

- Planned, attended homebirth - A birth occurring in the home with the assistance of an attendant (family member, friend, traditional midwife, certified nurse-midwife, physician, or other health care provider).

- Planned, unattended homebirth - A birth occurring in the home alone or with the assistance of the woman's partner.

- Unplanned homebirth - A birth in the home which occurs unexpectedly and unintentionally.

Traditional midwife - (Also referred to as lay midwife, direct-entry midwife, empirical midwife.) A community-based independent practitioner of midwifery. The traditional midwife may or may not be licensed, certified, or registered in a regulated health care profession. Education and training are obtained primarily through oral tradition and experience; medical training, resources, or education are not necessarily excluded. Standards of practice are defined by the Minnesota Midwives Guild, by the individual midwife, or are left undefined.

Transfer - A change of a woman's primary caregiver from the traditional midwife to the medical community. May occur at any time during the pregnancy or birth.

Transport - A transfer of care which occurs during the birth process and involves moving the woman from the home setting to the hospital setting.

ACKNOWLEDGEMENTS

Thanks and appreciation to members of the Midwifery Study Advisory Group:

Mary Hartmann, Chair, Midwife Study Advisory Group, former member of the Board of Medical Practice and current Executive Director of the Wayside House;

Ruth Anderson, Group Health, Inc.;

Rebeca Barroso, Senior Certified Traditional Midwife;

Melissa Coffey, Chair of Parents' Coalition for Homebirth;

Raymond DeVries, Ph.D., Associate Professor of Sociology at St. Olaf College;

Sharon Evans, Senior Certified Traditional Midwife, Minnesota Midwives Guild;

Karin Hangsleben, Certified Nurse-Midwife practicing in the metropolitan area;

Sharon Hills-Bonczyk, Certified Childbirth Educator in the metropolitan area;

Kathy Jenkins, President of International Cesarean Awareness Network/Cesarean Prevention Movement of Southeast Minnesota;

Rita Lais, Certified Nurse-Midwife practicing in the Fergus Falls area;

Barbara Leone, Family physician practicing in St. Paul at Model Cities and Ramsey Hospital;

Virginia Lupo, Perinatologist in practice at Hennepin County Medical Center;

Carol Manteuffel, Minnesota Board of Nursing;

Anne Montgomery, Family physician practicing in Northfield;

MaryAnn Stump, Blue Cross Blue Shield/Blue Plus of Minnesota;

Terry Wade, J.D., Attorney practicing in medical malpractice;

Ruth Wingeier, Certified Nurse-Midwife at Group Health, Inc. Taught at U of M Nurse-Midwifery Program 1988-1990. Previously worked 5 years in a rural Minnesota nurse-midwifery practice doing home and hospital births.

Rabbi Irvin Wise, homebirth parent, Executive Director, B'nai B'rith Hillel Foundation at the University of Minnesota.

Thanks also to the following who presented information at meetings or provided material for discussion: Rebeca Barroso, traditional midwife; Jeanne Bazille, traditional midwife; Sue Bedard-Johnson, MDH Minnesota Center for Health Statistics; Doris Brooker, U of M Department of Obstetrics and Gynecology; Melissa Coffey, Parents' Coalition for Homebirth; Jan Hofer, traditional midwife; Gene Senger, MDH Vital Records; and Kathy Wise, homebirth parent.

NOTES

1. Minnesota Statutes, §148.31. Minnesota Statutes §§148.30 through 148.32 and Minnesota Rules parts 5600.2000 through 5600.2100 concern licensing of midwives.

2. Minnesota Statutes, §148.30.

3. Minnesota Statutes, §148.31.

4. Minnesota Rules, part 5600.2000, subparts 3 and 4.

5. Minnesota Laws 1991, Chapter 106, sec. 5.

6. Minnesota Statutes, §148.31.

CHAPTER 2

HOMEBIRTH: OUTCOMES, SAFETY, RISKS

There has been much rhetoric regarding the risk of birth itself and the relative safety of hospital versus home birth. Little actual data, however, is available. The research data that is available is summarized in this chapter. First, information on the relative safety of birth in Minnesota is presented. Next, studies which have attempted to compare hospital and non-hospital birth outcomes are summarized. Finally, information and findings on practices in Minnesota are described. The following questions were asked:

- **What is the risk of adverse outcome in pregnancy and birth?**
- **What are the risks associated with homebirths?**
- **What is the relative safety of services provided by Minnesota midwives?**
- **What evidence is there of harm from midwifery practices?**

A. MINNESOTA DATA ON BIRTH OUTCOMES

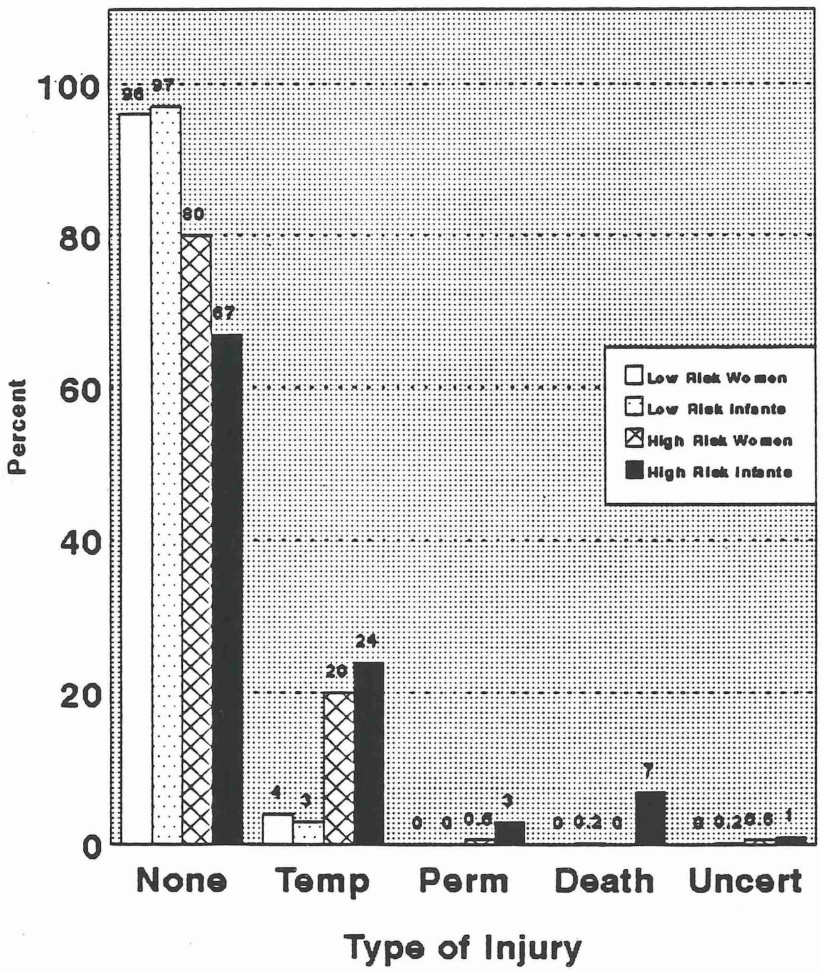
The Minnesota Obstetrical Malpractice Initiative (MOMI) forms the basis for a general discussion of birth outcomes in Minnesota. All figures are preliminary at this writing. While the information presented is valuable in assessing the risks associated with birth, it cannot be compared directly to the Minnesota data presented later in this chapter.

The MOMI study was conducted by the University of Minnesota, the Department of Family Practice and Community Health and the Department of Obstetrics and Gynecology. It was based on random selection of 5002 hospital births occurring in 1988-1989 in Minneapolis and St. Paul. The data was collected by chart review. Risk assessment of the prenatal, labor and delivery, and neonatal periods was performed based on the information obtained from the charts. The risk factors were subsequently weighted according to likelihood of injury from the risk.

Individuals in the data base were predominantly caucasian and married. Nearly half the births (40%) were first births. Sixty percent of the births were attended by obstetricians. Family practice physicians attended 22%, residents in training attended 7.4% and certified nurse-midwives attended 8% of the births. The health care payment source for 46% of the women was a Health Maintenance Organization. Thirty three percent were covered by private insurance and 15% had Medicaid coverage. The C-section rate for the group was 19%.

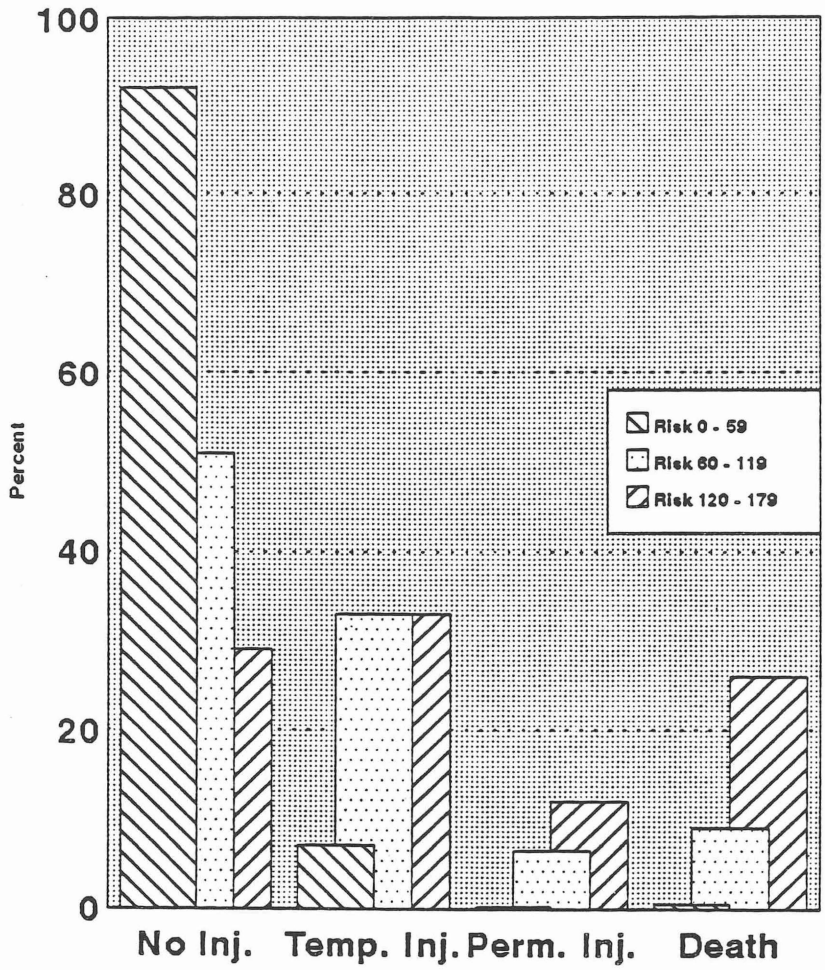
Approximately 500 of the 5002 cases studied did not have a significant risk score. Ninety percent of the pregnancies studied had risks at some time, with nearly half of these risks occurring within the prenatal period. Nearly 500 of the cases received a high risk score (greater than 40). The greatest number of risks were associated with labor and birth. A greater number of injuries to infants occurred in the high risk cases. See Figures 2.1 and 2.2.

Figure 2.1
Birth Outcomes
N = 5002



The higher the risk score, the greater the likelihood that injury will occur in pregnancy. It is suggested by the authors of the MOMI study that there should be an increased emphasis on and access to prenatal care, mandated risk analysis by providers, and improved documentation and consultation by primary caregivers. However, risk analysis alone does not determine outcomes. There must be recognition followed by proper management of the risk.[1]

Figure 2.2
Risk Score vs. Outcome
N = 5002



B. NATIONAL STUDIES COMPARING HOSPITAL AND NON-HOSPITAL BIRTHS

The table in Appendix B details studies addressing homebirth safety and risk. In summary, the studies indicate that:

- Planned homebirth with a trained attendant appears to offer a cost advantage to low risk women.[2]
- Babies born out-of-hospital are at no greater risk of being low birth weight than those born in-hospital.[3]
- Women are choosing homebirth and will continue to do so; if trained attendants become unavailable through regulation, women will likely choose untrained attendants, increasing the risks of homebirth.[4]

- The planning status of an out-of-hospital birth is a factor in its outcome. The neonatal mortality rate is much higher for unplanned out-of-hospital births while planned out-of-hospital births compare quite favorably with hospital births.[5]

- Birth outcomes of skilled traditional midwives compare favorably with those of physicians.[6]

- Homebirth with medical facility back-up can be a reasonable alternative to hospital birth for a screened, low risk population.[7]

C. MINNESOTA OUT-OF-HOSPITAL BIRTHS

The following data on Minnesota homebirths was gathered from three sources. The MDH Minnesota Center for Health Statistics provided data on births occurring form 1987 through 1990. Research of delayed filings of birth records from the Health Department Vital Records was conducted to obtain additional demographic information on homebirths. Finally, the Parents' Coalition for Homebirth surveyed practicing traditional midwives in Minnesota to obtain information regarding outcomes of midwife practices in Minnesota.

1. MDH Data on Non-hospital Births

Birth records data from the Minnesota Center for Health Statistics categorizes births according to attendant, (physician, nurse-midwife, other, unknown), and place of birth (hospital, named place, enroute, unknown). The following information for the years shown was gathered from the birth records submitted by the various Minnesota counties:

TABLE 2.1

NUMBER OF MINNESOTA OUT-OF-HOSPITAL BIRTHS*

1987	351 or .54% of total births
1988	386 or .57% of total births
1989	380 or .57% of total births
1990	348 or .51% of total births

* Enroute births are excluded from out-of-hospital figures.

Table 2.1 indicates that the percent of out-of-hospital births has remained fairly constant over the years shown. 1990 data is preliminary.

Traditional midwives and homebirths are not specifically noted on the birth certificates, therefore no specific statistics are available for these factors. Birth records do, however, provide for identity of birth attendants. Information on attendants at out-of-hospital births for the years 1987 through 1990 is shown in Table 2.2.

TABLE 2.2

OUT-OF-HOSPITAL BIRTH ATTENDANTS

	Physician	Nurse-Midwife	Midwife	Other	Unknown
1987	29%	6%	*	61%	4%
1988	29%	6%	*	61%	4%
1989	*	*	*	*	*
1990	15%	5%	2%	78%	0%

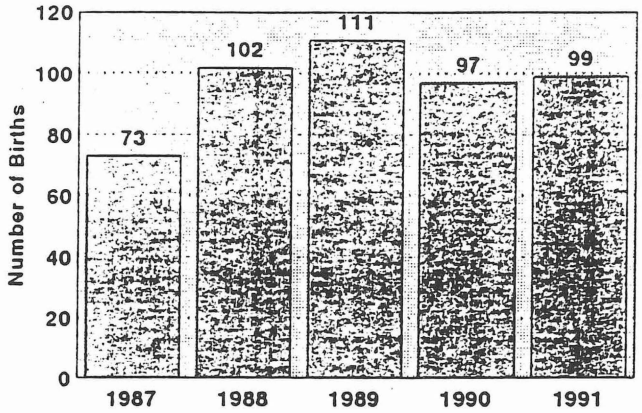
* Information unavailable

The attendant was identified as a midwife in the 1990 statistics when the "Other" portion of the vital statistics record was checked and there was some indication on the record that the attendant was a midwife. Not all traditional midwives identify themselves on the record, however, because of their legal status in the state at this time.

Additional information was obtained by reviewing birth certificates in the delayed filing records in the Vital Statistics Section of the Health Department. Delayed filing birth certificates are those applications for birth certificates submitted more than one year after the birth of the child.[8] Delayed filing birth certificate applications submitted to the Minnesota Department of Health for homebirths occurring from 1987 through December, 1991 are included in this data.

Delayed filing data must be read with a number of qualifications. Birth certificate applications submitted through the counties are not included. Nine births appearing to be unplanned (precipitous and no attendant or attended by EMS personnel) were eliminated from the data base. Finally, this data is from a very limited sample. Traditional midwives indicate that, based on their experience, the demographics of the delayed filing data are not consistent with the demographics of the populations they serve.[9] Therefore, caution must be used when attempting to draw conclusions regarding Minnesota homebirths in general.

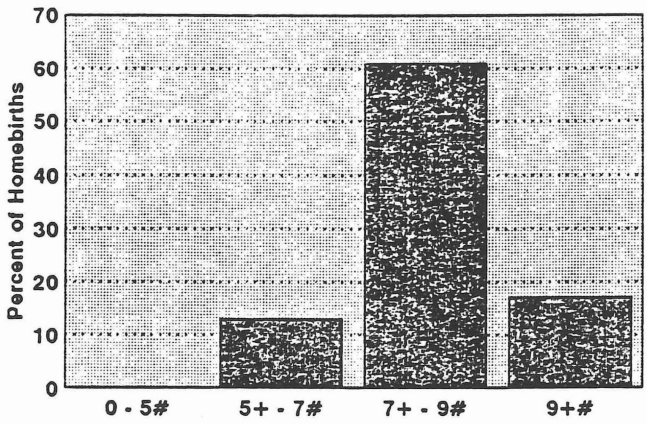
Figure 2.3
Minnesota Homebirths*
N = 482



*Based on delayed filing data
Due to limited sample, demographic data may not be representative of all hombirths.

Figure 2.3 indicates that the number of Minnesota homebirths has been fairly constant with slight fluctuations noted from year to year.

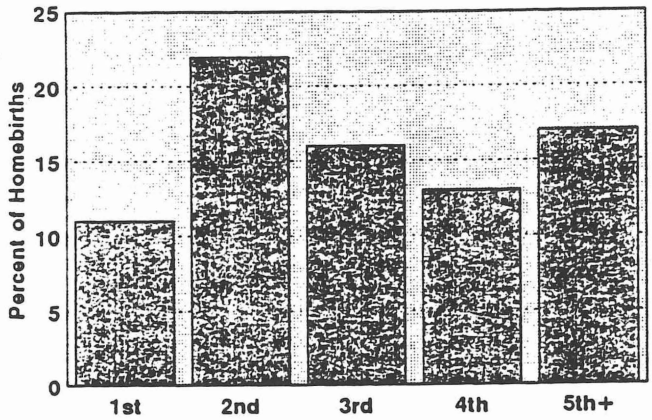
Figure 2.4
Birth Weight*
N = 438



*When indicated on record

Figure 2.4 shows that in the sample selected, with unplanned out-of-hospital births eliminated, there were no low birth weight infants. The majority of the infants were of average size as compared with the general population.

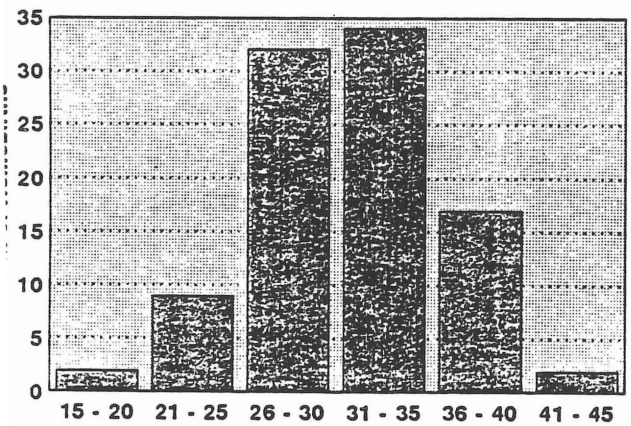
Figure 2.5
Birth Order*
N = 381



*When indicated on record

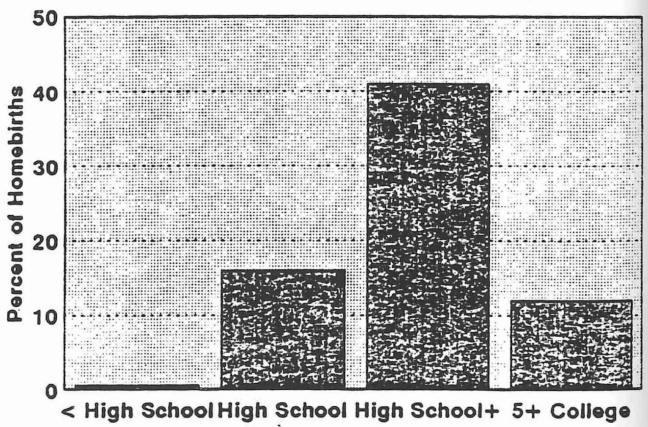
Figure 2.5 shows that information on birth order, when provided, indicates there are more second births taking place as homebirths.

Figure 2.6
Maternal Age*
N = 460



*When indicated on record

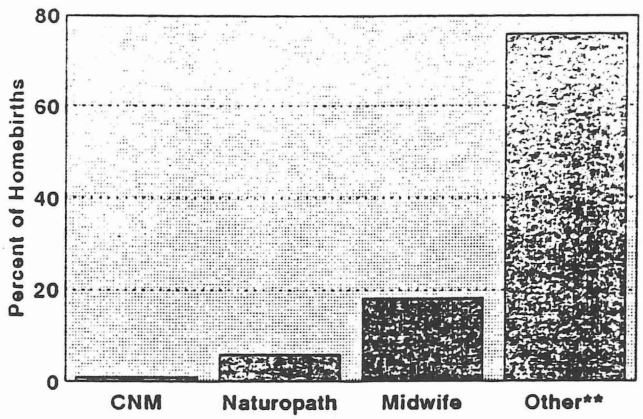
Figure 2.7
Maternal Education*
N = 335



*When indicated on record

Figures 2.6 and 2.7 show maternal demographics indicating that most women in this sample are post high school educated and in their late 20's or early 30's.

Figure 2.8
Homebirth Attendant*
N = 482



*As indicated by supporting documents
** Includes traditional midwives who choose not to be identified in "Midwife" category

Finally, the data show the majority of Minnesota homebirths are attended by "other" attendants. Figure 2.8 may be deceiving, however, because the vital statistics rules do not enable traditional midwives to identify themselves as birth attendants on the record. Additionally, traditional midwives often do not identify themselves as midwives on the record because of the current confusion regarding their legal status and fear of sanctions.

3. Minnesota Midwife Practices

In October, 1991, the Parents' Coalition for Homebirth conducted an informal survey of traditional midwives practicing in Minnesota. A midwife was identified as an individual who had attended one or more births as the primary caregiver within the past four years. Twenty-seven traditional midwives were identified by the survey. In addition, 3 individuals were unwilling to provide information, 2 offered misleading information and 7 individuals could not be reached for comment. The number of homebirths includes all homebirths attended by the individuals included in the survey for a total of 484 births within the past four years. The results of the survey are as follows:

TABLE 2.3

MINNESOTA MIDWIFE BIRTH OUTCOMES

Neonatal Deaths:	1/484 (2/1000)
Maternal Deaths:	0
C-section Rate:	10/484 (2.06%)

TABLE 2.4

TRANSFERS OF CARE
N = 484

Prenatal	12
During Labor	24
Postpartum	14
Infant	5
Labor and postpartum transfers	38 (7.8%)

According to the survey, the overall postpartum hemorrhage rate was 25/484 or 5.16%. Eighty percent of these postpartum hemorrhages were resolved at home. The screening practices of the traditional midwives surveyed vary. Some midwives attend only 5% of those who seek their services while others will attend birth for any and all women who requests their service. Traditional midwives in this survey provide an average of nine prenatal visits and four postpartum visits for their clients.

D. IDENTIFIABLE HARM FROM UNREGULATED PRACTICE OF MIDWIFERY

In addition to the survey information, MDH staff sought information from the midwifery community about the extent of unsafe homebirth practices.

- Department Staff obtained sufficient information to conclude that unsafe practices are occurring with some regularity. Specific examples of harm are not included in this report because homebirth attendants and midwifery representatives did not consent to presentation of such information to the Midwifery Study Advisory Group or to Department Staff. In response to a request for details of incidents involving potential and actual harm to women and infants, Department Staff received the following information regarding practices known to occur:

  - Misrepresentation by midwife regarding experience/qualifications.
  - Lack of or inadequate screening for risk factors which would indicate that homebirth is inappropriate for a particular woman.
  - Inadequate prenatal care.
  - Failure to refer a woman to medical care if indicated or to transport as necessary.
  - Insufficient precautions or unsanitary procedures in cases of premature rupture of membranes.
  - Inadequate monitoring of women/infant during labor and birth.
  - Delay or failure to intervene as needed in labor.
  - Lack of informed consent by homebirth consumer.

Reluctance of midwifery representatives to provide information stems from concerns related to privacy of the women and infants involved and prosecution of all midwifery practice as a result of disclosure. Information from birthing parents was not available because parents generally do not fault the birth attendant in cases of injurious outcomes.

E. CONCLUSION

It appears that the vast majority of all births proceed to a satisfactory outcome. The MOMI study indicates that risk assessment can identify those women or infants who are most likely to experience adverse outcomes. This would seem to indicate that adequate prenatal screening should occur for all women followed by appropriate referral to the caregiver who will best meet the needs of the individual woman. The fact that a large number of the risks occur during labor and delivery indicates that, for the safety of those who choose homebirth, an adequate back-up system with medical facilities and personnel is an essential precaution.

The bulk of the data comparing hospital and homebirth does not show that homebirths are inherently unsafe, and for selected populations, may even produce better outcomes than hospital births. Factors which appear to influence homebirth outcomes are adequate screening, planning and preparation and the presence of a trained attendant. As is presently occurring, those women who desire homebirths will continue to follow through with their intentions with or without the presence of a trained attendant. The availability of trained attendants in the future will be further influenced by regulations for midwives.

Very little conclusive information has been gathered regarding homebirth and traditional midwifery services in Minnesota. Information from other parts of the country or other countries is helpful, but cannot be applied directly to Minnesota because of differences in population, cultural expectations, socioeconomic factors and geographic considerations. Data is difficult to gather in Minnesota because the present methods for filing birth certificates do not allow individuals other than the physician, physician delegated individual or parents to enter attendant information. Minnesota midwives are generally reticent about providing information regarding their activities because of their uncertain legal status at this time.

From the data available, it is evident that approximately .5% of Minnesota births occur in the home setting. These births are attended by a variety of caregivers. Homebirths in Minnesota appear to have good outcomes based upon the birth weights recorded on birth certificate applications and the transfer rates for midwife attended homebirths. Care must be taken in forming conclusions regarding the safety of homebirth in Minnesota, however, because of the limited data. Likewise, comparisons of Minnesota's hospital births and homebirths should be made with caution due to the multitude of variables influencing the outcome of a particular pregnancy. Staff believe that these variables are not reflected in the available data sources.

The unavailability of specific evidence of potential and actual harm is a critical issue and has significant implications for proposals to regulate and the options for systems of regulation. The difficulty in obtaining information about harm arising from unregulated practice as part of a policy study strongly suggests that the information will be as difficult to obtain within a regulatory framework.

NOTES

1. Statements by Doris Brooker, M.D., Midwife Study Advisory Group meeting, November 7, 1991.

2. Claude A. Burnett III et. al., "Home Delivery and Neonatal Mortality in North Carolina," Journal of American Medical Association, 244:24 (December 19, 1980) 2745.

3. Eugene R. Declercq, "Out-of-Hospital Births, U.S., 1978: Birth Weight and Apgar Scores as Measures of Outcome", Public Health Reports, 99 (January-February 1984) 67.

4. Dona Schneider, "Planned Out-of Hospital Birth, New Jersey, 1978-1980," Social Science and Medicine, 23:10 (1986) 1015; Wayne F. Schramm et. al., "Neonatal Mortality in Missouri Home Births, 1978-1884," American Journal of Public Health, 77:8 (August 1987) 934.

5. M. Ward Hinds et.al., "Neonatal Outcome in Planned v. Unplanned Out-of-Hospital Births in Kentucky," Journal of American Medical Association, 253:11 (March 15, 1985) 1582.

6. Lewis E. Mehl et. al., "Evaluation of Outcomes of Non-Nurse Midwives: Matched Comparisons with Physicians," Women and Health, 5:2 (Summer 1980) 24, 27.

7. Lewis E. Mehl et. al., "Outcomes of Elective Home Births: A Series of 1,146 Cases," Journal of Reproductive Medicine, 19:5 (November, 1977) 290.

8. Minnesota Rules, part 4600.0100, subpart 2.

9. Statements of practicing midwives to Midwifery Study Advisory Group meeting, April 29, 1992.

CHAPTER 3

MIDWIFERY SCOPE OF PRACTICE

This chapter discusses and identifies the distinguishing characteristics of traditional midwifery practice. The training and standards of practice are discussed with the following questions in mind:

- **How does traditional midwifery differ from obstetric practice in a medical environment?**
- **What is the extent and adequacy of traditional midwife training?**
- **What are the practices engaged in by Minnesota midwives?**
- **Are there any practices which pose a danger to Minnesota citizens?**
- **What is needed to improve the quality and safety of services provided by Minnesota midwives?**

A. MIDWIFERY PRACTICE AND OBSTETRIC PRACTICE

The following summary of the philosophy and scope of practice of traditional midwifery and its contrast with conventional medicine reflects the general beliefs of the respective communities but does not necessarily represent the philosophy held by any particular practitioner.

It must be pointed out that the best interests of the infant are at the heart of the philosophies and practices of both the conventional medical model and the traditional midwifery model. Traditional midwives, homebirth advocates and parents believe they are acting in the best interests of the infant by choosing homebirth with a traditional midwife attendant, just as the conventional medical community believes hospital birth with a certified nurse-midwife or physician attendant is in the best interests of the infant.

The scope of practice engaged in by traditional midwives varies according to the philosophy and experience of the individual midwife. The Minnesota Midwives' Guild (MMG) has attempted to define a scope of practice and set standards of practice for Minnesota's traditional midwives, however, not all Minnesota midwives are Guild members. Although the MMG is not representative of the practice of all Minnesota midwives, it is the best documented source of information on the traditional midwife's scope of practice available, and it is the primary source referred to in this portion of the report.

The scope of practice for traditional midwives is significantly distinct from that of physicians who attend birth and from certified nurse-midwives. Traditional midwives are primary attendants for homebirths rather than hospital births. The homebirth setting necessitates a different scope of practice because of the differences in the resources available in the home and hospital settings. The MMG believes that because traditional midwives perform in a setting where there is little technology and no specialists available at a moment's notice, a traditional midwife must provide a more complex standard of care than that which is provided by physicians and certified nurse-midwives in the hospital setting.[1]

Much of traditional midwifery practice is in contrast to conventional obstetric practices. The medical model sees a potential for danger and harm to the mother or infant inherent in pregnancy and birth. There are definite guidelines for the normal parameters of pregnancy and birth and deviation from the norm requires intervention - using drugs, technological devices, or surgery - to assure a satisfactory outcome for the woman and infant. Homebirth is perceived by the medical community as dangerous, lacking the necessary equipment, facilities and personnel should problems develop during birth. The medical model, furthermore, perceives a responsibility to two patients, the woman and her infant, often with conflicting needs. The best course of action for one might not be the optimal course of action for the other.

In traditional midwifery, birth is perceived as a normal physiological process. The traditional midwife's approach is to educate the woman and empower her to give birth, providing assistance and intervening only as necessary. In traditional midwifery, the woman takes responsibility for the birth outcome. Prenatal care stresses prevention of problems through education, rest, proper nutrition and stress reduction. Generally, traditional midwives do not believe in nor use technological intervention to assist the woman to give birth. The home setting is viewed as the safest place for birth for the majority of women, but not necessarily for all women. Finally, the best interests of the woman and her infant are perceived to be one; the course of action that is best for the woman is best for her infant.

B. SKILLS/TRAINING REQUIRED AND ADEQUACY OF TRAINING

Minnesota's traditional midwives possess a wide range of training and skill levels. The MMG recognizes and has established standards for certification as a birth attendant, apprentice midwife, certified traditional midwife and senior certified traditional midwife. Each designation requires a certain amount of experience and study of particular topics in order to qualify for certification.[2]

Testimony to the Midwife Study Advisory Group indicates that other individuals of varying abilities and skill levels are attending homebirths in addition to the recognized midwifery certification levels. These individuals include obstetricians, family practice physicians, certified nurse-midwives, osteopaths (with and without hospital affiliations), chiropractors, naturopaths, nurses, physician assistants and trained medical technicians as well as friends and family members.

Lack of formal training or education is common among traditional midwives in the United States. There are very few traditional midwifery schools in the United States, accredited or unaccredited. Any nursing schools which offer training as a midwife are generally open only to individuals who have a nursing degree. There is one school for certified nurse-midwives located at the University of Minnesota, Minneapolis campus. There are no schools or training programs for traditional midwifery in Minnesota. Minnesota's traditional midwives, therefore, are primarily self-taught, having acquired their knowledge through independent reading of midwifery and medical texts,

observation of births and informal apprenticeship with more experienced midwives. Apprenticeship programs, however, have drawn criticism because:

- There is little control over "teaching material" and the program may not include the range of normal and abnormal conditions/births that an apprentice needs to know as a midwife.[3]

- Less breadth of study and less exposure to different styles is possible in an apprenticeship program.[4]

- Apprenticeship programs are not standardized; there is not a minimum level of competency which can be offered by an apprenticeship program.[5]

The lack of clearly identified basic skills is a significant problem. Currently there is no national standard and little consistency among state laws. The Midwives' Alliance of North America (MANA), a professional association for midwives, is attempting to develop a set of core skills. It has developed a standardized examination which is beginning to be implemented on a nationwide basis.

C. HOMEBIRTH PROCEDURES

Various elements of the scope of practice bear upon the safety and outcome of homebirth. Particular issues which impact birth risks are discussed below. While traditional midwifery cannot be equated to homebirth, traditional midwives in Minnesota are limited to practicing within the home setting, therefore the practice of traditional midwives will be discussed in the context of homebirth.

1. Risk Assessment of Homebirth Candidates

Unlike most health care services, traditional midwifery is not directed by a physician. Prospective clients seek out a traditional midwife as their primary caregiver during their pregnancy and for the birth. Prospective clients do not obtain a physician referral and most clients of traditional midwives do not consult with other health professionals during the course of pregnancy.

The Minnesota Midwives' Guild recommends risk assessment at various stages of pregnancy. They have identified 28 contraindications for homebirth and 20 conditions or situations requiring a hospital birth. These can be found in Appendix C. Guild standards require midwives to refer women with these conditions to a medical health care provider.[6]

Traditional midwives outside the Guild do not necessarily follow the same guidelines in assessing risk. Information presented to the Midwife Study Advisory Group reveals a wide range of screening procedures by traditional midwives practicing in Minnesota. Examples of current practices are:

- Some midwives have been known to accept any woman at any stage of pregnancy as a client.

- Other midwives will rely on "self selection" as a screening mechanism. (i.e. Those clients who are unsuitable for homebirth will eventually decide to have a hospital birth.)

- Still others take a more "medical" approach and screen clients based on medical or health history indicators (obtain a health history, assess obstetric history, review care received elsewhere, obtain lab work) as well as social and psychological factors and rationale for choosing a homebirth.

- The traditional midwife who does not adequately assess for risk may be unaware of complications, physical conditions or emotional factors which may make homebirth unsafe for a particular woman. Complications may arise during pregnancy or labor due to an unassessed risk and the midwife may not be prepared to deal with these complications.

2. Standards of Prenatal Care

As in other aspects of care, prenatal care provided by midwives is of variable quality and quantity. Some midwives will agree to attend birth for women who have had no prenatal care without providing the prenatal care which is lacking. Others are very thorough in providing prenatal care, exploring psychosocial factors as well as health and medical factors in preparing the woman for birth.

MMG guidelines require a detailed health history of both the mother and the father, as well as a physical examination and lab tests for the mother. Nutritional status is evaluated and monitored throughout pregnancy.[7] Education is an important component of prenatal care. It is not uncommon for the traditional midwife to spend a great deal of time with the prospective mother during prenatal visits. One study reports that prenatal visits may last from one to three hours.[8]

Guild standards recommend a minimum of ten prenatal visits, according to the following schedule: every three to four weeks until the 28th week, every two weeks from the 28th to the 36th week, and weekly from the 36th week until birth.[9] Prenatal care includes assessment of the woman's physical and psychosocial status in addition to assessment of the developing fetus.[10] The traditional midwife who is a Guild member, uses diet, exercise, stress-reduction and self-esteem building as cornerstones of prenatal care.[11]

The number and quality of prenatal visits varies widely among traditional midwives who are not members of MMG.

- A midwife may attend the birth of a woman with whom she has only had telephone contact or has not met prior to the onset of labor, without performing any prenatal care or visits.[12]

- Prenatal visits may be primarily social in some cases, without proper assessment of risk factors, adequate nutritional assessment or adequate prenatal education occurring.[13]

These practices may mean the midwife fails to identify developing problems and is inadequately prepared to deal with complications which may arise in the course of pregnancy and birth. Inadequate preparations for homebirth may take place during the prenatal period. There may be no firm decision regarding the place of birth, home or hospital, prior to labor. The home may be insufficiently prepared and supplied. The midwife may promote homebirth without consideration as to the best place of birth for a particular woman.[14]

3. Records and Charting of Prenatal Care

Accurate record keeping for each client is recommended by the MMG. Individual charts must include a health history, lab results, labor and birth records and prenatal and postpartum information.[15] Records are considered confidential and are released only with the woman's consent.[16]

In actual practice, record keeping varies among traditional midwives in Minnesota as to thoroughness and extent. There may be no prenatal records. Availability of the midwife's records upon transfer or transport of a client to medical care is also variable and may result in excessively invasive treatment to a woman who is transported.[17]

4. Transfer/Referral of Care

The MMG has identified conditions for its members which require medical consultation. These are set forth in Appendix C. The Guild has standards for conditions requiring consultation, with two senior midwives, or if midwives are not available, with a physician.[18] Standards for referring the mother or newborn infant to a health care provider during the postpartum period have also been established.[19] In the absence of practice standards, it is within the discretion of the individual traditional midwife to refer women to other health care providers. Referral varies according to the midwife's ability to assess the situation, the accessibility of adequate medical care, and the pregnant woman's attitude toward conventional medical care providers. There may be no transfer of care or consultation when complications arise.[20]

5. Labor and Birthing

The traditional midwife's role in labor is to "support the natural process and the mother's own efforts, in an attitude of appropriate observation and patience, as well as alertness to the parameters of normalcy."[21] In conformity to the philosophy of traditional midwives, most midwives have a very noninterventionist approach to birth and allow the woman to labor at her own pace. Generally, very little technology is used in assisting the birthing woman. The role of the traditional midwife is to assure that the physical and emotional environment are conducive to a safe birth. Traditional midwives assess the physical condition of the laboring woman and infant and emotional state of the woman throughout the labor. Assessment of the physical condition of mother and infant after birth is also the responsibility of the midwife.

- Labor and birthing practices vary widely among traditional midwives in Minnesota. Information provided by the homebirth community to MDH staff

indicates that many unsafe practices are occurring which appear related to insufficient skill, training and experience:

- There have been instances of insufficient precautions when a premature rupture of membranes occurs.
- Vaginal examinations have been performed without gloves following premature rupture of membranes and the time of rupture of membranes may not be noted.
- Monitoring of maternal blood pressure and vital signs has been inadequate or nonexistent during labor.
- Fetal heart tones have been inadequately monitored.
- Hydration and bladder assessment have been inadequate or nonexistent.
- Women have been permitted to labor at home with a known transverse lie.
- Women have been encouraged to push without complete cervical dilation.
- Artificial rupture of membranes to facilitate labor has occurred in homebirths.
- There has been failure to suction the infant in cases of moderate to heavy meconium staining.
- In some instances the birth attendant has waited an undue amount of time to relieve shoulder dystocia.
- Traction has been applied to the cord prior to separation of placenta.

6. Transport Issues

Transport to the hospital from the home setting during labor does occur with variable frequency. The MMG has developed standards requiring transport from the home setting to the hospital which are found in Appendix C. The MMG recommends that Guild midwives accompany the woman to the hospital and remain with the mother and infant if possible.[22] The decision to transport the birthing woman to the hospital depends on the individual traditional midwife's discretion, her ability to identify the risk of the particular situation, her experience in dealing with similar complications and the laboring woman's preference. Once the decision to transport has been made, the midwife who is not a member of MMG may or may not accompany the woman to the hospital. There are several transport issues that impact the safety and outcomes for the woman and infant:

- Transport may or may not occur when necessary depending on the individual traditional midwife's ability to assess the situation. A midwife may fail to transport when necessary, endangering the lives of both woman and infant. In contrast, a midwife may unnecessarily transport the woman and infant for fetal distress when none is present due to her inability to read and interpret heart tones. Unnecessary transport may also occur if a midwife is exhausted and feels she cannot handle the situation adequately. Transport which occurs without an adequate explanation disrupts the birth process and causes undue anxiety in the parents.

- Information provided to the Midwife Study Advisory Group indicates that clients who are transported during labor due to complications encounter problems with medical staff. Women who had planned a homebirth but who are transported to the hospital may be lectured by medical staff or may

be treated with unnecessary physical roughness. Physicians and other health care personnel may be reluctant to provide care for a woman transported into the hospital in a homebirth emergency situation. They fear legal liability for the results of a situation over which they have had no control.[23]

- When transports do occur, the interface between the medical community and the traditional midwives is not always conducive to adequate care for women or their infants. Often prenatal or labor records do not accompany the woman to the hospital so as to conceal the nature of the situation. Thus, medical personnel receive the woman or infant without knowing what the course of pregnancy or labor has been, and may lack information essential to timely and proper treatment of the individual. Additionally, midwives, if they do accompany their client to the hospital, may not be allowed to remain with the woman and provide necessary emotional support.

7. Postpartum Care

Postpartum care is provided by traditional midwives in varying degrees. The MMG guidelines for postpartum care recommend postpartum visits at eighteen to thirty-six hours after birth, at three to five days after birth, at seven to ten days after birth and at six weeks after birth.[24] Postpartum care includes physical examination of the woman and infant as well as assessment of the emotional adjustment of the family. Patient education continues in the postpartum period and may include providing information regarding contraception. In addition, the Guild midwife provides information to the parents regarding metabolic screening, eye prophylaxis, and the procedure for obtaining a birth certificate for the child.[25]

Testimony to the Midwife Study Advisory Group indicates that inadequate postpartum care occurs. Traditional midwives have been known to remain with the woman and infant for less than two hours following birth. Maternal lacerations may be insufficiently assessed, without repair or referral for care made. Follow-up visits may not be made and monitoring of maternal and infant vital signs in the 24 hours immediately following birth may be insufficient. One week visits to assess the condition of the woman and infant may not be done, and long term follow up may be absent.

D. RESPONSIBILITY AND ACCOUNTABILITY: MIDWIVES AND PARENTS

In contrast to conventional medical practice, traditional midwifery shifts major responsibility to the parents in a number of ways. The midwife views her role as empowering the woman to give birth. The woman is responsible for taking good care of herself during pregnancy and preparing for birth. Parents are responsible for obtaining lab work and prescription drugs such as rhogam, infant eye prophylaxis, and vitamins.[26] It is up to the parents to make arrangements for any medical assistance which may be needed.[27]

Traditional midwives are not accountable to any particular authority for their actions as birth attendants. The Guild has a system of peer review which requires an annual review of the traditional midwife's practices.[28] In addition, Guild midwives who experience a maternal or infant death or birth injury are required to submit to a peer review.[29] The Guild has no authority, however, to enforce disciplinary actions against a midwife who refuses to participate in peer review or comply with the recommendations of the Guild and not all Minnesota midwives belong to the Guild.

While the responsibility for a homebirth falls heavily on the parents, they do not always have adequate and accurate information on which to base their decision for homebirth and choice of birth attendant. The only standards delineating what information must be presented to prospective clients before they agree to accept a traditional midwife as their primary caregiver are those developed by the MMG. The Guild midwife must disclose her philosophy of practice; her background, education and training; the number of births attended as primary midwife and as assistant; and her experience with complications.[30] Not all Minnesota midwives are Guild members, however, and the amount and quality of information provided to parents prior to entering into a relationship with a midwife varies.

- Individuals or couples seeking a traditional midwife have little information on which to base their selection of a caregiver.

- There is no official roster or register of midwives for reference.

- The MMG maintains a listing of members who have met Guild qualifications, but Guild membership does not encompass all midwives practicing in Minnesota.

- Information about individual traditional midwives is obtained primarily through the "grapevine" existing in the homebirth community. Accuracy of the information is variable and misperceptions exist regarding the practices of traditional midwives.

The midwife may often be perceived to be in a position of or have greater knowledge than the parents regarding the birth process.

- There have been instances of individuals representing themselves as midwives to parents, yet failing to acknowledge their role and responsibility as a midwife during birthing situations requiring their expertise and judgement.[31]

Although the goal may be an equal relationship between the traditional midwife and parents, the parents may be at a disadvantage and the midwife is in a position of power. Prospective parents enter into the homebirth experience with varying levels of understanding of the risks and benefits of homebirth and of the skill and expertise of the midwife they have chosen. The information obtained by parents depends on their motivation to pursue self education through literature, the reliability of their contacts in the homebirth "grapevine," and the knowledge level and openness of the midwife with whom they have come into contact. Parents need to be adequately informed

in making their decision for homebirth and choice of homebirth attendant. Any informed consent that the parents give should be based on adequate knowledge. As a matter of public policy, the Legislature should not allow parents to sign away their rights to pursue an action for negligence.

E. MEDICAL DEVICES, DRUGS AND PROCEDURES

Interest in and actual use of physician back-up, drugs and technological procedures varies widely among midwives. For example:

- Some traditional midwives do not want midwives to use any drugs or devices in attending birth.
- Other traditional midwives may use herbs or natural remedies.
- Still others would like to be able to use a few select drugs such as pitocin and methergine for postpartum hemorrhage; to repair minor lacerations with use of a local anesthetic; to perform and repair episiotomies in an emergency situation; and to use DeLee suction and oxygen for infants when necessary.
- A few midwives in the United States are proponents of using even more technology, such as intravenous drips and vacuum extraction, in the home setting.

In general, Minnesota midwives would like the legal authority to intervene with technology appropriate to the home setting when necessary. They are not proponents of hospital practice in the home setting, but would like the authority and equipment to perform a few basic procedures appropriate to the home setting such as using pitocin for postpartum hemorrhaging, performing episiotomies when necessary and using local anesthetic in repairing minor tears.

F. MEDICAL BACK-UP

Medical back-up was previously discussed in relation to the subject of transport. But medical back-up prior to labor and birth is also an issue with traditional midwives and homebirth.

The prevailing attitude of the medical community is that homebirths are not safe for women or their infants.[32] Medical back-up is generally unavailable in a formal arrangement due to the pressures of the medical community on physicians and nurses against participation in homebirth or backing-up traditional midwives who perform homebirth. Some physicians who have chosen to back-up homebirths have lost their hospital admitting privileges over this issue.[33] Additionally, physicians and nurses are concerned with maintaining their medical malpractice insurance. Medical malpractice insurers have not been open to providing insurance for health care personnel who provide homebirth services. (See discussion on malpractice in Chapter 4 for additional information.)

The absence of adequate medical back-up exposes women who choose homebirth and their infants to additional risks. Ideally, for the benefit of the woman and her infant, the traditional midwife should be able to consult with a physician on a collegial basis whenever a situation arises requiring medical expertise. Safe and effective transport of women or infants needs an adequate exchange of information between the traditional midwife and the medical personnel assuming care. In the absence of a relationship which allows for the free exchange of information, prior to and at the point of transfer, the woman and infant may not receive the medical care which they need in a timely manner. Finally, a certain continuity of care is assured if the traditional midwife is allowed to remain with the woman in the event of a transport. In many instances the traditional midwife either does not accompany the woman for fear of repercussions from the medical community or is not allowed by the medical staff to remain with the woman, removing a source of support at a crucial time. The development of working relationships between traditional midwives and the medical community is necessary for adequate care of women and their infants.

G. CONCLUSION

Training of traditional midwives in Minnesota is quite varied. Some women have attained a high degree of skill based on extensive self-teaching and experience while others have had minimal training and possess rudimentary skills. The safety and quality of services offered by traditional midwives is equally varied. The Minnesota Midwives Guild (MMG) has established midwifery standards of care and categories of midwifery certification that recognize varying levels of training and skill. Not all homebirth attendants meet MMG standards, and members of the Midwifery Study Advisory Group expressed serious concerns about the practices of these other "midwives." Unsafe practices described to the Advisory Group include inadequate risk assessment to determine suitability for homebirth, inadequate or absent prenatal care, poor record keeping, lack of transfer of care or referral when the situation warrants, unsafe birthing practices, failure to transport when necessary, and lack of postpartum care. Presently, consumers do not have adequate means of differentiating the quality of services and distinguishing practitioners.

The following elements would better assure the safety of midwifery care to those consumers who choose homebirths and the services of the traditional midwife:

- A community of traditional midwives with a basic level of training which enables them to adequately assess women for risk and to provide care for the normal pregnancy, labor and birth;
- Standards of practice for those who offer their services as traditional midwives;
- A satisfactory back-up system with the medical community should emergencies arise; and
- Adequately informed consumers.

NOTES

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2. Genesis Midwives' Writing Collective, Minnesota Midwives' Guild Standards of Care and Certification Guide, (Minneapolis: 1989), pp. 9 -12.

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4. Reid, p. 133.

5. Reid, p. 133.

6. Guild Standards, p. 23.

7. Guild Standards, pp. 16-17.

8. Carol Sakala, "Content of Care by Independent Midwives: Assistance With Pain in Labor and Birth," Social Science and Medicine, 26:11 (1988), p. 1147.

9. Guild Standards, p. 19.

10. Guild Standards, p. 19.

11. Statement to the Childbirth Community

12. Communication from homebirth community representative to MDH Staff, February, 1992.

13. Communication from homebirth community representative to MDH staff, February, 1992.

14. Communication from homebirth community representative to MDH staff, February, 1992.

15. Guild Standards, p. 17.

16. Guild Standards, p. 17.

17. Communication from homebirth community representative to MDH staff, February, 1992.

18. Guild Standards, p. 39.

19. Guild Standards, pp. 43-44.

20. Communication from homebirth community representative to MDH staff, February, 1992.

21. Guild Standards, p. 31.

22. Guild Standards, p. 38.

23. Communication from homebirth community representative to MDH staff, February, 1992.

24. Guild Standards, p. 46.

25. Guild Standards, p. 41.

26. Guild Standards, p. 29.

27. Guild Standards, p. 30.

28. Guild Standards, p. 50.

29. Guild Standards, p. 50.

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CHAPTER 4

REGULATION OF MIDWIFERY PRACTICE

This chapter analyzes the competing interests surrounding the government's right to regulate occupational practices, provides information about regulation in other jurisdictions and discusses the effectiveness of regulations. The following questions are addressed:

- **What are the interests of the state and parents in regulating traditional midwives?**
- **How is midwifery regulated in Minnesota?**
- **Is the present system protecting the health and safety of consumers who choose the services of traditional midwives?**
- **How do other states and other countries regulate traditional midwives, and how well are these regulatory schemes working?**
- **What malpractice and liability considerations exist?**

A. STATE INTEREST VS. PARENTAL RIGHTS

The state has an interest in protecting the health and safety of its citizens and the authority to regulate this area arises from its police powers. The state also has the authority to intervene for the protection of individuals who lack the ability to act on their own behalf based on its parens patriae power. The interest in protecting the health and safety of citizens and authority to regulate arguably extends to the protection of women and infants in birth.

Parents, conversely, argue that they have the right to choose where and how they want their children to be born. This argument is based upon successful right to privacy arguments which have been applied to choice of marriage partner,[1] purchase and use of contraceptives,[2] decision regarding abortion,[3] and means of educating children.[4] This privacy right, however, has never been successfully applied to the choice of birth setting or birth attendant by the U. S. Supreme Court.[5]

A second argument in support of homebirth arises from the woman's right to self-determination. A competent adult woman has the right to accept or refuse medical treatment. The decision to refuse medical treatment and have a homebirth is such a decision. It is argued that a competent woman may assume the risks of a homebirth, even if others perceive the risks as unreasonable.[6] However, a woman's right to autonomy is not absolute; it has not been established at what level of risk to the unborn infant she should be permitted to make a choice for autonomy.[7]

In contrast to parental <u>rights</u>, there are parental <u>responsibilities</u>. Parents are responsible for providing adequate care for their children, including adequate medical care.[8] "Courts have generally refused to impose a legal duty on a woman to provide medical care to the expected child during the time of birth."[9] It is believed that neither parent will be held liable for failing to obtain medical assistance prior to the infant's birth, and that it is

unlikely that a woman will be found liable for neglect of the infant immediately following the birth, provided there are no prior indications of potential problems.[10] Opinions are divided, however, whether a father could be held liable for failure to summon or seek medical care for the infant should it be necessary.[11]

Finally, the law presumes that "the natural bonds of affection lead parents to act in the best interests of their children."[12] It is argued that a family that chooses a homebirth for the psychological benefits it has to offer, while at the same time minimizing the risks of a homebirth, must be considered as acting in the best interests of the infant.[13]

B. REGULATORY STATUS IN MINNESOTA

As mentioned earlier, the Board of Medical Practice has the authority to license midwives in Minnesota but has not exercised this authority in many years. (See discussion in Chapter 1.) Traditional midwives continue to practice in Minnesota even though they are not officially recognized by the state. This lack of recognition has raised some problems for traditional midwives and their clients. Under current regulatory status the following problems exist:

- Unsafe practices are occurring in the community. (See discussion in Chapter 2.) Unregulated traditional midwives are not accountable to any regulatory agency. No state-wide standards of care or basic level of training or skill are required to practice as a traditional midwife. Some midwives, and other individuals, are performing practices which are unsafe to the consumer. Regulation could set standards of care, require a basic level of skill prior to practice, and provide a means of disciplinary action for traditional midwives. Proponents of regulation desire to preserve a safe birthing alternative for women and perceive regulation of traditional midwives as a means of meeting that goal.

- Traditional midwives and their clients are poorly received by the conventional medical community. Some traditional midwives perceive state regulation as providing respectability and credibility with the medical community, leading toward improved interaction with the medical community. Improved interaction with the conventional medical community would benefit consumers because traditional midwives would be able to consult with physicians as needed and transfers and transports would be smoother.

- Consumers have great difficulty obtaining information when attempting to select a traditional midwife. Information is obtained through "the grapevine." State regulation could provide the consumer with a reference point in selecting a traditional midwife. Regulated traditional midwives could be required to meet certain standards and consumers would know that regulated traditional midwives have at least a basic level of knowledge and skill and are required to meet certain practice standards. Regulation could also require the traditional midwives to disclose certain information to consumers.

Regulation of midwives is seen by proponents of regulation as providing a safer environment for those women who choose homebirths. There are limits, however, to what a regulatory system can provide. It cannot assure the consumer that even a regulated individual will never make a mistake or that no harm will result from the practices of a regulated individual. Depending on the regulatory model selected, it may not be able to prevent other individuals from performing home births nor discipline them for unsafe practices. The attitudes of the medical community towards midwives and homebirth cannot be legislated; even if enabling legislation is enacted to encourage interaction between the medical community and traditional midwives, it does not assure that such interaction will occur. Attempts to regulate traditional midwives in other states have taken various forms, with equally variable results.

C. REGULATION IN OTHER STATES

Various forms of regulation are in effect throughout the United States. In some states the practice of traditional midwifery is prohibited. A number of states limit the practice of midwifery to certified nurse-midwives. Other states allow the practice of traditional midwifery upon licensure, registration, certification or permit. Still other states have no laws or judicial precedent regarding the practice of midwifery. Finally, some states, like Minnesota, have regulatory statutes in place but do not implement the laws, leaving midwives in these states to practice in a gray area of the law. Nationwide, the laws governing the practice of midwifery are in a state of flux, with some states moving to restrict the practice and others to expand the practice. A summary of regulation in other states is as follows:

- The practice of midwifery is <u>prohibited</u> in seven states. Statutes in these states define the practice of medicine to include those activities performed by midwives or have been interpreted as including midwifery. Despite the prohibition against practicing midwifery, traditional midwives remain active in these states to varying degrees.[14] Included in this group are California, Colorado, D.C., Illinois, Iowa, Missouri, and New York.

- The practice of traditional midwifery is <u>regulated by permit</u> in three states. Delaware, Kentucky and North Carolina require permits to practice as a traditional midwife. Delaware limits its midwifery permit to those who held a valid permit prior to September 19, 1978 or to certified nurse-midwives. Kentucky permits are issued only those holding midwifery permits prior to April 9, 1975. North Carolina, likewise, limits its midwifery permit to those individuals who held a permit prior to October 1, 1983.

- New Hampshire has a <u>certification</u> program for traditional midwives. The New Hampshire rules define the practice of midwifery, set out qualifications for certification (educational, experiential and examination), set forth reporting requirements, continuing education, a peer review process and standards of care. Certification requires the midwife to have written plans for medical back-up and consultation.

- Two states (Alaska and Texas) provide for registration of midwives. Alaska has a provision exempting those midwives who are performing midwifery as a "cultural tradition" or who perform midwifery services gratuitously. Texas maintains a registry of individuals performing midwifery. Current requirements have the midwife register with the county clerk. Recent legislation requires an educational component for initial registration and renewal of registration. Disclosure of limitations "of skills and practices" of the midwife to the prospective client is also required.

- Licensing is required in an additional eight states (Arizona, Arkansas, Florida, Louisiana, Montana, New Mexico, South Carolina and Washington). These states have a variety of requirements for education and training, standards of care, continuing education, physician back-up, etc. The regulatory programs have met with variable success.

In the remainder of the states the practice of traditional midwifery is not clearly legal or illegal. Statutes may be in place which require regulation of midwives, but these statutes are virtually unenforced.

- A permit is required in Alabama, Georgia, Ohio and Virginia, however, no permits have been issued. Traditional midwives continue to practice despite the lack of a permit.

- A license to practice midwifery is required in Hawaii, Indiana, Maryland, New Jersey, Rhode Island, and Minnesota. No licenses have been issued and traditional midwives continue to practice in these states to varying degrees.

- Ten other states have no statutes or judicial decisions which address the practice of midwifery. Still other states have statutes, Attorney General Opinions or judicial opinions which don't clearly allow or disallow traditional midwifery.

D. CULTURAL EXPECTATIONS REGARDING CHILDBIRTH

Cultural expectations influence attitudes toward birth.[15] The norm for childbirth in North America is a physician attended hospital birth. Most women expect to give birth in a hospital setting attended by a physician, if not an obstetrician. Most women in North America would not feel comfortable giving birth in a home setting. This discomfort itself can affect the outcome of a homebirth for these women. In other countries and cultures of the world, the practice of midwifery and homebirth is more widespread. Women expect to give birth at home and are comfortable with the idea of a homebirth. This attitude can positively affect the outcome of a homebirth for these women.[16]

The United Kingdom has a history of homebirth and midwives. In recent years, however, there has been a shift toward more hospital births.[17] Additionally, there is some debate in the United Kingdom whether midwives should be trained as nurses before becoming midwives rather than directly entering midwifery practice.[18]

Holland uses midwives extensively and has a well established homebirth practice in its maternal health services. Midwives attend 40% of all births. Half of these births occur in the home setting.[19] Midwives in Holland need not be nurses prior to becoming a midwife. All who wish to become midwives attend a three year training program. An important part of training is the identification of high risk women during prenatal care.[20] Midwives are independent practitioners who are reimbursed by the public insurance program and private insurers.[21] Public insurance does not reimburse for a physician if there is a midwife practicing in the area and the woman is considered low risk.[22] Midwives are prohibited from attending high risk women.[23] The perinatal mortality rates for Holland are among the lowest.[24]

Midwifery practice in Minnesota is perceived primarily as a phenomenon among white, middle class women. In reality, midwifery practice cuts across all class and ethnic lines. There are several cultural and religious groups in Minnesota in which traditional midwives practice. The Southeast Asian population has a strong homebirth practice. Several religious groups also have a strong tradition of homebirths attended by women in the community.[25] These groups must be taken into account when regulations regarding traditional midwives are being considered, and care must be taken so as not to infringe on their exercise of traditional cultural or religious practices.

E. MALPRACTICE AND LIABILITY CONCERNS AND ISSUES

Research of the subject of liability exposure produced the following information:

- Currently there is no malpractice insurance available for traditional midwives. The Midwives' Alliance of North America has been discussing the possibility of obtaining coverage for traditional midwives with various insurance carriers, but has been unable to obtain insurance coverage as of this date.[26]

- Malpractice insurance available to certified nurse-midwives through the American College of Nurse-Midwives (ACNM) will no longer continue to cover certified nurse-midwives who perform home births. Two large claims have recently been paid out for certified nurse-midwives involved in homebirths, with a third suit pending. The ACNM has been unable to locate a carrier to underwrite homebirths. The ACNM cites a lack of data on homebirths, the environment in the U.S. judicial system and the small number of certified nurse-midwives in the ACNM insurance program as factors influencing this situation.[27]

- Recently, a Washington D.C. area insurer has added surcharges to the policies of those obstetricians who back up nurse-midwives. The insurance company additionally limits coverage to hospital deliveries and requires physicians to be present during the birth even though the certified nurse-midwife is the primary birth attendant.[28] This surcharge, however, was later reversed by the Insurance Commissioner.[29]

The above facts about malpractice coverage have implications for regulating traditional midwives. Because midwives do not have malpractice insurance available to them nor do most of them have considerable assets, the medical community fears that the target of a lawsuit by parents is likely to be the physician, nurse or facility who backs up the traditional midwife. This does not facilitate the provision of back-up services by the conventional medical community. Not all, however, see physicians as bearing the brunt of the malpractice responsibility. Others believe any malpractice action against a physician for a homebirth would be unsuccessful if the woman is fully informed of the risks of homebirth, medical screening occurs and emergency back-up is arranged.[30] One possible solution to the malpractice problem may be a statutory provision providing limited immunity for physicians, nurses or facilities who serve as back-up for clients of traditional midwives.

F. CONCLUSION

The state has definite interest in and authority to regulate traditional midwives if necessary to protect the health and safety of its citizens. It is reasonable to conclude that the health and safety of Minnesotans is not effectively protected by the regulatory status currently afforded midwives. In the absence of full implementation of a legally authorized regulatory scheme, there is general evidence of unsafe practices occurring in the homebirth community in Minnesota.

Regulatory models exist within the United States and Europe, however, these models cannot be directly implemented in Minnesota without adaptations to meet the specific needs of the communities in this state. Aspects of these models which can be incorporated include:

- An adequate method of risk screening so that referral to the appropriate caregiver can occur.
- Development of healthy attitudes in the public towards pregnancy and birth.
- A basic level of education and skill for practicing traditional midwives.
- Encouragement of a collaborative relationship between traditional midwives and the medical community.
- A method of limiting liability for physicians who choose to back-up traditional midwives.

NOTES

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3. Roe v. Wade, 410 U.S. 113, 162 (1973).

4. Wisconsin v. Yoder, 406 U.S. 205, 233-34 (1972).

5. Bowland v. Municipal Ct. for Santa Cruz County Judicial District of Santa Cruz County, 556 P.2d 1081, 1089 (1976); People v. Rosburg, 805 P.2d 432, 437 (1991).

6. Gerard A. Hoff and Lawrence J. Schneiderman, "Having Babies at Home: Is it Safe? Is it Ethical?" Hastings Center Report, 15:6 (1985), 24.

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8. George Annas, "Are Childbirth Laws Adequate?" Women and Health, 2:23 (September/October 1977) p. 24.

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11. Katz, p. 66, Forrest, p. 325.

12. Parham v. J.R., 442 U.S. 584, 602 (1979).

13. Hoff and Schneiderman, p. 25.

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19. Edward van Teijlingen and Peter McCafferty, "The Profession of Midwife in the Netherlands," Midwifery, 3 (1987), 183.

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21. van Teijlingen and McCafferty, p. 178.

22. van Teijlingen and McCafferty, p. 179.

23. van Teijlingen and McCafferty, p. 179.

24. van Teijlingen and McCafferty, p. 178. But see Lievaart regarding morbidity for midwife delivered births.

25. Statements from practicing midwives, Midwifery Study Advisory Group meetings, December 13, 1991 and April 29, 1992. Statement from Sara Mullett, Maternal Child Health Technical Services, Minnesota Department of Health.

26. Communication from Joan Remington, February 11, 1992.

27. _____, "Insurance Gap Threatens Homebirths," Quickening, January/February, 1992, p. 2.

28. _____, "High D.C. Rates May Squash Nurse-Midwife Practice," Professional Licensing Report, September, 1991, pp. 7-8.

29. _____, "CNMs Victorious in Insurance Case," Quickening, March/April, 1992, p. 1.

30. George Annas, "Are Childbirth Laws Adequate?" Women and Health, 2:23 (September/October 1977), p. 24; Katz, p. 66.

CHAPTER 5

BENEFIT, COST AND ECONOMIC CONSIDERATIONS OF REGULATION

This chapter examines in general and specific terms the relative benefits and costs of regulating midwifery practice. In this discussion, we assume that regulation is needed to protect the public from harm. The purpose of the analysis is twofold: to determine whether various types of regulation can confer a public benefit in the form of adequately protecting midwifery consumers from harm, and whether it can be done in a cost effective manner.

Benefits and costs may accrue to traditional midwives and/or to consumers of midwifery services as a result of occupational regulation by government. Legislative policy requires that benefits to the public exceed benefits accruing to the occupation, and that overall benefits exceed overall costs.[1] In this chapter, the following questions are addressed:

- **What would be the benefits and costs resulting from a decision to regulate traditional midwifery?**
- **Would benefits expected to accrue to the public from a decision to regulate traditional midwifery be greater than the costs?**
- **Would public benefits from regulation exceed benefits to the occupation of traditional midwifery?**
- **What are the options for regulating midwifery, how would regulation be administered and what is the approximate financial cost?**

A. BENEFITS OF REGULATING

Implicit in a decision to regulate traditional midwifery is state recognition of homebirth as an alternative to hospital birth. Therefore, the costs and benefits of homebirth as an alternative to hospital births are also a factor in analyzing the economic considerations of regulating traditional midwifery. However, not all cost-benefit considerations are economic. Parental motivation for choosing homebirth, for example, is primarily non-economic, and the reasons reflect desire for an alternative to traditional obstetrical practice.

1. Benefits of Homebirth

The following motivations for choosing homebirth attended by a midwife appear in the literature.[2] Some of these reasons were also articulated by homebirth parents who made presentations to the Midwifery Study Advisory Group:

- A relaxed, non-medical environment in which to give birth;
- Having control over persons present at birth, often including supportive family members and women who will remain throughout labor and birth and avoiding unfamiliar and intermittent attendants such as nurses, aides, residents and physicians;
- A desire to avoid excess intervention in a natural event such as routine

electronic fetal monitoring, fetal scalp sampling, intravenous oxytocin, amniotomy, etc., that often accompany aggressive obstetrical management;

- Access to attendants knowledgeable of delivery styles which minimize the need for episiotomies and the possibility of tears;

- Control over mobility during labor, delivery position and avoidance of separation of infant and family after birth.

2. Other Indirect Benefits of Regulation

Regulatory benefits may accrue to the public and to the practitioners of traditional midwifery. If regulation benefits the occupation, these occupational benefits must not exceed public benefits. The following benefits to the public were identified:

- Regulation may help consumers identify qualified midwives by creating a roster of practitioners who meet state established standards. If the standards establish training or experience requirements, there may be some assurance of higher quality services from state-recognized midwives. As noted in a previous chapter, the process of locating and securing a midwife is often difficult and time consuming at best.

- Regulation may promote access to less expensive but similar providers. Since midwives practice in home settings, hospital expenses would be avoided in all cases except those requiring transport. Cost of midwifery services are likely less than physician services.

- Regulation may provide consumers with a means of redress for service which is incompetent or unprofessional. By establishing standards of practice and authorizing discipline for violations, consumers may gain a mechanism for holding midwives accountable for conduct that does not meet standards.

The following benefits to midwifery and midwives were identified:

- Regulation of midwifery practice by the state would legitimize midwives' status and confer some legal protection to practitioners from possible prosecution for the illegal practice of medicine. Regulation would define midwifery practice, thereby distinguishing and separating it from medical practice. Midwives would no longer practice in a "gray area" where the legality of practice is undetermined.

- For many occupations, regulation establishes a basis for reimbursement of services by private and public payors. While it is currently unlikely that third party payors would cover midwifery practice, insurance companies and public health programs do use occupational regulations as a mechanism for assuring provider and service quality and reliability.

Overall, regulation would provide relatively few benefits to midwives and a

greater number of benefits to the public. The benefits which may accrue to the public may benefit not only persons choosing to birth at home but also the public at large.

3. Economic Considerations

The fact that some midwives may charge little or nothing for their services may suggest that an economic incentive and benefit exists for women to give birth at home. In reality, economic considerations may or may not be a reason for choosing homebirth. Testimony to the Midwifery Study Advisory Group indicated that some women may initially choose homebirth because they do not have insurance coverage or funds to pay for a hospital birth. Traditional midwives report that many of these women give birth in a hospital because they are not appropriate candidates for homebirth. Other women who have health insurance and who want a homebirth, may birth in a hospital because homebirths are not covered by their policy. For these women, economics are a disincentive for homebirth. Finally, some women have health insurance which does not cover a homebirth but choose homebirth and pay out-of-pocket for the services of a traditional midwife. When women are informed of risks that may compromise birth outcome, traditional midwives report that any economic incentive for homebirth disappears.[3]

B. COST-BENEFIT CONSIDERATIONS OF REGULATORY OPTIONS

This section discusses four regulatory options and the theoretical benefits and indirect costs that might result from imposing each type of regulation. Appendix D contains a table contrasting the key elements of licensure, permitting and registration as regulatory systems. Research literature indicates that systems of regulation such as licensure, permitting and registration have substantial negative financial and other adverse effects on occupational practice and services. While the effects vary and the presumption is that the more restrictive regulations impose the greatest costs, research has not established the degree to which one system of regulation is more costly than another.[4]

1. Licensure

Licensure prohibits the right to practice and to represent oneself in any manner as qualified to engage in the occupation unless state-established qualifications are met. Licensing regulations impose a variety of requirements that must be satisfied in order to obtain and renew licensure. Requirements to enter an occupation often include education and training and examination and/or "apprenticeship" experience. Continuing education is required to maintain ability to practice. The following may be viewed as benefits of licensure:

- Licensure attempts to protect the public by assuring a minimum level of quality of all practitioners providing services. Licensure would assess competency, qualify only competent persons for practice and prohibit practice by incompetent persons.

occupation's interests, and that public members defer to the expertise of occupational members of the board on matters related to practice. Thus, Boards fail to fulfill the mission of public protection through aggressive disciplinary actions and public education about consumer rights and options.

- Licensure boards have greater difficulty proving and sanctioning "incompetent" conduct and less difficulty disciplining unprofessional or unethical conduct. The records of board disciplinary action suggest many more of the latter than the former.[8] Thus, a major rationale for licensing, to promote quality by assuring competency in practice, is not demonstrated by the regulation.

2. Permit

Permit regulation, unlike licensure and registration, does not require practitioners to have education or experience requirements in order to practice. Practitioners are required only to file name, address and other practice information with the state regulatory agency in order to practice. However, the state can revoke a permit and remove the right to practice for illegal or harmful conduct. Short of revoking a permit, the state can also force changes in conduct of practice. The following benefits of permit systems have been noted:

- Permitting is the most appropriate mode of regulation where harm to the public arises from unethical or unprofessional conduct by the practitioner and there is little risk of harm arising from incompetent practice of occupational functions.

- Permitting creates a roster of practitioners that may enable the state to help consumers access services.

- Because the state has the name and location of all practitioners, permitting may enable the regulatory agency to more quickly respond to consumer complaints regarding occupational conduct.

As a form of regulation, permit systems may have the following indirect costs and deficiencies:

- In the absence of training requirements, there are no assurances regarding quality of the practitioner or the services. The permit only represents prior or ongoing compliance with minimal legal requirements.

- Government costs of administering the permit system is paid for by permittees who recoup this cost in their fees to consumers. The costs of a permit system may be substantial and without a commensurate public protection benefit. Permitting may be more appropriate and effective for regulating business activities than health care activities.

- A significant portion of enforcement resources may be consumed by having to take action against practitioners who fail to secure permits.

- Licensure may be most useful where the consumer, because of lack of expertise, vulnerability or impairment, cannot determine or judge the quality of the provider or the services.

Numerous costs and deficiencies are associated with licensure. As a form of regulation, licensure may have the following adverse impacts to practitioners and the public:

- Licensure regulation confers a monopoly on the delivery of occupational services to a defined group of practitioners.

- Mandatory education and training requirements inherent in licensure systems erect cost and entry barriers to the practice of the occupation. Those who gain entry recoup these costs through fees for services.

- Empirical findings indicate that the mandatory entry requirements of licensing are not reliable in raising the quality of services, assuring a high level of competency in practice or minimizing the occurrence of unethical and unprofessional conduct.[5]

- Government costs of administering the licensure system is paid for by licensees, who in turn recoup this cost in their fees to consumers.[6]

- Restrictive entry requirements can limit the supply of practitioners and, if done in a market with constant or growing demand, will increase the price of services and decrease access to the services.

- Licensure boards do not have jurisdiction over non-licensees. In order for a board to stop a non-licensee from practicing illegally, the board must present evidence of a case egregious enough to meet the legal threshold for obtaining an injunction in district court or the county attorney's priorities for criminal prosecution. The practical result then is that boards often cannot sanction the conduct of persons over whom they have no direct authority. This also ironically becomes a disincentive for a board to use revocation of the license as the strongest disciplinary action against a licensee.

- Enforcement of the licensed scope of practice and regulatory standards is dependent upon the cooperation of an injured complainant. Where the consumer is unwilling to make a complaint or provide necessary information to investigators, enforcement of the regulations is not practicable.

- Board membership is set by statute and generally establishes representation that gives practitioners of the regulated occupation a majority. Research and literature suggests that this type of administrative system institutionalizes incentives to focus on activities related to restricting entry to the occupation, ensuring access to third party payment and quietly disposing of complaints concerning problem practitioners.[7] The evidence regarding public membership on boards indicates that lay input is co-opted by the

3. Registration

Registration allows anyone to practice an occupation, but prohibits the use of specified occupational titles unless training and education requirements established by the state have been met. The following are considered benefits of registration:

- For registered practitioners, registration provides a definition of the scope of occupational practice, standards for practice and discipline for violations.
- Initial education or training can be required for applicants for registration and continuing education can be required of registrants.
- Registration allows consumers freedom of choice in selecting practitioners with varying and various qualifications.
- It attempts to help consumers of the occupation's services identify those practitioners who are most qualified or competent by virtue of satisfying state qualifications.
- Registration allows for competition in the delivery of the occupational service. Because it is easier and less costly for persons to gain entry to the occupation, competition may promote innovation in delivery of services and/or equivalent services at lower cost.
- It may enhance consumer geographic and financial access to occupational services by increasing the availability and decreasing the cost to consumers willing to use non-registered practitioners.

As a form of regulation, registration may have the following indirect costs and deficiencies:

- Registration increases the costs of entry to the occupation for persons seeking recognition by the state. These costs are passed on to the consumer.
- Training and education requirements may not translate into high quality services.
- Government costs of administering the registration system are paid for by registered practitioners who recoup this cost in their fees to consumers.
- There is no authority over non-registered persons. There is no control over practice, only over titles used in practice.

4. Other Regulatory Options

If regulatory systems such as licensure, permitting or registration are not adopted, there are other alternatives available which may address specific problems. Regulations currently in effect may be used or amended to enable

the state to protect the public if new regulation is not enacted:

- The Commissioner of Health has the authority to bring an action in the court of appropriate jurisdiction to enjoin as a public health nuisance any activity, or failure to act, that adversely affects the public health.[9] Specific provisions could be adopted in statute to provide definitions of activity, or failure to act, that is harmful to the public.

- The Commissioner of Health collects vital statistics for the state. This responsibility includes recording information regarding births, neonate health status and data such as birth location and attendant.[10] This reporting and recording system could provide more accurate information regarding statewide homebirth activity.

- The Department of Health's Division of Maternal Child Health could make use of public information and education methods to inform pregnant women of general birth risks, homebirth risks, the necessity for planning and managing a homebirth, who may be most "qualified" to attend birth, rights of consumers of midwifery services and remedies, if any, available as redress for harm.

These regulatory alternatives may not require substantial efforts to enact new law or implement new regulations. There may be other laws that could be enacted which are potentially low in cost impacts. As a result, such measures may be more cost effective in terms of overall expenditure of effort and funds and the degree of public protection gained.

C. INDIRECT COSTS OF REGULATION TO TRADITIONAL MIDWIFERY AND THE PUBLIC

There are several concerns regarding possible negative effects of regulation on the practice of midwifery. The following effects of regulation on traditional midwifery and consumers of homebirth were identified:

- Regulation might clarify the legal status of midwifery practice such that government could have clear authority to take action against some practices and/or practitioners. Regulation would formally recognize the activity, and specific permission and/or specific prohibition would subject consumers and practitioners to enforcement issues and costs.

- If regulation imposes education and training requirements, entry to midwifery practice would be limited to those who can afford the time and expense of training. This cost would be greater for Minnesotans because there are no training programs in the state. Training requirements are warranted when occupational practice involves technical knowledge and skills, complex interrelationships in exercise of those skills and increased likelihood of physical harm in the absence of training. Though the requisite knowledge and skills may be learned through practical experience and supervised "on-the-job training," the impact may be as adverse to entry to the occupation as requiring formal academic course work in a matriculated program.

- Regulation may change the nature of midwifery practice by "medicalizing" aspects of the practice. Standards of safe midwifery practice such as risk assessments, prenatal care and trauma indices requiring transport may be viewed by some midwives as capture of the occupation by the medical delivery system. Regulations defining and requiring specific practice activities would be universally imposed, thereby removing a degree of autonomy and independence in practice and substituting procedures and protocols for assuring safety.

- Regulation may drive a portion of practice and practitioners underground. If occupational regulation is voluntary or only affects limited aspects of practice, covert practice may not result. But regulation often includes mechanisms for disciplining incompetent or unprofessional practice, and this authority to sanction conduct may be a motivation for some practitioners to not participate in voluntary regulation or avoid mandatory regulation. Department staff believe that any midwifery regulation attempting to require entry requirements and enforce practice standards would at this time be self-defeating. A significant number of midwives would practice covertly, and the net effect could be little gain in public protection for homebirth consumers.

- Imposition of restrictive types of regulation may reduce the availability of midwifery services and homebirth as an alternative to consumers at low risk. Licensing and permitting would likely prohibit many currently practicing midwives from providing services. Consumer access to services would thereby be limited to qualified providers, and overall access to services would be similarly reduced.

- Regulation which establishes training, experience or examination requirements will likely require practitioners to incur financial costs to satisfy them. In addition, the financial cost to the state of implementing and administering regulation must be paid for by fees paid by each practitioner. These direct costs to practitioners would be transferred to consumers in the fees charged for midwifery services.

D. ADMINISTRATION OF REGULATION

This section discusses financial costs and several options for administering a formal system of regulation if licensing, permitting or registration were recommended and implemented. Because of costs, the most economical options involve an existing board or host agency assuming responsibility for administration of midwifery regulation. However, an independent body for regulation of midwifery practice is also discussed. In addition, advantages and disadvantages of each administrative option are indicated.

1. Administrative Costs of Regulatory Systems

Legislative policy dictates that the direct costs to the state of establishing and administering occupational regulation must be reimbursed through fees paid by regulated practitioners.[11] Where the total number of practitioners to be

regulated is small, fees for each practitioner may be excessive and burdensome. Of particular concern are the financial costs associated with regulating midwifery practice using any one of the formal types of regulation systems described above.

A detailed estimate of costs for licensure, registration or permitting of midwives is contained in Appendix E. The estimate assumes regulation would occur within an existing agency. As noted above, an independent Board of Midwifery would be more costly than a host agency arrangement. Regardless of administering agency, total fees in each of the first five years of regulation would be almost $2,000 per year per midwife. In the sixth year of regulation, the annual fee would be about $1,000 per midwife. These estimates are based upon reasonable costs for establishing and implementing any of the three types of regulatory systems.

2. Board of Medical Practice

The Board currently has responsibility for regulation of midwifery practice. The logical option is that future regulatory authority over midwifery practice continue to rest with the Board. The Board currently administers registration systems for several occupations, including physical therapists, physician assistants and respiratory care practitioners. Through an identical arrangement involving use of a subcommittee or an advisory council of midwife practitioners, the Board could receive recommendations concerning midwifery practice and implementation of regulations. The expertise of physicians would be readily available to deal with practice issues involving risk screening, transfer, labor, delivery and transport.

However, there may be conflicts inherent in such a structure. The significant differences between the midwifery and medical models of practice may make trust and communication difficult to establish and maintain. Physician training, community practice standards and liability exposure may make it exceedingly difficult to consider midwifery practice issues objectively. Midwives may fear "medicalization" and capture of their practice by a physician board with authority over standards of care for midwifery.

3. Board of Nursing

The Minnesota Board of Nursing currently regulates nurses who are Certified Nurse-Midwives (CNMs), a nursing specialty similar to midwifery in philosophy and some elements of practice. However, the Nursing Board does not set standards for CNMs, but recognizes the specialty training and title conferred by the American College of Nurse Midwives, a private credentialing organization. CNMs work under the direction and supervision of physicians engaged in obstetrical practice. The board currently only has authority to regulate persons with different levels of training who perform nursing functions, and without explicit legislation, would not have authority and could not assume responsibility for setting standards for midwifery practice.

The Board of Nursing has in the past regulated persons who are not nurses. For a brief time it assumed administrative responsibility for regulating nursing assistants, an occupational group performing limited nursing

functions. Regulating midwifery would be a departure from prior experience for the Board of Nursing, but could be accomplished by employing an advisory council or subcommittee to obtain recommendations on items requiring action. However, the Board of Nursing might face the same professional conflicts posed for the Board of Medical Practice: the differences inherent in the medical and the midwifery models and philosophies of practice.

4. Board of Midwifery

Enactment of occupational licensure regulation in Minnesota most often involves creation of a board as an independent and separate administrative authority. A Board of Midwifery would be less likely to incur the conflicts arising from regulation by the Boards of Medical Practice or Nursing. On the other hand, the cost of establishing and operating an independent board would be significant. These costs would be greater than those estimated in Appendix E for regulatory systems incorporated within an existing board or agency.

5. Minnesota Department of Health

The Health Department is currently the host agency for central administrative services for all health-related boards in Minnesota.[12] The Department provides centralized personnel, financial, communication and facility management functions while authority for all other administrative functions resides with the licensing boards. The Department also licenses, registers and permits a number of health-related occupations in its Environmental Health and Health Care Delivery Systems Divisions. In this capacity, the Department credentials practitioners, conducts investigations and takes enforcement actions related to occupational regulation in the same manner as licensing boards.

In addition, the Department is the lead public health agency for the state, and as such, it has a broader public health protection mission than the individual licensing boards. For example, the Health Department engages in activities related to vital statistics, health promotion and education and maternal and child health. The Department has physicians on staff in a number of its operational divisions, and it has a physician consultant who provides medical expertise upon request. The Department's involvement in a broad and diverse set of public health and public protection activities may enable it to address the concerns related to midwifery practice.

E. CONCLUSION

While there are important reasons to regulate midwifery, the direct and indirect costs of implementing a formal regulation system such as licensure, permitting or registration are substantial and clearly outweigh benefits. As noted in Chapters 2 and 3, midwifery consumers are not willing to come forward when wronged. Department staff believe that, if a formal system of regulation were imposed, a significant number of midwifery practitioners would not comply with mandatory regulation or choose not to participate in voluntary regulation that establishes practice standards.

If consumers choose to use midwifery practitioners opposed to regulation, and they choose not to come forward with complaints about midwifery practitioners and services, little commensurate public benefit would be gained from imposing regulation. The goal of regulation would be frustrated and the overall effect may promote a further compromising of public protection for consumers of midwifery services. Only those regulatory options should be considered which would enhance public protection.

The financial cost of implementing a formal regulatory system such as licensure, permitting or registration would be substantial. On the other hand, carrying out other less restrictive types of regulation may be financially feasible. If a regulatory system such as licensure, registration or permitting is not imposed, the costs cited above may be avoided, and less comprehensive regulations may be equally or more cost effective in protecting the public.

Less restrictive and costly alternatives to formal regulation systems are available or can be implemented. Changes to existing civil liability laws and vital statistics reporting requirements and establishing minimal but enforceable standards of safe midwifery practice would require a one-time commitment of staff resources to legislative and rulemaking efforts. Costs associated with enforcing safe practice standards would be incurred only when investigation and enforcement activity occurred. However, a funding source for these expenses would have to be identified, secured and available in advance, and an appropriation would be required in any proposed legislation.

Finally, it appears that the Department of Health may be the most appropriate agency to assume responsibility for protecting members of the public who decide to have homebirths. The Department currently conducts several activities that may be sufficient to provide necessary public protection. These include the vital statistics system that can be used to more accurately record homebirth activity and outcomes, investigative authority to respond to egregious homebirth practices, and ongoing maternal and child health activities that may be consistent with an effort to educate the public about the risks and precautions involved in birthing at home.

NOTES

1. Minnesota Statutes §214.001, subd. 2(d), and Minnesota Rules, part 4695.0800, subp. 5.

2. Lewis E. Mehl, "Research on Alternatives in Childbirth. What Can it Tell Us About Hospital Practice?" in Twenty-first Century Obstetrics Now, ed. D. Stewart and L. Stewart, (Chapel Hill, N.C.: NAPSAC, 1977), pp. 171-207.

3. Statements of practicing midwives to the Midwifery Study Advisory Group, November 22, 1991.

4. Gary L. Gaumer, "Regulating Health Professionals: A Review of the Empirical Literature," Millbank Memorial Fund Quarterly/Health and Society, 62:3 (1984).

5. Cox and Foster, The Costs and Benefits of Occupational Regulation, October 1990, and authority cited therein.

6. Minnesota Statutes §214.06.

7. Stanley J. Gross, Of Foxes & Hen Houses: Licensing the Health Professions, (Connecticut: Quorum Books, 1984).

8. S. David Young, The Rule of Experts: Occupational Licensing in America, (Cato Institute, 1987).

9. Minnesota Statutes, §145.075.

10. Minnesota Statutes, §144.211-144.227 and Minnesota Rules, Chapter 4600.

11. Minnesota Statutes, §214.06.

12. Minnesota Statutes, §214.04.

CHAPTER 6

RECOMMENDATIONS REGARDING REGULATION OF MIDWIFERY AND HOMEBIRTH

In this chapter the various options for regulating traditional midwives are discussed. The members of the Midwife Study Advisory Group arrived at different solutions based on the information presented. Minnesota Department of Health staff had additional recommendations for regulation. These proposals were developed in response to the following questions:

- **What regulation, if any, is necessary to adequately protect the health, safety and welfare of citizens?**
- **How can the state best protect those members of the public who decide to have homebirths?**
- **When, how and who should implement any necessary regulation?**

A. ADVISORY GROUP CONSIDERATIONS

After extensive discussion and deliberation, the Midwife Study Advisory Group initially recommended a formal regulatory system for traditional midwives. Those in favor of regulating the occupation of traditional midwifery also provided the following rationale for their position:

- Regulation of traditional midwives can identify standards of practice, require accountability of practitioners and provide sanctions for unsafe or harmful practices.

- A regulatory system can also establish a data base regarding practitioners and thus assist consumers in making an informed choice of a primary caregiver by improving access to data.

- Depending on the structure of the regulatory system, protection can be provided to practitioners and the occupation of traditional midwifery can be recognized on the continuum of care.

- With this "legitimization" of traditional midwifery, improved interaction between midwives and the medical community should result.

Among those in favor of regulating traditional midwives, several formal models of regulation were suggested. The formal models ranged from strict licensure to mandatory registration to voluntary registration as follows:

- Licensure to practice as a midwife along with a variety of components to increase interaction between traditional midwives and the medical community. Immunity from malpractice liability is provided for physicians and nurses who see these women and who accept homebirth transports. Homebirth attendance by certified nurse-midwives and physicians is facilitated by protection from medical malpractice liability for injuries due to "reasonably unavoidable constraints imposed by the homebirth environment."[1] Finally, an informed consent requirement for parents is also added.

- Mandatory registration would require registration for all midwives. Midwives who wished to register would be required to complete the MANA examination.

- Another registration model offers basic registration with an option for further certification. A Midwife Advisory Committee would be established. Rule promulgation for registration of midwives would occur through the MDH with advisory committee input and guidance. Registration, upon meeting specific, basic requirements would be offered with an option for further certification. Loss of registration/certification or other sanctions for unsafe practice would occur. Information regarding registered midwives would be available to the public to assist them in their choice of a birth attendant.

- A voluntary registration system was proposed in which midwives would be offered the opportunity to register, without penalty for failure to register. Those registering would be required to submit basic information about themselves, such as name, telephone number, number of deliveries, relevant organizational memberships and activities. They would be permitted to use doppler tones, blood pressure cuffs and pitocin (for postpartum hemorrhage control only) in their practices. As an accompaniment to the registration system, there would be consumer education by the state regarding midwives and their regulation. Educational inservices for associated health care professionals regarding traditional midwives and their practices could also be initiated.

Although it appeared that the majority of group members favored a formal registration system for traditional midwives, several questions remained unanswered. It was not clear from the discussions whether registration should be mandatory or voluntary. The administrative body and the time line for implementation of registration were not clearly defined. Finally, the costs of a registration system were not thoroughly discussed or conclusions reached on financing regulation.

Several members of the group did not believe that regulation of traditional midwives was appropriate at this time. The reasons cited included an absence of significant data demonstrating actual harm from the unregulated practice of traditional midwifery, the fact that a regulatory system cannot guarantee that harm will not result to the public from a regulated practitioner and the small number of identified practitioners in the state to financially support a regulatory system. Other arguments against regulation focused on the adverse impact of regulation on the traditional midwifery community. Specifically:

- Regulation of traditional midwives, without counterbalancing support for the occupation, could prove detrimental to the practice of traditional midwifery. Restrictive or punitive regulations could serve to force traditional midwives underground, making practices more surreptitious, decreasing interaction between midwives, decreasing collaboration with the medical community for transfers of care and transports, and thus increasing the risks for consumers.

- The fees required of traditional midwives to defray the cost of developing and administering a regulatory system are likely to increase the costs of providing midwifery care, resulting in decreased availability of services to consumers.

- Finally, it appears that regulation of traditional midwifery in other states, whether by licensure, registration or permit hasn't necessarily resulted in improved traditional midwifery practices or facilitated compliance by traditional midwives with the regulatory system.[2]

Aside from the formal models of regulation discussed above, various alternatives to regulation were also discussed.

- The need for collection of information on homebirths and establishment of a data base was expressed more than once.

- A proposal was made to allow or require traditional midwives to complete birth certificate applications and facilitate collection of data on homebirths.

- The importance of informed choice in the decision to have a homebirth and in choosing a birth attendant was also stressed, with various suggestions for consumer education and/or informed consent requirements.

- Facilitation of communication between traditional midwives and the medical community was also identified as a key to providing better care for the homebirth consumer. It was unclear, however, the means needed to accomplish improved communication and interaction.

- Additionally, some group members expressed the importance of preserving the choices for women in birth, not just for those who choose homebirth but for the impact that the alternative care perspective has on care provided to women in the mainstream of medical care.

After presentation of the Department of Health's analysis and recommendations in a draft of this report, the Midwifery Study Advisory Group reviewed the Department's recommendations and rationale. In two subsequent meetings, the Advisory Group decided to support Health Department recommendations with the criticisms and amendments noted in Section B. below.

B. ADVISORY GROUP AND HEALTH DEPARTMENT RECOMMENDATIONS

One goal of the MDH as a public health agency involves the promotion and development of good prenatal care and safe birth places and practices for all women and children of Minnesota. The decision as to place of birth is a personal one which the birth parents ultimately make, most often without awareness of alternatives to hospital birth, but in a growing number of cases, with deliberate consideration of homebirth as an option. The Department acknowledges that homebirth is occurring and will continue to occur whether or not traditional midwives are regulated.

There is potential harm from the unregulated practice of midwifery for women who choose to have homebirths and for their infants. There are practices occurring in the homebirth community which are unsafe and have the potential for causing severe harm or death to the woman or infant. (See discussion of unsafe practices in Chapter 2.) The actual and potential harm is significant enough to warrant some kind of regulation, although not necessarily and only of traditional midwives.

Based upon a review of the literature and information received from advisory group members and others in the medical and homebirth communities, MDH staff recommends phasing in implementation of changes and additions to current regulations by the Minnesota Department of Health in collaboration with the Board of Medical Practice. The proposals are as follows:

Step 1

- Revise vital statistics rules to require midwives and other homebirth attendants to sign birth certificate applications, amend other laws to remove concern regarding prosecution for practicing medicine without a license;

- provide a place for recording the intended and actual place of birth on the birth certificate application;

- devise a method for identifying and compiling information on homebirths.

It is essential that the regulatory mechanism which documents birth recognize homebirth and midwifery activity. Integrity in the system and accurate data regarding the incidence and outcome of homebirths in Minnesota is needed. More than one advisory group member commented on the lack of actual data regarding homebirths in Minnesota. More accurate recording methods could assist in developing a data base for any future study of homebirths. This data would also be necessary for determining the need for further amending regulations. A fair assessment of the need and ways for further regulation in this area cannot be made without more complete and accurate data.

Legislative action would not be needed to amend the vital statistics reporting requirements. The present system of gathering and reporting birth information could accommodate the proposed changes, but rulemaking is necessary to clarify the requirements. The MDH also has the capability of extrapolating the information gathered on the birth records for further study as necessary. Costs to implement this change to vital statistics records should be minimal.

- Institute limited immunity for physicians, nurses and other health care providers who accept transports from traditional midwives. Health care providers would only be responsible for the harm resulting from their actions and not adverse outcomes occurring as a result of the actions or inaction of a traditional midwife.

- Develop strategies for improving communication between homebirth and medical providers so that there is continuity of care.

The current legal climate makes acceptance of transports an onerous responsibility for those health care providers who choose to do so. By providing limited immunity, the reluctance of health care providers for accepting women under the care of traditional midwives would, hopefully, be reduced resulting in better care for the woman and her infant. It is also hoped that such a statute would facilitate traditional midwives to transport clients when needed. Limited immunity for medical providers acting as backup to traditional midwives or accepting transfer of care is not recommended at this time. Numerous aspects of liability in these areas remain unresolved.

Legislative action would be needed to enact a statute containing the appropriate language. The time frame for this step would be the next legislative session. The cost to implement this recommendation should be minimal.

Step 2

- Establish an advisory council composed of representatives of the traditional midwifery community, homebirth consumers and medical community under authority of the Commissioner of Health. The advisory council would advise Health Department staff regarding complaints received about homebirth practices and could assist in evaluating need for further regulation of traditional midwives and/or other birth attendants. The advisory council would also plan educational brochures and initiatives regarding homebirth. The Midwifery Study Advisory Group recommended that the majority of advisory council members be traditional midwives. Several Advisory Group members also urged that a research study or pilot program be conducted, possibly with federal grant dollars, to compare the relative safety of homebirths and hospital births in Minnesota.

The advisory council should be initiated within one year from the release of this report. The need for funds would be limited to statutory per diem and expenses of council members. The advisory council could be funded by allocating a portion of the fees assessed and collected by each health-related licensing board. However, some Advisory Group members have reservations about this funding approach, and recommend that it be re-evaluated in view of recent assessments against this funding source that have not yet been fully realized. For example, funding for regulation of unlicensed mental health practitioners was imposed in 1991, and health care practitioner HIV infection reporting requirements take affect in 1992. The fiscal impacts of these new programs on licensee fees has not yet been determined, and there was some concern by Advisory Group members about adding another obligation to license fees at this time. It was suggested that the legislature consider a general fund appropriation to the Health Department for this purpose, at least until such time as an estimate of advisory council operational costs can be determined.

Step 3

- Health Department staff and the proposed advisory council should develop a consumer education brochure for prospective parents who are considering homebirth. The brochure would not promote, condone or discourage a particular place of birth, but should provide information regarding homebirth and choosing a homebirth attendant. The brochure could contain sample questions to ask the prospective midwife as well as other considerations involved when deciding whether to have a homebirth. The brochure might also contain contacts and resources for further information. A protocol should be developed regarding appropriate dissemination of the informational brochure. Distribution of the brochure could occur through various consumer groups, birth educators and possibly through providers of prenatal care and the Maternal and Child Health programs conducted by the Department.

The time frame for this step would be within one year from the establishment of the proposed advisory council. The brochure could be developed inexpensively by Department staff and distributed free at appropriate sites as public information within Department budgets.

Step 4

- Institute a regulatory scheme similar to that for unlicensed mental health practitioners in which unsafe practices would be regulated rather than practitioners. Sanctions should be specified which might include civil penalties and restriction on the right to attend homebirths. Authority to conduct this activity should be given to the MDH.

A formal regulatory system with jurisdiction over midwifery would not be as effective as definition and regulation for practices deemed unsafe. The unsafe practices occurring within the community are not always performed by traditional midwives, but may be performed by other individuals attending homebirths.

A voluntary registration system cannot directly affect conduct of those individuals who are not registered within the system. Licensure of qualified practitioners would likely have the effect of driving other attendants underground. Regulation of particular practices can reach individuals regardless of their regulatory status, or how they refer to themselves.

Legislative action is needed to effectuate laws regulating unsafe practices. Authority would need to be given a state agency to enforce these laws, and the Advisory Group recommended that authority be vested with the Department of Health. Components of the legislation would include a definition of midwifery, identification of homebirth practitioners to whom the laws would apply, definition of prohibited conduct, and forms of disciplinary action. The prohibited conduct would include but not be limited to those practices which have been identified as unsafe, such as the following:

- Attending birth as the primary caregiver in which the woman has obtained no prenatal care (to be defined), except in an emergency.

- Leaving prior to placental passage.

- Attending births of women who smoke cigarettes, consume alcohol and/or have diabetes mellitus, epilepsy, active hepatitis, sickle cell disease, renal disease, pre-eclampsia, cardiac disease, liver disease, thyroid disease, lung disease, cancer, systemic lupus, HIV positive, essential hypertension, bleeding disorders, thromboembolism or thrombophlebitis, Rh negative sensitized, or a current psychiatric condition requiring medication.

- Performing homebirth without current adult and infant CPR certification.

- Leaving woman in active labor before birth has occurred.

- Failure to transport in the following situations:
  Cardiac arrest, eclampsia or maternal convulsions, cord prolapse, maternal infection, maternal respiratory distress, active genital herpes, placenta abruptio, uncontrolled maternal hemorrhage or shock, maternal shock, or suspected meconium aspiration.

- Failure to obtain informed consent.

Exemptions may be provided for family members, where homebirth practice has religious basis, or in an emergency. The current statutory definition of midwifery should remain in place until new legislation replaces it.

- Develop and require use of a disclosure form for parents (similar to the bill of rights required in regulation of mental health practices) along with an acknowledgement by the woman of receipt of the disclosure form. The brochure described above could be developed so as to provide the core of the disclosure form.

The target date for this step would be the 1994 legislative session. Funding would have to be appropriated for providing the investigative and enforcement capabilities. Funding could be obtained by an allocation of the fees assessed and collected by the health-related licensing boards. Some Advisory Group members again expressed concerns about funding as described previously regarding the proposed advisory council under Step 2.

The Advisory Group recommended that in conjunction with Step 4, the Health Department and the proposed advisory council should attempt to obtain funding and conduct research that begins using vital statistic records and other research data to define practice standards for midwives.

C. CLOSING COMMENTS

Several Advisory Group members expressed concern that the Department's recommendations continue to leave midwifery practice undefined and unrestricted, and that ultimately practice standards and affirmative statements of actions that comprise safe practice should be adopted. In the Department's view, the recommendations have the following rationale:

- Imposing a formal system of mandatory regulation at this time would drive many midwives and other homebirth practitioners underground.

- At this time, an educational health promotion approach focused on consumers who make the decisions regarding birth place and birth attendant may be more effective than regulatory efforts geared at attempting to control practitioners many of whom do not want recognition or regulation by the state.

- To be effective, regulation requires the cooperation of consumers and practitioners to a minimal extent. Based on research and information received, MDH staff assert that a formal regulatory system would be ineffective because a significant number of consumers would not bring complaints and members of the homebirth practice community would not register with the state.

NOTES

1. Terry Wade, Comment in January 8, 1992 Midwife Study Advisory Group meeting.

2. Rebeca Barroso and Melissa Coffey, "Legal Status of Traditional Midwives - United States," Midwife Study Advisory Group, January 8, 1992.

APPENDIX A

MINNESOTA MIDWIFERY STATUTES AND RULES

MIDWIVES

148.30 MIDWIFERY.

Within the meaning of sections 148.30 to 148.32, a person who shall publicly profess to be a midwife or who, for a fee, shall attend to women in childbirth, shall be regarded as practicing midwifery. Nothing in sections 148.30 to 148.32 shall apply to gratuitous emergency services or to authorized medical practitioners.

History: *(5721) RL s 2301*

148.31 LICENSES.

A person desiring to practice midwifery in this state, if not already authorized so to do, shall apply to the state board of medical examiners for a license. This license shall be granted upon the production of a diploma from a school of midwifery recognized by the board, or after examination of the applicant and compliance with other requirements that the board may reasonably impose for the protection of the public. The board is authorized to adopt rules as may be necessary to carry out the purposes of sections 148.30 to 148.32. The board may delegate to another unit of state government with that unit's consent, all or part of a study to determine the appropriate level of regulation of midwives and the content for any administrative rule deemed appropriate by the board.

History: *1991 c 106 s 5*

148.32 LICENSES; DENIAL, REVOCATION, REFUSAL.

All licenses to practice midwifery heretofore or hereafter issued by the board of medical examiners must be renewed and a fee paid for each renewal as set by the board. Licenses may be revoked, suspended, conditioned, limited, qualified or restricted, or renewals refused by the board for unprofessional or dishonorable conduct, or neglect to make proper returns to agents of a board of health as authorized under section 145A.04 of births, deaths, puerperal fever, and other contagious diseases.

A license to practice midwifery is suspended if (1) a guardian of the person of a licensee is appointed by order of a probate court pursuant to sections 525.54 to 525.61, for reasons other than the minority of the licensee; or (2) the licensee is committed by order of a probate court pursuant to 253B or sections 526.09 to 526.11. The license remains suspended until the licensee is restored to capacity by a court and, upon petition by the licensee, the suspension is terminated by the board after a hearing.

History: *(5723) RL s 2303; 1967 c 118 s 1; 1969 c 927 s 5; 1976 c 222 s 60; 1982 c 581 s 24; 1987 c 309 s 24; 1987 c 384 art 2 s 1*

5600.2000 LICENSURE EXAMINATION TO PRACTICE MIDWIFERY.

Subpart 1. **Definition.** As used in Minnesota Statutes, section 148.30, the practice of midwifery includes the furthering or undertaking by any person to assist or attend a woman in normal pregnancy and childbirth, but shall not include the use of any instrument at a childbirth, except such instrument as is necessary in severing the umbilical cord, nor does it include the assisting of childbirth by an artificial, forcible, or mechanical means, nor the removal of adherent placenta, nor the administering, prescribing, advising, or employing, either before or after any childbirth, of any drug, other than a disinfectant or cathartic.

Subp. 2. **Application.** An application for admission to a licensing examination to practice midwifery in this state shall be filed with the board as hereinafter prescribed. If the board finds that the application is complete and that all of the requirements of the statute and of these rules have been met, it shall advise the applicant of the date and place of the examination.

Subp. 3. **Content of application.** The application shall require the applicant to submit the following information:

A. original or certified copy of high school diploma or evidence of equivalent education;

B. original or certified copy of diploma, degree, or certificate, or evidence satisfactory to the board, indicating that the applicant has satisfactorily completed an approved curriculum in midwifery in a school or maternity hospital approved by the board;

C. evidence, satisfactory to the board that the applicant is of good moral character; and

D. an unmounted recent photograph of the applicant with the affidavit of the applicant on the reverse side thereof that the photograph is that of the applicant.

Subp. 4. **Subjects tested.** The examination shall include the following subjects: anatomy of the pelvis and female generative organs; physiology of menstruation; diagnosis and management of pregnancy, fetal presentation, and position; mechanism and management of normal labor; management of the puerperium; injuries to the genital organ following labor; sepsis and asepsis in relation to labor; special care of the bed and lying-in room; hygiene of the mother and infant; asphyxiation, convulsions, malformation, and infectious disease of the newborn; cause and effects of ophthalmia neonatorum; abnormal conditions requiring attendance of a physician.

Subp. 5. **Ineligible applicants.** An applicant whose credentials are determined by the board to indicate ineligibility for examination shall be notified of such determination and the grounds therefor and may be granted a hearing thereon in accordance with the provisions of part 5615.0300, by filing a statement of issues with the board within 20 days after receipt of such notice from the board. After such hearing the board shall notify the applicant, in writing, of its decision thereon.

Subp. 6. **Application deadline.** All applications for examination must be fully completed and forwarded to the secretary of the board, postmarked not later than 30 days before the date of the examination.

Statutory Authority: *MS s 147.01 subd 3*.

5600.2100 MIDWIFERY ETHICS.

The board may revoke, suspend, condition, limit, qualify, or restrict the license of, or refuse to renew the license of, any midwife for unprofessional or dishonorable conduct, which shall include but not be limited to the following:

A. conviction of the crime of criminal abortion or of a crime involving moral turpitude;

B. neglect or refusal to promptly make proper returns to an agent of a board of health as authorized under Minnesota Statutes, section 145A.04 or health department of births, of a puerperal, contagious, or infectious disease;

C. failure promptly to secure the attendance of duly licensed physician in case of miscarriage, hemorrhage, abnormal presentation or position, retained placenta, convulsions, prolapse of the cord, fever during parturient stage, inflammation or discharge from the eyes of the newborn infant, or whenever any abnormal or unhealthy symptoms appear either in the mother or infant during pregnancy, labor, or the puerperium.

Statutory Authority: *MS s 147.01 subd 3*

History: *L 1987 c 309 s 24*

SUMMARY OF LITERATURE

STUDY	RESEARCH DESIGN	DEMOGRAPHICS	OUTCOMES	CONCLUSIONS
1. Burnett (1980)	* Collected information from North Carolina vital records of 1974 - 1976. * Planned homebirth - a chosen homebirth in which a healthy infant is anticipated. * Attempted to distinguish homebirths without medical screening or trained attendant from those with medical screening and at least minimally trained attendant.	* Medically low risk; demographically high risk. * Planned homebirth with midwife: group young, black, unmarried and less educated than average woman giving birth in the state. Low risk medical profile. * Planned, without trained attendant: group at least 20 years old, married, had more than high school education, had 2 or less prenatal visits.	Measured rate of neonatal deaths per 1000 live births. * 4/1000 for planned homebirths prenatally screened and midwife attended. * 6/1000 for planned homebirths. * 12/1000 for hospital deliveries (including high risk and low birth weight infants). * 120/1000 for unplanned homebirths. * 17% of homebirth neonatal deaths followed planned homebirths - 1/2 of these had no trained attendant present, 1/2 due to congenital anomalies. * 83% of the homebirth neonatal deaths followed unplanned homebirths.	* For low risk women there is a cost advantage without unacceptable risk in delivery by a trained nurse-midwife under physician supervision. * "[C]ost and preference accounted for more than 3/4 of the reasons for the dangerous planned home deliveries not attended by a physician or lay midwife." (p. 2745)
2. Declercq (1984)	* Collected information from vital records of 36 states for the year 1978; 50% sampling of birth records of remainder of the states.		Compared birth weight and Apgar of hospital and out-of-hospital births. * Lower proportion of low birth weights for out-of-hospital births. * Pattern of low birth weights with regard to age of mother same for hospital and out-of-hospital births. * More 7+ Apgar scores for hospital births. * Infants born out of hospital more likely to receive Apgar of 9 - 10.	* Heterogeneous group of women chose homebirth. * With respect to birth weight, babies born out-of-hospital are at no greater risk than those born in hospital. * "...[C]hances of [an emergency] arising are somewhat less for babies born out of hospitals..." (p. 71) * "Multiparous, well-educated women between 25 and 34, giving birth out-of-hospital are not at greater risk of having a low birth weight baby than women giving birth in a hospital." (p. 68) * "[Findings appear to argue for a curtailment of the legal and professional restrictions on those who wish to attend and assist home births and for provision of greater medical support for those who choose the home-birth option." (p. 72)

STUDY	RESEARCH DESIGN	DEMOGRAPHICS	OUTCOMES	CONCLUSIONS
3. Schneider (1986)	* Collected information from New Jersey vital records of 1978 - 1980. * Identified 775 planned homebirths. * Interviewed midwives, physicians, health department staff, educators, consumers, birthing center personnel. * Planned homebirth - birth occurring in the home or birthing center with a physician or midwife in attendance.	Out-of-hospital birth women had a variety of backgrounds and value systems but were more likely than total population to be: * Married; * From 25 - 29 years old; and * Have more than 13 years education.	* No increase in absolute number or percentage of out-of-hospital births for period of study. * Proportion of low birth weight infants significantly lower in out-of-hospital births as compared to proportion of low birth weights for hospital births. * Planned home births exceeded planned birthing center births for period of study. * Majority of planned out-of-hospital births attended by midwives. * Small number of providers responsible for majority of out-of-hospital births.	* No significant change in number of out-of-hospital births noted during period of study. * Out-of-hospital births statewide practice. * If trained providers are made unavailable through regulation, women will choose lay persons for homebirth which may increase the hazard of homebirth.
4. Schramm (1987)	* Collected information from Missouri vital records of 1978 - 1984. * Supplemented with survey of health departments and midwives' guild. * Planned homebirth - a birth intended to be at home with a healthy infant anticipated.	Planned homebirths were at lower risk demographically than unplanned homebirths or hospital births.	* Neonatal mortality similar for hospital births and planned homebirths attended by skilled attendants; and for hospital births and unplanned births with very low birth weight infants. * Neonatal deaths excessive for homebirths as compared to hospital births; nearly all excess for planned homebirths found in those births attended by attendants with lower levels of training. * Neonatal deaths for unplanned homebirths over 35% higher than expected. * All of the excess neonatal deaths for unplanned homebirths found in infants weighing 1500 grams or more.	* Stressed the importance of having trained attendants present at homebirths. * Speculated that Missouri may have lesser level of care for homebirths than comparative studies performed in other states. * Parents may have difficulty finding an adequately trained midwife; lack of registration status in Missouri has driven midwives underground.

STUDY	RESEARCH DESIGN	DEMOGRAPHICS	OUTCOMES	CONCLUSIONS
5. Hinds (1985)	* Collected information from Kentucky vital records of 1979 - 1982. * Questionnaires sent to mothers to identify planning status of birth and attendant present at birth.	* Planned out-of-hospital births classified as low risk. * Unplanned out-of-hospital births classified as high risk.	* 6.6 fold-increase of low birth weight infants for unplanned out-of-hospital births compared to planned out-of-hospital births. * Only half the expected number of low birth weights seen in planned out-of-hospital births. * No neonatal deaths occurred among planned homebirths; few occurred in other planned out-of-hospital births. * Neonatal mortality rate significantly smaller in planned out-of-hospital births as compared to unplanned out-of-hospital births.	Important to identify planning status of out-of-hospital births in studying outcomes of out-of-hospital births.
6. Lievaart (1982)	Researchers asked: * Can midwives diagnose adequately and refer those cases that develop abnormalities? * Are midwives, with the available tools, capable of maintaining normalcy in their cases in the course of delivery? Arterial blood sample taken from cord immediately after birth. Infants later tested by standardized assessment.	* Firstborn infants, born after 38th week of gestation, without major congenital abnormalities, without hyperbilirubinemia. * Women were married; none in lower socioeconomic class; housing conditions satisfactory. * Those attended by gynecologists were older and had been seen for primary infertility.	* Neonatal morbidity of midwife attended group higher than gynecologist attended group as measured by increased acidosis in arterial blood of neonates.	* Dutch system assumes birth is physiologic function which does not require medical intervention and can even be harmed by medical treatment. * Neonatal morbidity <u>not</u> predominantly due to an inability of midwives to detect pathologic conditions; assumed to be associated with an undue load imposed by delivery on the neonate, especially by a prolonged 2nd stage of labor. * Better outcome in gynecologist attended group is most likely due to the tools of surveillance and the capability to perform a C-section.

STUDY	RESEARCH DESIGN	DEMOGRAPHICS	OUTCOMES	CONCLUSIONS
7. Campbell (1986)	Reviewed previous studies, vital statistics of England.			* Statistical association of increased hospital deliveries and decreased crude perinatal mortality rate does not indicate cause/effect relationship. * Can't conclude that women giving birth in hospital are exposed to greater risk of perinatal death than those giving birth elsewhere despite higher crude perinatal mortality rates. * Rise in crude perinatal mortality rates is explained by increased number of unplanned homebirths. * Perinatal mortality rates for those planning homebirth are very low. * No evidence to support the claim that the safest policy is for all women to give birth in the hospital. * Some evidence that the perinatal morbidity rate is higher among births occurring in facilities and in obstetric units in particular. * The majority of women who have had home and hospital births prefer homebirths. * There is selection bias in place of birth and outcome; demographic factors are associated with selecting homebirth or hospital birth.

STUDY	RESEARCH DESIGN	DEMOGRAPHICS	OUTCOMES	CONCLUSIONS
8. Mehl I (1977)	Reviewed medical records of 5 home delivery services in North California. Prenatal care similar among groups and in accordance with ACOG standards for frequency of visits, lab testing and clinical assessment. Prenatal care stressed nutrition, avoidance of medications, and psychosocial aspects of pregnancy and birth. Intrapartum care essentially the same. Midwife groups required 2 physician visits.	Majority of women were between 20 - 34 years old, were having first pregnancy, began prenatal care in first trimester. Nearly all had attended childbirth classes.	* 1% low forceps delivery. * .5% midforceps delivery. * 2.4% primary C-section rate. * 1.3% low birth weight infants. * 3% prematurity rate. * 9.5 perinatal deaths/1000 total births. * Average Apgars of 8.9 - 1 minute, 9.7 - 5 minutes. * Episiotomies lower for midwife groups. * Lacerations requiring repair lowest in midwife groups.	* "[W]omen seeking home deliveries are a self-selected healthy group, probably knowledgeable about childbirth and the importance of nutrition in pregnancy." (p. 284) * "[I]n a self-selected, medically screened, low-risk population, home delivery with medical facility back-up can be a reasonable alternative to hospital delivery." (p. 281)

STUDY	RESEARCH DESIGN	DEMOGRAPHICS	OUTCOMES	CONCLUSIONS
9. Mehl II (1980)	* Retrospective chart review of midwife records for 1970 - 1975 from midwives with the following qualifications: * at least 2 years experience; * attended 50 deliveries with more experienced midwife; * attended 50 deliveries as the most experienced attendant; * knowledge base in obstetrics and pediatrics: * evidence of good judgement for complicated cases; * maintains reasonably complete records. * Midwife outcomes compared with physician attended homebirth outcomes and hospital births attended by "low interventionist" physicians.	Midwife and physician attended homebirth populations were from Santa Cruz, California area. Hospital birth population was from Madison, Wisconsin.	Compared to physician attended homebirth populations: * Midwife attended group had significantly less fetal distress, meconium staining, postpartum hemorrhage, birth injuries and infants requiring resuscitation. * Midwife attended group infants also had higher Apgar scores. Compared to "low interventionist" physician population: * No significant differences between physician attended and midwife attended births; * Hospital births showed more fetal distress and problems with delivery of placenta; * More analgesia, 2nd stage oxytocin, anesthesia and obstetric procedures used in hospital group; * No significant differences in neonatal complications were seen between the midwife and physician groups.	* Better outcomes noted in planned homebirths attended by midwives as compared to planned hospital births attended by physicians. The following factors may be of influence: * Differences in patient management; * Effects of practitioner on the labor process; * Effects of psychosocial differences in the populations. * Midwives at home did at least as well as physicians in hospitals for low risk cases. * Larger numbers of cases are needed to assess midwife performance in emergency situations requiring immediate intervention or rapid evaluation and/or hospital transport. * Consider alternative training programs for midwives. * Establish clinical research programs to study outcomes of midwives and their possible use in maternal and child health care delivery. * Expressed concern regarding the practices of those midwives with less experience than those included in the study.

STUDY	RESEARCH DESIGN	DEMOGRAPHICS	OUTCOMES	CONCLUSIONS
10. Tew (1990)	* Survey of British birth statistics for 1958 and 1970. * Risk scores applied retrospectively to the data gathered in the survey. * Antenatal prediction score (APS) - based on factors known about early enough in pregnancy to influence choice of birth place. * 0,1,2 - Maternal age; parity; social class. * 4 - Previous stillbirth; neonatal death; abortion; c-section; hypertension; diabetes. * Labor prediction score (LPS) - complications of pregnancy and labor. Could lead to transfer to hospital for planned out-of-hospital births. * 0,1,2 - APS; hypertension/toxemia; duration of pregnancy; duration of 1st stage labor; fetal distress (heart rate); meconium. * 2 - antepartum hemorrhage; fetal distress and meconium. * 4 - previous c-section; breech presentation.		Compared perinatal mortality rates. * LPS 0-1 (very low risk) * 8/1000 obstetric unit * 3.9/1000 homebirth or general practitioner maternity unit (GPU). *LPS 2 (low risk) * 17.9/1000 obstetric unit * 5.2/1000 homebirth or GPU. *LPS 3 (moderate risk) * 32.2/1000 obstetric unit * 3.8 homebirth or GPU. *LPS 4-6 (high risk) * 53.2/1000 obstetric unit * 15.5/1000 homebirth or GPU. *LPS 7-12 (very high risk) * 162.6/1000 obstetric unit * 133.3/1000 homebirth or GPU.	* Low interventive methods used effectively protect against death over a range of predicted risk. * The fetus, already at risk, is unable to withstand the stress of obstetric intervention. * Emotional factors play an important part in birth outcomes and are not measured by this survey. Obstetricians have failed to appreciate the role of emotional factors.

APPENDIX C

EXCERPTS FROM THE MINNESOTA MIDWIVES' GUILD STANDARDS OF PRACTICE

A. Contraindications for Homebirth:

Poor maternal nutrition;
Smoking, regular alcohol use, or drug use, drug abuse, drug dependency;
Repeated elective abortions;
Cardiac disease;
Diabetes mellitus;
Renal disease;
Liver disease;
Lung disease caused by emphysema, cystic fibrosis, scoliosis, active TB or severe pathological asthma;
Thyroid disease;
Epilepsy;
Cancer;
Systemic lupus;
Sickle cell disease;
Active hepatitis;
HIV positive;
Marked skeletal abnormalities that would interfere with the birthing process;
Congenital defects of the reproductive organs that would interfere with the birthing process;
Essential hypertension;
Severe chronic anemia;
Bleeding disorders;
Thromboembolism or thrombophlebitis;
Mother with PKU;
Rh negative disease;
History of low birth weight infants, stillbirths, or neonatal deaths related to maternal health problem or genetically transmitted anomaly;
Current psychiatric condition requiring medication;
Any other major medical problem or congenital abnormality that affects childbearing;
Unwillingness to accept midwife's limitations, prohibitions and responsibilities for safe practice; and
Any other condition which may preclude the possibility of a normal birth, at the midwife's discretion.

Genesis Midwives' Writing Collective, Minnesota Midwives' Guild Standards of Care and Certification Guide, Minneapolis: 1989, page 23.

B. Conditions or Situations Requiring a Hospital Birth:

Rubella during the first trimester of pregnancy;
Primary outbreak of genital herpes;
Nutrition unimproved to within satisfactory limit;

Serious mental illness or severe psychological problems;
Eclampsia;
Convulsions;
Central placenta previa;
Placental abruptio or signs of placenta abruptio;
Suspected or diagnosed congenital fetal anomaly that may require immediate medical care after birth;
Persistent transverse presentation;
Breech baby on a first time mother;
Indications that the baby has died in utero;
Premature labor;
Active syphilis, gonorrhea, AIDS or other sexually transmitted disease at term;
Serious viral or bacterial infection at term;
Active genital herpes lesions at the onset of labor;
Irresponsible attitude of parents;
Unsafe home or location for birth, at the midwife's discretion;
Unresolved fearfulness regarding home birth or midwife care, or a desire to transfer care; and
Any other condition or situation which may preclude the possibility of a normal birth, at the discretion of the midwife.

Genesis Midwives' Writing Collective, Minnesota Midwives' Guild Standards of Care and Certification Guide, Minneapolis: 1989, page 24.

C. Conditions Requiring Medical Consultation:

Fetal heart tones not heard by 24 weeks or at any point later in the pregnancy;
Abnormal fetal heart tones;
Marked decrease or cessation of fetal movements;
Maternal cardiac irregularities;
Kidney infection;
Gestational diabetes;
Maternal pre-eclampsia;
Abnormal vaginal bleeding before the onset of labor;
Rupture of membranes prior to the 37th week of gestation; and
Medical care or consultation is desired by woman or midwife.

Genesis Midwives' Writing Collective, Minnesota Midwives' Guild Standards of Care and Certification Guide, Minneapolis: 1989, page 26.

D. Standards Requiring Transport to the Hospital:

Cardiac arrest;
Eclampsia or maternal convulsions;
Signs of severe fetal distress;
Moderate to heavy meconium staining;
Cord prolapse;
Infection;
Ruptured membranes with any signs of infection;

Foul smelling amniotic fluid;
Maternal respiratory distress;
Signs and symptoms of pre-eclampsia;
Active genital herpes;
Sudden and/or severe pain;
Unforeseen multiple birth;
Unforeseen breech presentation;
Transverse lie;
Excessive painless vaginal bleeding;
Signs and symptoms of placenta abruptio;
Uncontrollable hemorrhage;
Maternal shock;
Suspected meconium aspiration; and
Desire for transport by the birthing woman.

Genesis Midwives' Writing Collective, Minnesota Midwives' Guild Standards of Care and Certification Guide, Minneapolis: 1989, page 38.

APPENDIX D

ALTERNATIVE REGULATORY SYSTEMS

KEY ELEMENTS OF REGULATION:	TYPES OF REGULATORY SYSTEMS: LICENSURE	PERMIT	REGISTRATION
1 Participation	Mandatory	Mandatory	Voluntary
2 Administrative Authority:	Independent Board	Board or Agency	Advsry Councl to Brd or Agncy
a. Appointments	Yes	No	Yes
b. Staff	Yes	Yes	Yes
c. Credentialing: issuance,renewal, denial,suspension, revocation	Yes	Yes	Yes
d. Discipline	Yes	Yes	Yes
e. Examinations	Yes	No	Yes
f. Fees	Yes	Yes	Yes
g. Rules	Yes	Yes	Yes
h. Professional accountability	Yes	Yes	Yes
3 Restrictions on Practice:	Yes	Yes	No
a. Scope of Practice	Unlawful Practice defined	Activities defined	Activities defined
b. Exemptions	Yes	Yes	Yes/No
4 Restrictions on Representation (Title Protection)	Yes	No	Yes
5 Minimum Qualifications	Yes	No	Yes
6 Continuing Education	Yes	No	Yes
7 Prohibited Conduct (Code of Ethics)	Yes	Yes	Yes
8 Reporting Obligations	Yes	Yes	Yes
9 Disclosure Reqrments. (By prctnr. to consumer)	Yes	Yes	Yes
10 Professional Cooperation with regulatory authority	Yes	Yes	Yes

APPENDIX E

ESTIMATE OF LICENSURE, PERMIT OR REGISTRATION COSTS & FEES

COST ITEMS	FY 93	FY94	FY95
Personnel[1]:			
Supervision	520	541	563
Management Analyst 2[2]	33,950	35,308	12,240
Health Program Aide	341	355	369
Clerk Typist 2	250	260	270
Personnel Subtotal	35,061	36,464	13,442
Supplies and Expenses			
Office Equipment	1,000	500	500
Computer Equipment	500	500	500
Repairs/Maintenance	500	500	500
Printing/Copying	1,000	2,000	1,000
Professional Srvcs.[3]	4,000	15,000	2,000
Mail/Phones	500	1,000	1,000
In-state Travel	250	250	250
Fees[4]	500	500	500
Supplies	1,000	1,500	1,200
Misc. Expenses	500	700	900
Supply & Expense Subtotal	9,750	22,450	8,350
Total Direct Costs	$44,811	$58,914	$21,792
Indirect Costs	6,274	8,248	3,051
TOTAL COSTS	$51,085	$67,162	$24,843

FEES

- Estimated fiscal year 1993 and 1994 start up costs may be prorated over 5 years and results in an annual average cost of $23,649. This number divided by an estimated 25 practitioners results in an annual surcharge fee for five consecutive years of $946.
- Estimated annual costs in fiscal year 1995 and each year thereafter of approximately $25,000, divided by an estimated 25 practitioners results in an annual fee of $1,000.
- Assume all activities would be conducted within a host agency or board.

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[1]Salary estimates are based on FY 91 compensation agreements, include 20% fringe benefits and assume 4% wage increases each fiscal year.

[2]1.0 FTE until 1995; .33 FTE thereafter. Other personnel at .01 FTE.

[3]Rulemaking costs in first two years; Attorney General costs in each year of operation for investigation of complaints and enforcement actions.

[4]Board member expenses for five persons, assuming monthly meetings of board and sub-committees. Members serve without compensation.

APPENDIX F

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