

Comprehensive Perinatal Health Services:
A Strategy Toward Universal Access and Care in Oregon.
Report of the Maternity Care Access Planning Commission

by
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ABSTRACT

TITLE: Comprehensive Perinatal Health Services:
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This project consisted of staffing the Maternity Care Access Planning Commission and preparing its final public report. The Commission was formed in 1991 with a mission to: design and implement an action plan for an integrated, coordinated, preventive and more accessible statewide system of perinatal services for women and their infants to span the period from preconception through postpartum.

Using federal, state and local reports and testimony, a community-based system of care is proposed with a basic benefit package standard for all pregnant women in the state. Perinatal care is recognized as a continuum of care for women of childbearing age that includes: family planning and preconception services; prenatal, delivery and postpartum services; and newborn and interconception services. Risk-appropriate social, educational, and psychological services are recognized as integral components with medical care for a comprehensive approach.

Specific background and recommendations are incorporated into sections on Client care, Content and System of care, Financing strategies, and issues related to Providers and Quality. Further political action and legislation is necessary to implement this plan.

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MATERNITY CARE ACCESS PLANNING COMMISSION

Mission

...To design and implement an action plan for an integrated, coordinated, preventive and more accessible statewide system of perinatal services for women and their infants to span the period from preconception through postpartum.

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EXECUTIVE SUMMARY

This report describes the recommendations of the Governor's Maternity Care Access Planning Commission to the Oregon Health Division for a comprehensive, statewide system of perinatal care. This complies with Senate Bill 274 that created the Commission in 1991. Implementation of this plan will provide substantial progress towards achieving Oregon Benchmarks for **Adequate Prenatal Care, Teen Pregnancy, Healthy Birthweight, Infant Mortality, Child Abuse or Neglect, Substance Use during Pregnancy, Children Ready to Learn, Spousal Abuse, Economic and Geographic Access to Health Care, and Health Care Costs.**

These recommendations incorporate the work of several national advisory panels. More importantly, they also blend numerous state and local reports, and testimony provided to Commissioners from throughout the state.

The following **Principles** served as a guide:

- Quality perinatal care is the foundation of health care for the entire family.
- Jobs, education, and housing are public health investments, that along with primary care, are essential to the health and well-being of the family.
- Improved client health outcomes, long-term savings, and system efficiencies far outweigh the short-term financial impact of establishing a comprehensive system of perinatal care.
- The individual has an important role and responsibility in seeking care and actively participating in health maintenance.
- The state has the ultimate responsibility for assuring universal access to perinatal care for all women and their infants.

The major recommendations for **Client** care include a plan that will:

- Provide a basic benefit package as the standard for ALL pregnant women in the state, regardless of payment method.
- Address all impediments to care, including financial and non financial barriers, for an effective system of care.
- Be culturally sensitive and appropriate.
- Provide perinatal care in an environment that supports both clients and providers.

The major recommendations for the **Content and System of Care** include a plan that:

- Defines adequate prenatal care as the percentage of women who received comprehensive prenatal care in the first three months of pregnancy.
- Recognizes perinatal care as a continuum of care for women of childbearing age that includes: family planning and preconception services; prenatal, delivery and postpartum services; newborn and interconception services.

- Recognizes that risk-appropriate social, educational, and psychological services are as important as medical care. Maternity support services, case management, child care, childbirth education, and transportation must be made available regardless of payment method.
- Allows the specific content and timing of provider contact to vary depending upon on-going risk assessment.
- Funds home visits for all pregnant women early in the pregnancy and again 3-5 days after delivery.
- Develops community-based systems of care responsive to local needs.
- Recognizes that a partnership of private and public resources is necessary for an integrated, coordinated, statewide system of perinatal care.
- Creates single points of entry for related service delivery with simplified enrollment and eligibility processing.
- Reforms tort liability for all providers, especially those meeting the needs of low-income women.
- Supports full scope of practice for Certified Nurse-Midwives providing hospital services.

The major recommendations for the **Financing** of the plan include strategies that will:

- Promote prevention and create incentives for cost-effective care and appropriate use of technology.
- Fund all perinatal services for pregnant women with income below 133% of the Federal Poverty Level but who are not Medicaid eligible (e.g., undocumented women).
- Increase Medicaid client Poverty Level Medical (PLM) eligibility to 185% of the Federal Poverty Level.
- Increase Medicaid remuneration for global obstetric care.
- Adequately staff the Commission and Health Division to facilitate the development of standards and community plans. Grants to counties may be necessary to help meet their identified needs.

The major recommendations for **Providers** include the need to:

- Develop a plan for the training and distribution of an adequate number of perinatal care providers throughout the state.
- Link perinatal services to a system of quality assurance and accountability.
- Improve perinatal tracking data for planning and evaluation purposes.
- Develop a Maternal-Fetal-Infant Mortality and Morbidity review board to review cases on a statewide basis.

OVERVIEW

The Commission firmly believes that the women and children of Oregon need and deserve better health care. Major improvements in our quality of life have resulted from the use of the present prenatal care system. Over the last generation, maternal mortality and morbidity rates have declined dramatically, and rates of infant mortality have showed a steady incremental improvement, much of it associated with advances in medical care technology. However by the mid-1980s the rate of improvement slowed and it became clear that additional efforts were needed if pregnant women and infants were to receive the full benefits of current health knowledge and support. Some of these efforts were compelled by community crises such as increases in the rates of low birthweight babies and teen pregnancies, fewer obstetrical practitioners or low provider participation in Medicaid, high liability insurance premiums, and an increased number of uninsured and Medicaid clients receiving inadequate prenatal services¹⁻¹¹. The response included:

- Expanded Medicaid coverage to include pregnant, low-income women up to 100% of Federal Poverty Level in 1987 and increased to 133% in 1990.
- Increased outreach, case management, and provider reimbursement for pregnant Medicaid clients.
- Continued operation and expansion of the Perinatal Project at Oregon Health Sciences University to provide medical consultation to a wide network of satellite clinics and providers.
- The Babies First high-risk infant tracking program and Oregon Maternal Child Health Hotline (1-800-SAFENET).
- Substance abuse treatment for pregnant women.
- Creation of local maternity care programs such as Healthy Start in Washington and Deschutes Counties, Lane County Comprehensive Pregnancy Services, the Malheur Maternity Project, and others.
- Prenatal outreach grants funded by the Health Division, March of Dimes, and the Office of Substance Abuse Programs, and supported through local Health Departments and local Healthy Mothers/Healthy Babies coalitions.
- The development of Area Health Education Centers (AHEC) in 3 regions with program responsibilities of continuing education and provider recruitment and retention.
- Development of the Oregon Benchmarks¹²⁻¹⁴, with measurable outcomes to guide human investment policy.

Despite these efforts the overall result has been an uneven patchwork of care that has varied considerably in communities across the state—from those with very comprehensive activities, to others with few ready access options. It is the work of this Commission to help create a unified system, both as a good investment and because it is badly needed in the state.

Not all of the 42,458 resident infants born in Oregon in 1991 will thrive and develop into normal healthy adults. Health Division statistics^{15,16} utilize two indicators to note poor birth outcomes: rates of low birthweight (LBW) and infant mortality. Low birthweight, or those infants who weigh less than 5 1/2 pounds at birth, is the most important determinant of infant mortality^{17,18}. Low birthweight babies that do survive bear an increased risk for medical disability, learning and behavior problems, child abuse and neglect. In 1991, there were 2,091 LBW babies born in Oregon (4.9%)¹⁶.

The overall LBW trend has fluctuated little in the last ten years, with Oregon rates typically lower than national data. But, Oregon should have even more favorable rates with its largely white and rural population. Major risk factors for having a LBW baby include: non-white race, younger and older maternal age, multiple births, poor reproductive history, low socioeconomic status, low level of maternal education, single marital status, late entry into prenatal care, low pregnancy weight gain, smoking and other substance abuse^{5,15}. Smoking women are nearly twice as likely to give birth to a LBW baby^{5,19}. And, despite the importance of early prenatal care in protecting against low birthweight and infant deaths, nearly one in four pregnant women in Oregon receives no care in the first trimester of her pregnancy¹⁵. A disproportionate share of these mothers are low income, have less than a high school education, or are very young.

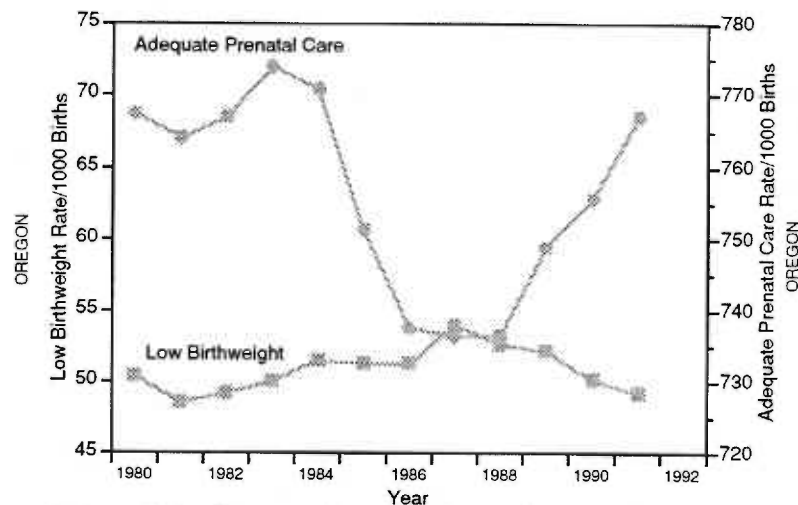


Figure 1. Association Between Adequate Prenatal Care and Low Birthweight

Early and comprehensive prenatal care is associated with fewer LBW babies (see Figure 1). This is where the Commission has focused its efforts. A structure is offered that is a significant departure from the current system of care. This may be considered analogous to a quilt, a whole fabric, designed and stitched together by local communities using a pattern of proposed standards, with a backing of statewide support. Investments will be required, some will be financial. But the "payback" will be immediate. The Institute of Medicine and the American Academy of Pediatrics have estimated that for each \$1 spent on prenatal care, between \$2 and \$10 of more expensive, high technology care for LBW infants is saved^{17,18}. There is a greater logic to providing quality health care for pregnant women and children even beyond the financial savings and improved birth outcomes. Perinatal care can provide the foundation for improving the health of the entire family. Good health, in many ways, is a prerequisite for enjoying the benefits of quality education, affordable housing, and a fulfilling job. In health care, there is no better way to begin building a just system of services than at the beginning.

The Maternity Care Access Planning Commission developed from hearings begun 3 years ago before the Maternity Care Access Workgroup of the Joint Legislative Committee on Health Care. Senate Bill 274 from the 1991 Legislative Session established the Commission and charged it to develop, "a comprehensive system of maternity care, including prenatal, delivery and postpartum care that meets the unique needs of the individual pregnant woman, available to **all** pregnant women in this state." Eleven Commissioners were sworn in on February 13, 1992 and 13 public hearings have been held in Salem, Portland, Hillsboro, Eugene, Madras, Astoria, Klamath Falls, and Ontario. Nearly 600 draft reports were then distributed for further comment followed by two more open hearings in Portland and Eugene.

Public testimony has been diverse and reflects the need for an **integrated, coordinated, preventive, and more accessible** statewide service model that builds on the unique strengths of Oregon communities. This model presents a continuum of care for all women of childbearing age that promotes entering a desired pregnancy in optimal health. It includes services that meet their needs, both medical and psychosocial, regardless of source of payment or geographic location; and the goal of healthy, term infants. Local communities will determine how they will provide the basic set of recommended services. Their role is to maintain, monitor, and often to create the services and relationships necessary for a functioning local perinatal health service delivery **system**. The State will offer technical assistance to support the development and implementation of these local plans. Public and private resources will be required to fund a common system, with the State responsible for assuring funding is adequate.

Client Issues

Consideration of client issues is essential to the success of any human service program. Repeatedly, statewide testimony confirmed numerous non financial barriers to prenatal care described in the literature^{2,20}. There are pockets throughout the state where care is simply not readily available. However, even when care is abundant and available, a percentage of women do not initiate access²¹ because of personal, system and/or cultural barriers.

One example is logistical. For reasons largely arising out of isolation and poverty, overwhelming basic needs for shelter, food, and safety take precedence over prenatal care. Other commonly cited barriers were transportation, lack of child care, and concerns about missing work or school to obtain care. Employer understanding and acceptance, alternative clinic hours and convenient care locations were mentioned as possible solutions.

The Commission recognizes other significant factors that influence women's ability to seek and remain in prenatal care. One of these is the fear women may feel of being confronted about their substance use. Some women may delay or not seek care for fear of having their baby taken away if their substance use is detected^{22,23}. Another factor is domestic violence. It is well documented that domestic violence increases during pregnancy and is in itself a deterrent to obtaining regular prenatal care^{24,25}. Finally, mental health has an impact on women's care-seeking behavior. Women with low self-esteem and with mental health problems are less likely to utilize prenatal care.

The Commission heard compelling testimony describing how cultural insensitivity, language barriers, and lack of respect keep women from obtaining adequate care. Providers and staff may seem unwelcoming to women and poor phone access, inflexible hours, and long waits decrease women's satisfaction. Previous

negative experiences with providers and institutions can be powerful reasons for delaying or not seeking care again. As one Native American woman summed it up, "It's the attitude."

Finally, some women are simply unaware of local resources. Or if aware of them, they may not know how to access them. Health education materials and outreach efforts are often inadequately targeted to client primary languages, comprehension and reading levels ²⁶, or the most effective method of understanding whether it be television, radio, written material, or direct personal contact. For example, not all women have telephones and the process of locating a provider may involve numerous calls (and quarters) from pay telephones or messages left through friends and neighbors. This has strong implications for the types of public awareness strategies that are necessary to inform women of their options.

The Commissioners believe there are two principal strategies for decreasing these barriers: 1) the development of community-based systems of care responsive to local needs and 2) individualized care which imparts a sense of caring for each woman. The Healthy Start Program in Bend is an example of how these strategies have been operationalized. The Program is a locally-crafted cooperative effort between the county health department, private physicians and St. Charles Hospital. The sense of caring for each woman is a high priority and begins when each woman is greeted at the door. Each woman has an assigned case manager that serves as her advocate and is available to help negotiate the system when necessary. When women leave the clinic, they are treated like anyone would be in a home; they are escorted to the door.

The Oregon Benchmarks Human Investment Partnership successfully captures the spirit of change needed to facilitate this environment when they stress "customer" needs and satisfaction over strictly an agency orientation. The Commission supports their philosophy that believes "no one should be wasted, allowed to fail or left dependent" (p 49-50)¹³.

One method for addressing both these strategies is the use of a variety of client advocates. These include outreach workers, community-based "natural helpers" (Children's Care Team)²⁷, community health nurses, resource mothers, social workers, and case managers. The role of these advocates is to help coordinate care and often negotiate very complex systems ^{28,29}. For example, a mentally ill client's care plan may involve the prenatal clinic, mental health services, housing authority, children's services, and SSI services. Too often, care plans fail to achieve maximal outcomes because the many component parts are not adequately coordinated. Hispanic communities in Hood River, Woodburn, Nyssa and elsewhere have illustrated good results with "promotores" or lay health promoters. These locally recruited people provide outreach and education work, as well as some basic direct services such as health screening and counseling. The Black United Fund is managing a similar effort to begin among low income women in north Portland.

Another method is to develop local systems that reduce service fragmentation. One example is one-stop-shopping ^{30,31}, where care and eligibility determination are available in one location. Ideally, this would also include a seamless system of primary care including preconception and family planning and prenatal care. Other strategies may include flexible clinic hours, providing transportation, and onsite child care or vouchers.

Each community must identify the most effective methods for addressing the cultural issues relevant to their population. These must include staff training on cultural sensitivity, modified facilities for the physically challenged, a commitment to providing multilingual and transcultural staff at all levels of care, and periodic input from client focus groups. The Commission strongly believes that the most effective solutions will be those created in partnership with community members. Community leaders, providers, private insurers, public agencies, business people, advocacy groups, and cultural group members all need to participate in the process. A culturally derived system of care must evolve along a continuum between clients, providers and community—from sensitivity and willingness to learn, to competent understanding of how to do things differently.

In summary, client issues must be incorporated into every aspect of services. Locally responsive plans and family-centered approaches to individual client care are two key strategies. Assessment tools, such as the Planned Approach to Community Health (PATCH) and Assessment Protocol for Excellence in Public Health (APEXPH), can help communities bring the benefits of research and experience, and local political and financial support to bear on priorities such as perinatal care ³³⁻³⁵.

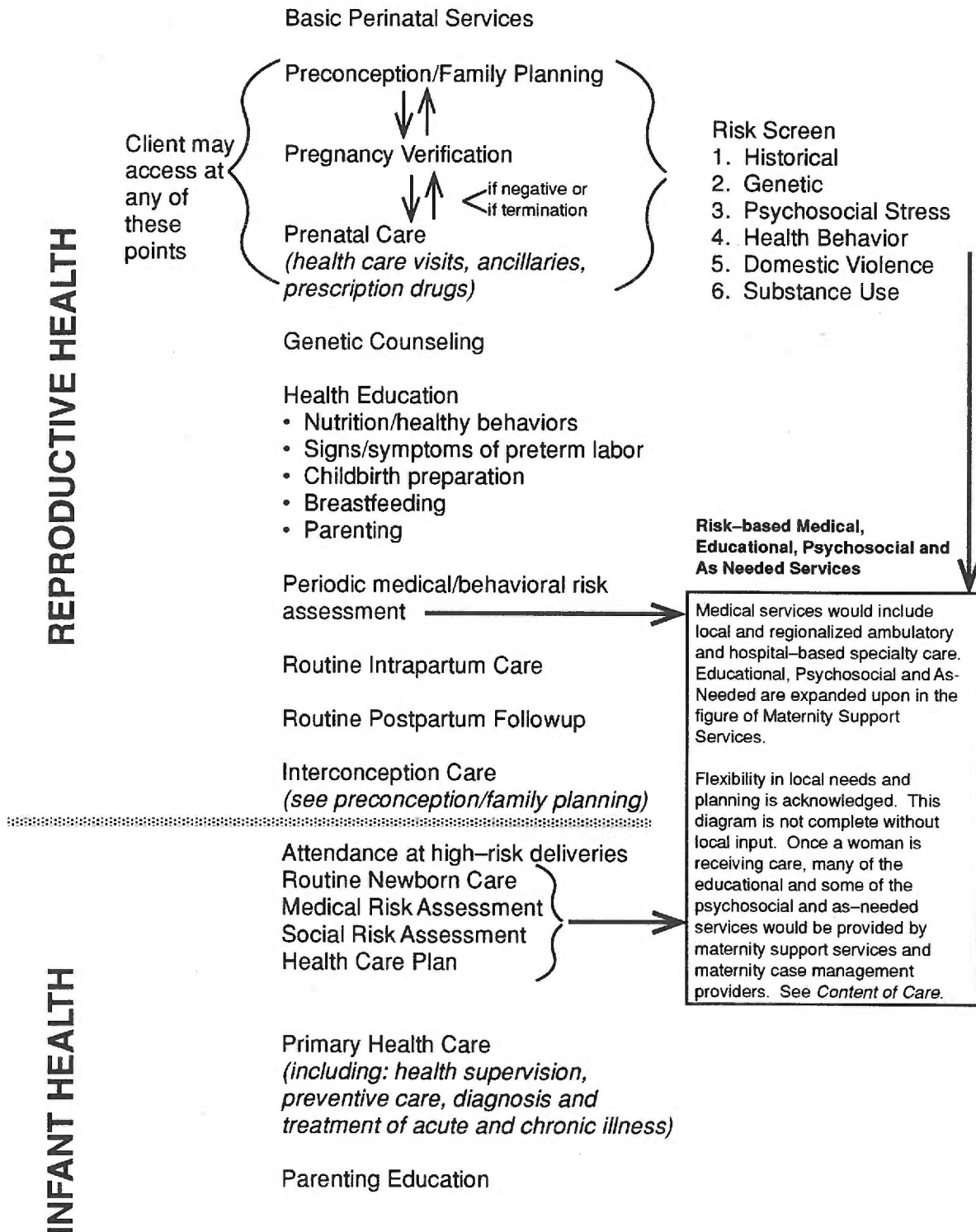
Content and System of Care

Most of the services in this model are neither new nor innovative, but the aggregation of these services into a comprehensive benefit package is. Continuity of services throughout the cycle of care is proposed as the most effective method for ensuring healthy pregnancy outcomes (see Figure 2). Maternity Support Services and Case Management are described. The system in which the content of care is delivered is equally important. An explicit relationship between state and local systems and the continued role of a statewide advisory group such as the Commission is recommended. The State Health Division is designated as the agency accountable for ensuring universal access to perinatal care. The State legislature is designated as being fiscally responsible for guaranteeing universal access. Local maternity care advisory committees are responsible for developing plans of implementation that must be approved by the Commission and the Health Division. This is not a small group of citizens that we consider. The 1991 estimated population of Oregon women, ages 15-44 years, totaled 664,497—greater than the population of Multnomah County. Combined with the 42,458 children born that year they totaled 24.1% of the state's population ³⁵.

Comprehensive perinatal care includes reproductive elements of family planning and preconception, prenatal, intrapartum, postpartum, and interconception care ^{1,6,36,37}. The cycle begins with educational services before the onset of puberty and the start of regular gynecologic services. These should be linked to community and school-based sex education courses as appropriate, and include decision-making, sex abuse awareness, abstinence and refusal skills. For the sexually inactive, the focus is on education and health promotion. Sexually active women and men need access to family planning services to prevent unwanted pregnancies and therefore decrease the number of pregnancy terminations and prevent sexually transmitted diseases (e.g., chlamydia, gonorrhea, and AIDS). These services also provide health promotion instruction and risk assessments such as Pap smears and breast exams, and help plan for wanted pregnancies. For women who have just given birth or terminated a pregnancy, basic concepts about pregnancy spacing, fertility preservation, and health promotion should be part of the discharge process. Safe and healthful

Figure 2

COMPREHENSIVE PERINATAL CARE



MATERNITY SUPPORT SERVICES

Educational Services	Psychosocial Services	As-Needed Services
<ul style="list-style-type: none"> • Importance of life-style change around the following: <ul style="list-style-type: none"> — Healthy behaviors — Preconception/Family planning — Early Prenatal care • Prenatal health education (i.e., nutrition, signs/symptoms of preterm labor, childbirth preparation, breastfeeding) • Parenting education 	<ul style="list-style-type: none"> • Information and referral (I&R) • Counseling for effective coping and stress management • Alcohol and drug counseling • Smoking cessation • Life-style maintenance and assistance <ul style="list-style-type: none"> — Shelter — Employment — Food and utilities • Care coordination 	<ul style="list-style-type: none"> • Outreach <ul style="list-style-type: none"> — Importance of comprehensive perinatal care — Financial Resources/access to care • Child care for medical and counseling appointments, bedrest, hospital care, NICU visits • Transportation for medical and counseling appointments, hospital care, NICU visits
Providers	Providers	Providers
<ul style="list-style-type: none"> • Health Care Workers • Schools • Churches • Community Resource Centers • Businesses • Community Outreach Workers • Mental Health and Social Workers • Nutritionists, Dieticians • Extension Agencies • Private practice therapists and treatment centers • Private not-for-profit agencies • WIC • County alcohol and drug programs • OSAP projects 	<ul style="list-style-type: none"> • For Information and Referral, all those listed under education • Local Housing Authority • Community Action Agency • AFS • Utilities • Food banks • Employment offices 	<ul style="list-style-type: none"> • Outreach—same as for education and I&R • Child care — relatives, friends, other pregnant women and licensed day care • Transportation — relatives, friends, volunteers, state program vans

childbearing contributes to, and is a result of, effective family planning.

Family planning, contraception, and abortion are important components of any maternity care program. Nine out of ten women of childbearing age in the United States are sexually active. Two thirds are at risk of an unwanted pregnancy. In 1988, nearly half of American women surveyed reported that their pregnancies in the last 5 years had been mistimed or unwanted⁵. Most women spend 90% of their reproductive lives trying to postpone or avoid giving birth. Yet this plan encompasses more than birth control; it also incorporates the long-term perspective of health promotion and specifically preconception care.

Preconception care serves as a bridge between family planning and prenatal care. Preconception care refers to services that assess the health status of the woman and her partner prior to conception, and as such should be addressed at every family planning visit. Preconception care focuses on the early detection and management of risk factors before pregnancy, the need to alter behaviors that can affect a fetus, the need for regular health care and preparation for effective parenting. Risk assessment includes a health history, physical examination, laboratory testing, and immunizations as necessary. Health promotion includes counseling to prevent unhealthful behaviors such as smoking and use of alcohol and other drugs, and genetic screening as appropriate.

General health promotion—including reproductive health, risks to a healthy pregnancy, and effective methods to minimize risks before conception—must be integrated into school-based curricula, women's health care programs, and public information campaigns as major themes. High school sex education should be directly linked to family planning services. The goal should be to reach 100% of the women of childbearing age the same way as we seek to immunize all children. These strategies are quite important for schools since more than three out of four young women and 85% of young men have had sexual intercourse by age 20. Each year, one out of ten women in this age group becomes pregnant, and approximately 40% of all women by age 20 have been pregnant⁵.

Prenatal care is defined as services delivered during pregnancy. Because of the absence of universal access to health care, many women only become eligible for health services due to pregnancy. This lack of previous care increases the risk of a poor outcome in many pregnancies. Ongoing prenatal care should include the following services: early and continued assessment of risks; health and nutrition education; psychosocial intervention and home visiting; and care coordination with other human services. Women who enter pregnancy in good health need encouragement to maintain their motivation to care for themselves during the pregnancy. Those women with physical or psychosocial health problems need information and support to modify contributing behaviors.

Providers should assist all pregnant women and their families to adjust to the physical and psychological changes that take place during pregnancy, as well as preparing for labor, birth, and parenting. The Commission heard from clients who experienced extraordinary and sensitive prenatal care from dedicated providers while others had memorable impressions of superficial care that focused merely on their bodies below the waist. Likewise childbirth education was described from a canned class that taught a client how to be a good hospital patient, to an adversarial approach towards the hospital where the client arrived

Unhealthy Behaviors Screen

- Each trimester, with appropriate intervention whenever needed.

Educational Needs

- Initial and ongoing throughout the pregnancy, for example, breastfeeding education.

Intrauterine Growth Retardation (IUGR)

- Accurate dating is one of the best tools for detection of IUGR. This could be accomplished by an early ultrasound. Additional fundal height evaluations throughout the pregnancy are necessary to detect a lag in growth.

Infection

- Screening for cervical infection is necessary early in pregnancy, as well as for urinary tract infection throughout gestation. Sexually transmitted diseases must be screened for at the onset of pregnancy and again near the end for those women noted to be at high risk.

Premature Labor/Delivery

- An historical screen should be done early in pregnancy to identify a woman at high risk, but additional teaching should be done for all pregnant women between 20 and 28 weeks gestation.

Nutrition

- Screening early in pregnancy allows education and referral. Referral to the supplemental food program, Women-Infant-Child (WIC), for all pregnant women within 185% of Federal Poverty Level. Follow-up of maternal weight gain throughout the pregnancy may trigger later intervention as well.

Multiple Gestation

- An ultrasound scan at 14-16 weeks would allow virtually 100% identification and appropriate follow-up.

Preeclampsia

- This is a disease limited almost entirely to the second and third trimester, and can be identified through regular measurement of blood pressure along with checks for urinary protein. Clients also need to be educated in the symptomatic warning signs.

Gestational Diabetes

- Screening is needed at 26-28 weeks gestation to identify those women at risk. Appropriate treatment should reduce the fetal risk to a negligible level.

Rh Disease

- Identification at the onset of pregnancy of those women at risk allows follow-up evaluation in the second and third trimesters.

While the preceding elements of care (see Table) are recommended by the Commission, specific screening tools and procedures with which to best accomplish these will vary over time. More specific information will depend on continuing discussions between the Health Division and obstetrical providers ³⁷.

Trimester	1st	2nd	3rd
Historical Risk Assessment	X		
Genetics (<i>done @ 10 weeks</i>)	X	X	
Psychosocial Stress	X	X	X
Unhealthy Behaviors	X	X	X
Intrauterine Growth Retardation	X	X	X
Infection	X	X	X
Premature Labor/Delivery	X	X	X
Nutrition	X	X	X
Multiple Gestation	X	X	X
Preeclampsia		X	X
Gestational Diabetes		X	X
Rh Disease		X	X

Intrapartum care comprises the varied services that occur during the labor and delivery period, traditionally characterized by the provision of medical services. Because most women experience no complications during their deliveries, out-of-hospital births could be further integrated into a system of care that accommodates changing risk status, resulting in safe deliveries at lower cost and alleviating provider shortages in some settings. A system of linkages among alternative delivery sites must be formally established to ensure that adequate care is available for all pregnancies, with comprehensive medical care available to mother and infant in at-risk pregnancies when complications do occur.

The Commission is aware that often the continuity of care unravels in this period. Conflicting funding sources, provider and agency jurisdictions and clinical care arrangements can lead to a fragmented transition for clients between prenatal, intrapartum, and postpartum care. It is in the best interests of client and provider that this be recognized and that substantial efforts be made to encourage the continuity of service providers and common philosophy of care. Adequate and appropriate labor support for women is essential during this period.

The **postpartum period** is a critical transition for mother and infant, bringing a closure to the pregnancy and integration of the birth experience. Other goals remain ongoing risk assessment and monitoring of conditions and referrals, an opportunity in which healthy behaviors for the entire family can be promoted. After delivery, parallel services are initiated for the mother and child. Postpartum care and renewed family planning as appropriate are the mother's focus; infant well child care focuses on the newborn. The goals are to monitor and facilitate the mother's stabilization and recovery, and the infant's ability to thrive. A home visit is recommended within 3-5 days of delivery to reassess changing conditions, reinforce health education efforts, and address family concerns.

System plans must include linkage and access to similar care for infants and children. An **infant health** component emphasizes education and prevention. Services would be provided within a plan of continuing infant health care which would be the responsibility of the primary provider. Specific components include primary care (preventive services, well-child supervision, standard care for acute and chronic illness, and screening for dysfunctional families); parenting education; case management and care coordination, and referral for infants and

families that are medically or socially at-risk to special medical, nutrition, social services, home nursing, and early intervention programs. The Commission supports particular emphasis on parenting education. While women and men may become biological parents with ease, quality parenting and understanding of infant care and development is learned. Community opportunities through classes, and support groups such as Birth to Three in Eugene, can nurture the importance of such learning as the normal transition of parenthood. Related association with Children's Care Team proposals can be fostered.

The Commission has adopted basic provisions of Washington state's First Steps Project that are supplementary and critical components to the service package previously described. The Commission recommends that all pregnant women should be evaluated for their need of Maternity Support Services(MSS) and Case Management(MCM), and both public and private insurers are expected to reimburse for a common array of services. MSS are preventive health services for all pregnant/postpartum women including assessment, education, intervention and counseling provided by an interdisciplinary team of members from the nursing, psychosocial and nutrition professions; and authorization of child care. The Commission recommends a stronger perinatal educational emphasis on: pregnancy risk factors including signs and symptoms of preterm labor; domestic violence; nutrition; stress management; parenting skills; preconception, interconception and family planning.

MCM includes care coordination and enhanced services which will assist eligible pregnant/parenting women and their families at high medical or socio-economic risk in gaining access to needed medical, social, educational, and other services such as substance abuse treatment, shelter or safety from domestic violence ⁴¹. Case management or care coordination includes use of community linkages; a comprehensive on-going identification of recipient/family needs; development and implementation of a detailed service plan; and advocacy to ensure achievement of service plan goals in an accountable manner.

The Commission recommends that client goals for MSS should follow the guidelines of the Washington First Steps Program ⁴²; specifically a review of:

- Knowledge of major health risks, signs/symptoms of preterm labor and other danger signs during pregnancy, and healthy versus unhealthy behaviors;
- Medical factors relating to pregnancy risk and health behaviors;
- Signs and symptoms of alcohol and other drug use by self or in the environment;
- Tobacco use by self or in the environment;
- Communication skills such as primary language, literacy, maturity, decision-making ability, or ability to communicate feelings;
- Family functioning such as family structure, support system, coping and stress, physical/sexual/emotional abuse, or roles and relationships;
- Home and work environment, including housing, safety and security, occupation, transportation and access issues, and financial resources;

- Dietary patterns and intake, resources for obtaining and preparing food, and evaluation of nutritional needs;
- Understanding and utilization of health care resources, including family planning, dental and vision services;
- Need for child care;
- Knowledge of pregnancy, childbirth and parenting;
- Pregnancy and post-partum related changes in activities of daily living such as activity/exercise, elimination, sexuality, and self-concept/body image.

The Commission recommends that the following populations shall be considered at higher risk for poor birth outcomes, and shall be enrolled in Maternity Case Management; pregnant women who:

- 1) Experience one or more of the following:
 - age 17 or younger;
 - alcohol and/or drug use by the individual and/or the presence of these in the environment; or
- 2) Have a medical factor related to pregnancy outcome, such as: HIV+ or AIDS, diabetes, hypertension, chronic illness, multiple gestation (twins or triplets), or previous preterm birth; or
- 3) Demonstrate an inability to access necessary resources or follow actions/ treatments in the service plan, and/or who experience one or more of the following:
 - Homelessness;
 - Current or recent physical or sexual abuse;
 - Lack of a support system and/or uninvolvement of partner;
 - Two or more children under the age of 5;
 - Education at eighth grade level or less;
 - Physical disability;
 - Mental impairment;
 - Late entry into prenatal care after 28 weeks gestation;
 - Refugee status;
 - Ages 18 or 19;
 - Limited English proficiency.

For any woman, early medical care *alone* will not assure an optimal birth outcome. Risk-based medical, educational, psychosocial, and as needed services will depend on local needs assessment, state and local planning, as well as whether a woman is pregnant. The Commission recommends addressing these needs during pregnancy through coordinated and improved consultation and specialty care between medical providers and those nursing/social work/ nutrition providers directing Support Services and Case Management. Home visiting has demonstrated a broad range of positive benefits^{36,38,39}. Services for non-pregnant women will need further local definition. However, risk screening should occur at all points of access and services provided or referred accordingly throughout the continuum of care.

Some employers and private insurers have already recognized the value of providing early education and other support services in addition to medical care. One of the most important demographic trends confronting corporate America today is the increasing number of women in the labor force. Not only are there more working women, but studies indicate that women are delaying their first pregnancies; having more children while working; working to within one week of delivery and returning to work within weeks after delivery. The private sector can become leaders in promoting the health and well-being of women and infants by developing comprehensive health benefit and workplace policies^{43,45}. Examples include smoke and drug-free environments, related reproductive health hazard assessment, excused absences for prenatal and pediatric visits, and employee participation in programs for preconception and prenatal health promotion, parenting, lactation, and child care services.

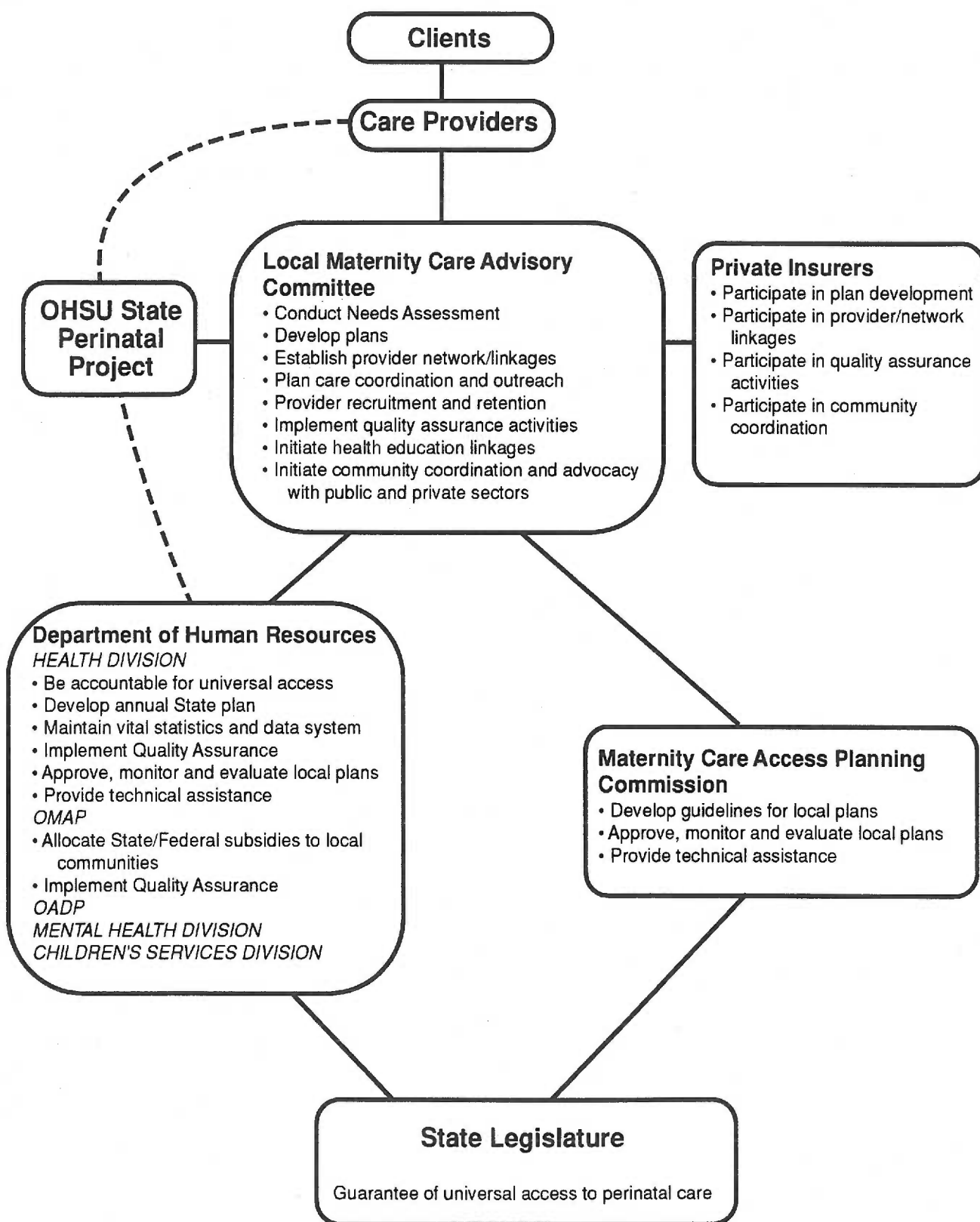
There is no single system for coordination of care between providers. Commission testimony described community programs that often do not include all pregnant women. Other findings were:

- Women *without* insurance may actually be more likely to receive coordination of care between medical, nursing, and other support system providers.
- Even clients with private insurance have financial barriers to basic care with substantial deductible and copayment charges.
- Small communities often have better service linkages.
- Women in some communities lack *local* access to perinatal consultation services (i.e. OHSU Perinatal Project or an alternative), or few resources exist for consultation by specialists.
- Without resources targeted to coordination the system remains extremely fragile.

Some communities have developed creative and unique public/private partnerships between prenatal provider, county health department, Children and Youth Services Commission, hospitals, business, and other public and voluntary health and social agencies. These partnerships often include financial commitments from hospitals who believe early prenatal access and care will reduce their own unreimbursed costs caused by poor outcomes in women presenting with inadequate prenatal care.

The Community and State structure illustrated (see Figure 3) recognizes that services are ultimately delivered locally or regionally. Health care needs vary by locale based on factors such as available providers, facilities, and population characteristics. Community responsibility to assure access to a full range of quality, risk and culturally appropriate perinatal health services is essential. Many key components of the service delivery system are already in place and operating effectively. The Commission endorses development and strengthening of a public/private partnership using existing resources and integrated planning efforts to create more comprehensive services. Local health authorities can promote broad-based support with advisory committee membership representing local and private agencies and organizations, local health departments, health care professionals, private insurers, representatives of hospitals and clinics, civic government leaders, business and other community leaders, consumers and other perinatal interest groups¹.

Figure 3



Financing of Services

The Commission recognizes that there are serious problems with current health care financing. Because of their immediate need and the core role of perinatal health care, the Commission has targeted the population of women who are of childbearing age and in need of family planning services, who wish to become pregnant or who are pregnant.

Features of the plan are:

- Medicaid remuneration for routine global obstetric care should increase to more comparable private reimbursement rates and remove a barrier to provider participation with low-income clients;
- Medicaid PLMP client income eligibility should increase to 185% of Federal Poverty Level to promote further economic access to care;
- Perinatal services should be covered for pregnant women with income below 133% of the Federal Poverty Level and not Medicaid eligible. For example only intrapartum delivery for undocumented women is now paid for as an emergency item by the Office of Medical Assistance.
- All public and private insurers would be required to offer a uniform comprehensive benefit package that would be incorporated into the Oregon Health Plan ⁴⁵ and also offered through employers;
- There would be no coinsurance, deductibles, or preexisting conditions related to perinatal and infant health services because they are essential preventive services.
- Individual insurance companies or HMOs would manage their own plans but would be linked to a statewide quality assurance program. Another option to improve access could be development of a single "payer blind" form of reimbursement to providers.
- Monies will be necessary to establish the range of individual and community service resources within a locale. Ongoing operational support for many community services must be provided.
- A statewide system and resources are needed for outreach to encourage early access to perinatal care. Programs that do exist are often funded with temporary grants or allocations which must be used to cover services when outreach brings more clients.

Provider and Quality Issues

In 1991, 44,007 births occurred in Oregon, 1549 to non-residents. Hospital births accounted for 97.8%(43,028) of these, with medical and osteopathic physicians delivering 90.3%(38,838). Certified Nurse-Midwives(CNMs) delivered 9.5%(4096) of hospital births. Out of hospital births were 2.2%(979) of all live births, with deliveries by medical doctors 2.7%(26), naturopaths 13.6%(133), CNMs 17%(166), and direct entry midwives 52.4%(513) ⁴⁶⁻⁴⁸.

Extrapolating from a 1990 provider survey⁴⁶⁻⁴⁸, there was a potential pool of 511 physicians, 246(of 320) OB/GYNs and 265(of 1068) family and general practitioners providing obstetrical services in the state. In 1984 there had been a pool of 603 physicians. The average caseload for Oregon OB/GYNs was 130 deliveries per year and 35 per year for family and general practitioners. In 1989, there were 103 licensed CNMs with individual delivery capacity ranging from 84 to 120 births per year or more depending on the practice setting.

The supply of providers and their distribution are never static. Providers locate, relocate, retire, cut back on their practice, and otherwise change their availability. In recent years, lifestyle issues such as number of hours in practice, on-call and backup as well as spousal satisfaction have had a significant impact on providers in a community. Provider numbers and their theoretical capacity alone do not offer a complete picture. Estimating the need for obstetricians for high-risk deliveries is complicated by community variations of defining high-risk, and the preferences of individual obstetricians to restrict or limit the number of their high-risk deliveries. CNMs are restricted by barriers to hospital practice and the need for specific obstetrical backup. What is clear to this Commission is that Oregon is not over supplied with providers and much more can be done to encourage and support the existing ones. A plan is also necessary for the training and distribution of adequate perinatal providers in Oregon.

A summary of identified Provider and Quality findings are:

- Increase the **number** of providers with incentives to continue or return to obstetrical practice.
 - (1) Increase the Medicaid remuneration for routine global obstetric care, similar to private insurance and suggested fees.
 - (2) The increased remuneration should be reflected in the prenatal portion of the fee. Few, if any, service providers, whether public or private, are receiving reimbursement for the FULL cost of services they are providing and most of the money is now weighted towards delivery.
 - (3) Increase the pay for high risk cases which require considerable time investment.
 - (4) Support tort liability reform for all providers, especially those meeting the needs of low-income women. Though malpractice insurance rates have recently declined somewhat, 1989 insurance costs for an OB/GYN performing deliveries were still \$98 to \$125 per birth assuming an average caseload per year. Community-based clinics report they spend 5 to 15 per cent of their budgets on malpractice insurance, an expense that limits the number of clients they serve.
 - (5) Provide better quality postgraduate education opportunities with standard courses in obstetrics, expanded Ed-Net courses with content transition to broader cultural/psychosocial issues, and further telephonic and electronic consultation with regional capability.

- (6) Support the provision of care by CNMs and other nurse practitioners within their scope of practice, and primary care physicians as illustrated under current local models, i.e. Healthy Start in Washington and Deschutes Counties, the Lane County Comprehensive Pregnancy Services ⁴⁸, the Malheur Maternity Project, and others. This support includes removing any existing barriers preventing CNMs from providing hospital services to the level permitted by their licenses and education.
 - (7) Support the training and incentives for improved quality and numbers of obstetric nurses, nurse anesthetists, and community health nurses. This issue alone would address a chronic need of health support personnel in rural and underserved localities. The Commission suggests that the Area Health Education Centers (AHEC) could play a very significant role in local provider recruitment and retention.
 - (8) Provide encouragement for the provision of newborn and infant care, which has not received similar recognition or enhancement as a continuum of services in the perinatal period. Coordination of pediatric care is necessary; and insurance coverage for preventive well child care should be as standard as that for pregnancy care.
 - (9) Provide a system of safe entry to backup care for women choosing lay providers or out-of-hospital delivery. A comprehensive system of care acknowledges the role that direct entry midwives and others play in out-of-hospital births in Oregon. It is the responsibility of the local hospitals and community providers to extend a welcome for client referrals to qualified providers when medically necessary and counter the prevailing hostile attitudes. Such transfers of care when needed provide protection for the women and children involved and need not imply support or liability for the previous mode of care. Respect and sensitivity to client needs and a priority of healthy babies are the shared commitment.
 - (10) Improved communication is necessary in the relationship between public and private health providers who occasionally treat each other more as adversaries. Local Health Departments can be a mystery to private physicians who see them as poorly funded and inconsistent. Likewise public health can see the private side of health care as self-serving, and with less commitment to community planning. Obviously we must do better. This model requires local ownership and collaboration. We do not ask for a merger of public and private, but there must be a partnership of mutual respect, with client needs first.
- Increase **integration and access to non-medical support services**. While the scope of these services are described under the content and system of care we also suggest that the education and remuneration of these providers become a new priority. In addition, improved linkage and communication between service agencies with shared clients should be emphasized using single points of entry.
 - Support the development of a Maternal-Fetal-Infant Mortality and Morbidity **Review Board** with peer review protection to evaluate perinatal cases on a statewide basis, anonymously, and provide support for local reviews. The purpose of the review would be to identify trends and problems around the state and assure improvements or corrective action.

Improving the Quality of Care in perinatal health services can be broken into two categories. First there is an institutionalized system of monitoring, problem identification, intervention, and follow-up monitoring through external checks and balances. The second, internal approach is often called Total Quality Management, or variations such as Continuous Quality Improvement. The latter is a proactive orientation using systems management principles to prevent problems early rather than to identify them later. It is customer focused, based on trust and information, and it attends to the **system**. With this orientation of clients as partners and informed users, standards and goals can be internally generated instead of externally imposed.

Adequate tracking systems in Oregon to assure client access, utilization, and report sharing do not usually exist. Coordination of care and services likely happens now through special community programs. The lack of standardized tracking data inhibits need assessments and service planning as well as outcome evaluation. Birth certificates are the only source of data on all pregnancies. The quality of this data varies with how clients interpret questions and how the hospital or provider collects the information. Since birth certificates reflect content of care, the Commission has suggested the need for future revisions to improve evaluation of those components. Client confidentiality must be assured.

One important component of quality care is the financing of a standard package of comprehensive care with the same benefits available to everyone. To achieve standard quality though it is necessary to develop outcome and client satisfaction indicators, care standards, provider accountability methods, and full public disclosure of information. Standards currently available include the Region X Nursing Network assessments⁵⁰, the Academy of Pediatrics EPSDT well child screen, and the Content of Prenatal Care³⁷. A comprehensive perinatal care system would provide a rich opportunity for policy evaluation as providers, families and communities seek to attain the broad objectives of perinatal care.

Beginning with the underlying principle that all women and infants have the right to quality perinatal care, and the conviction that this provides the foundation for the health of the entire family, this report describes a comprehensive plan for perinatal care. It includes a basic benefit package that will be the standard for all pregnant women, regardless of payment method and a plan for an integrated statewide system that will require a partnership of private and public resources. The Commission recognizes that adequately funding these recommendations will require a significant investment. However, unlike most investments, this one will have **immediate** human and financial returns. We sincerely hope it is an investment that Oregonians will make sooner rather than later.

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